

Asthma Action Plan Implementation in Primary Care

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Asthma Action Plan Implementation Improves Outcomes for Patients

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We evaluated a simple intervention to increase written asthma action plan (WAAP) possession by patients with asthma. The intervention was health care professionals

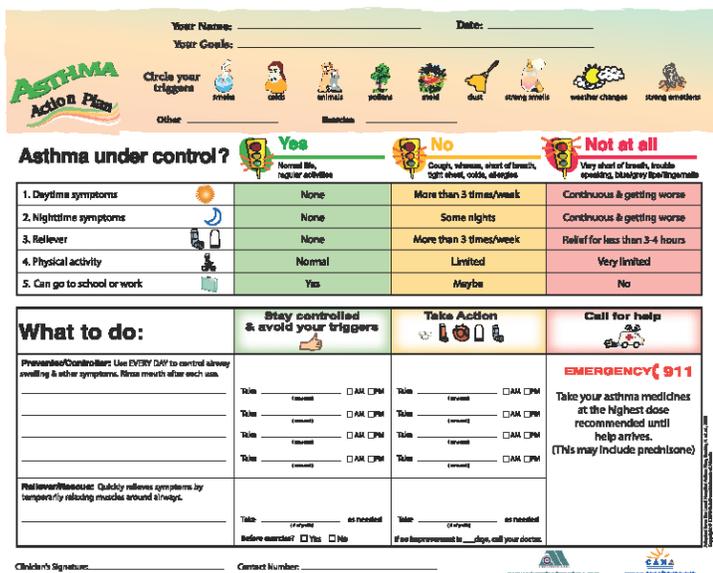
(HCPs) providing WAAPs and basic teaching to patients with asthma. Over 90 HCPs attended brief training and over 20 recruit patients and providing the intervention. Patients' rate of possession of a physician-approved WAAP and asthma control were assessed at baseline and 6 months.

score for the Asthma Control Questionnaire increased significantly.

Important Findings:

- * Physician approved WAAP possession rate increased from 10% at baseline to 63.8% six months later
- * Asthma Control Questionnaire scores improved from a mean baseline score of 1.27 to 0.87 six months later. A score of >1.0 indicates sub-optimal asthma control
- * Health care professionals that were successful at providing the intervention had support of their physician colleagues and a method of identifying asthma patients in their practice

Results: The intervention resulted in an association between the provision of a WAAP template by a health care professional and rate of physician approved WAAP possession 6 months later. The mean



Asthma under control?

	Yes Normal life, regular activities	No Cough, wheeze, short of breath, tight chest, cold, allergies	Not at all Very short of breath, trouble breathing, sleepless nights, etc.
1. Daytime symptoms	None	More than 3 times/week	Continuous & getting worse
2. Nighttime symptoms	None	Some nights	Continuous & getting worse
3. Reliever	None	More than 3 times/week	Relief for less than 3-4 hours
4. Physical activity	Normal	Limited	Very limited
5. Can go to school or work	Yes	Maybe	No

What to do:

	Stay controlled & avoid your triggers	Take Action	Call for help EMERGENCY 911
Preventer/Controller: Use EVERY DAY to control allergy swelling & other symptoms. Rinse mouth after each use.	Take _____ <input type="checkbox"/> AM <input type="checkbox"/> PM Take _____ <input type="checkbox"/> AM <input type="checkbox"/> PM Take _____ <input type="checkbox"/> AM <input type="checkbox"/> PM Take _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	Take _____ <input type="checkbox"/> AM <input type="checkbox"/> PM Take _____ <input type="checkbox"/> AM <input type="checkbox"/> PM Take _____ <input type="checkbox"/> AM <input type="checkbox"/> PM Take _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	Take your asthma medicines at the highest dose recommended until help arrives. (This may include prednisone)
Reliever/Rescue: Quickly relieves symptoms by temporarily relaxing muscles around airways.	Take _____ <input type="checkbox"/> as needed Before exercise? <input type="checkbox"/> Yes <input type="checkbox"/> No	Take _____ <input type="checkbox"/> as needed If no improvement in _____ days, call your doctor.	

