British Columbia Pharmacy Association (BCPhA)
Clinical Service Proposal
Asthma Consultation Service

March 2013
Introduction

Asthma is one of the most common chronic conditions affecting British Columbians and exerts a significant economic impact on the health care system. More than 2.5 million Canadians and 300,000 British Columbians\textsuperscript{1} suffer from asthma and its prevalence has been steadily increasing across both the country and the province.

It is estimated that the total annual cost of asthma care in Canada is between $504 and $648 million (1990 dollars) annually.\textsuperscript{2} In British Columbia, it has been estimated that asthma has direct health care-related costs of at least $41 million dollars annually\textsuperscript{3} with the major costs being medications, followed by physician visits and hospitalization. Furthermore, evidence suggests that patients with poorly controlled asthma are responsible for the majority of asthma-related resource use.\textsuperscript{3,4}

What Is the Scope of the Problem?

Studies suggest that the majority of Canadians with asthma have inadequately controlled conditions.\textsuperscript{5,6,7} It has also been demonstrated that suboptimal control of asthma is associated with increased morbidity.\textsuperscript{4}

It is estimated that more than 80 per cent of asthma deaths could be prevented through proper asthma education\textsuperscript{8} and that under-diagnosis, under-treatment, lack of public understanding and knowledge about the disease, and inadequate monitoring all contribute to the negative impacts of the disease on patients.\textsuperscript{9} According to a Health Canada report on respiratory illness, many asthmatics need more help using management strategies such as asthma action plans.\textsuperscript{10}

Both the Canadian Asthma Consensus (CAC) guidelines\textsuperscript{11} and BC Ministry of Health guidelines\textsuperscript{12} recommend a multi-faceted approach for achieving optimal management of asthma, which includes appropriate diagnosis, prevention strategies, pharmacotherapy, education and ongoing monitoring.

In a nationwide Canadian survey, physicians were asked if they provide adequate asthma information to their patients. Only 37 per cent of respondents indicated they provide educational pamphlets, brochures, booklets or videos to their patients; just over 17 per cent develop a written action plan; 16.5 per cent refer patients to a nurse or other health professional for education; and 13.6 per cent refer patients to an asthma centre, hospital or non-profit agency for education.\textsuperscript{13} In a national survey of patients, only two out of 10 patients (21 per cent) reported ever receiving a written action plan from their physician.\textsuperscript{14}
This same survey also suggests that the lack of effective education on and ongoing management of asthma results in widespread misunderstanding as to what treatments actually do, noting that 45 per cent of “poorly controlled” patients have used the wrong medication for the wrong indication. Clearly, there is a void of education and ongoing disease management for patients with asthma, particularly with respect to patients with poorly controlled asthma.

**What Role Can Pharmacists Play?**

Numerous studies\textsuperscript{15,16,17,18} have demonstrated the economic and therapeutic benefits of pharmacist-delivered asthma education, assessment and drug-therapy monitoring. A study carried out in BC, similar to what we are proposing here, demonstrated that patients who received an enhanced level of care from their pharmacist to manage their condition achieved better asthma control, improved quality of life, improved knowledge on their condition, as well as reduced emergency and medical visits compared to standard care.\textsuperscript{19} Asthma patients go to pharmacists to collect their medications, providing a regular opportunity for engagement.

Working in collaboration with patients’ family doctors, pharmacists are well positioned to respond to the identified needs of patients with asthma, particularly those who have poor control over their condition.

**How Can This Benefit the Patient?**

Asthma is a leading cause of emergency room visits in Canada\textsuperscript{20} as well as absenteeism from school, and is the third-leading cause of work loss.\textsuperscript{21} Even more concerning is that asthma is the leading cause of hospital admissions for children\textsuperscript{22} and has been identified as the most common preventable cause for admission, particularly in children.\textsuperscript{23} Individuals with poorly controlled asthma have a reduced quality of life, with limited involvement in everyday activities such as walking, climbing stairs, laughing, playing sports and engaging in various outdoor activities.\textsuperscript{14}

Pharmacists are ideally situated to help educate patients on their condition and medications and develop individualized asthma action plans as recommended in the CAC guidelines.

Having easy access to a consultation with a pharmacist would ensure that patients can get regular education and assistance with medication adherence when they want and need it. Pharmacists would provide these services in collaboration with patients’ family doctors.
How Can This Benefit the Health Care System?

Having pharmacists collaborate with family doctors and implementing a program that increases education, assessment and monitoring for patients with asthma would have an impact on medication adherence. This in turn could potentially increase cost savings to the health care system by reducing the estimated $18 million spent annually on physician and emergency department visits and hospitalizations.

BCPhA’s Proposal

The BCPhA proposes that the Ministry of Health fund a pharmacist-delivered program that provides education, assessment and management tools to patients, or their caregivers, to help improve control of their asthma: the Asthma Consultation Program.

Pharmacists currently provide consultations on a wide variety of conditions for eligible patients using the Medication Review Services (MRS) program. This program compensates pharmacists for a patient-care service aimed at enhancing a patient’s understanding of and health outcomes with their medication regimen. Under the Medication Review - Pharmacist Consultation (MR-PC) service, pharmacists can also develop a care plan with the patient to resolve a drug issue. In addition, a pharmacist can also provide Medication Review - Follow-up services to support and assess the patient’s progress with his or her care plan.

The proposed Asthma Consultation Program would build on the MRS program (see Table 1 and 2). The core components of the MRS program align with the recommendations of the CAC guidelines, namely: reviewing and educating on the patient’s condition, triggers, medications and inhalation technique; monitoring effectiveness of therapy; and providing a care plan for self-management. Care plans would be shared with the patient’s family physician, providing assistance in the delivery of guideline-based care for asthma.

Many patients with asthma do not currently qualify for the MRS due to the program’s eligibility limitations (a patient must be taking five medications entered on PharmaNet); eligibility for the Asthma Consultation Program would be based on a patient’s diagnosis of asthma rather than the number of medications he or she is taking.
Table 1 – Medication Review Services Reimbursement Model

<table>
<thead>
<tr>
<th>Service</th>
<th>Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication Review Service – Standard</td>
<td>$60 (bi-annual)</td>
</tr>
<tr>
<td>Medication Review Service – Pharmacist Consultation</td>
<td>$70 (bi-annual)</td>
</tr>
<tr>
<td>Medication Review Service – Follow-up</td>
<td>$15 (4 x per year)</td>
</tr>
</tbody>
</table>

Table 2 – Asthma Consultation Program Reimbursement Model

<table>
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<th>Service</th>
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<tr>
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</table>

To demonstrate the value of an expanded role for pharmacists in the management of asthma and to inform future policy decisions, we propose that an evaluation be conducted following the end of the Asthma Consultation Program.

**Conclusion**

The prevalence and impact of asthma are significant both to individuals suffering with the disease