Interviews Identify Facilitators and Barriers to Implementation

Seventeen HCPs were asked about their experiences with implementing the WAAP. HCPs were overwhelmingly positive about the WAAP and stated it was a valuable tool for educating patients and demonstrating the criteria for asthma

control. They felt qualified to complete the WAAP and expressed confidence in completing the yellow zone of the plan, as many had direct access to the family physicians to discuss the plan. HCPs that were successful at implement-

ing the intervention had physician colleagues that were supportive of asthma education. Several barriers to implementation were discovered. Most notably, asthma was not a high priority for chronic disease management, therefore for some, patient

recruitment was difficult. HCPs did not receive referrals for asthma patients, and identifying patients with asthma was challenging. Additionally, time was a barrier to implementation, as HCPs identified it was challenging to find time to provide education to patients.

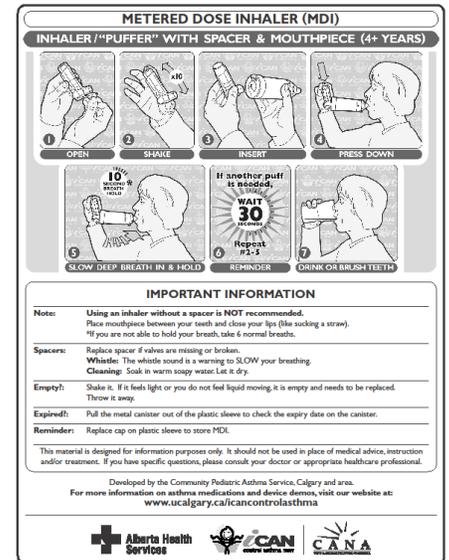
The Intervention

Completing the WAAP involved:

- reviewing the individual goals of the participant for asthma management,
- identifying triggers and trigger avoidance strategies,
- highlighting asthma control,
- discussing asthma medication and their use, and medication dosage changes, if appropriate.
- providing asthma inhalation device sheet.
- reviewing inhaler technique to ensure optimal delivery. (followed by return demonstration, highlighting changes).

If the participant had not received verbal/written instruction from their family physician regarding dosage adjustments, then the HCP was to write the medication names in the 'yellow zone' and leave the dosages blank, unless they had direct access to the family physician to verify dosages at the time of appointment.

The patient was instructed to have the WAAP reviewed and signed by the family physician.



Respiratory a Priority?

One of out three individuals has physician diagnosed asthma during their lifetime

The majority do not have asthma in control.

Asthma is one of the most common causes for emergency visits and results in significant costs.

Only half of patients seen in the emergency in Alberta have a physician office visit within 7d.

Every \$1 invested in health education, \$11.22 is saved. Group asthma education saves approximately \$2100 per person.

Less than half receive any form of asthma education; and fewer than 2% of patients receive an Action Plan.

Actions plans impacts health, quality of life & prevent unnecessary health care use.

The widest gaps in care and skills are observed in high risk groups including: newly diagnosed, low income, First Nations, children, adolescents and rural areas.

- This study gives primary care evidence of practical tools to promote optimal control and strategies to support the educational needs of individuals with asthma.
- We challenge others in primary care to try the WAAP and new asthma approaches. See Alberta Breathes Briefing Papers (gaps and rational), resources and tools at www.asthmacentre.ualberta.ca/

Implications for Practice

A simple intervention for patients with asthma can improve patient outcomes. The study demonstrated that providing HCPs with the tools and resources to educate patients was feasible. It also revealed that the intervention of providing the WAAP with minimal education was an effective strategy at ensuring the patients received the tool.

Often, WAAPs are provided as a part of a formal and complex intervention. Therefore, it is difficult to untangle this one intervention from the large matrix of strategies that were used, making it challenging to determine which components of the intervention were truly beneficial. The simplistic nature of this intervention demonstrates that providing a

more basic level of intervention may in fact be beneficial to patients. This is helpful where the intensive options may not be feasible. This should be supplemented by more comprehensive education provided by certified respiratory education where possible.

"A simple intervention for patients with asthma can improve asthma control"

Supporting Respiratory in Primary Care

- We would like to highlight your primary care practices that improving asthma and COPD outcomes. Tell us what is working.
- The COPD action plan, developed in collaboration with the Canadian Thoracic Society is being launched this month. For more information, please email Heather hsharpe@ualberta.ca.
- Alberta Breathes would like to

hear about your team's and your patient's asthma and COPD needs. For more information regarding this project please contact Shawna McGhan at the Alberta Asthma Centre.

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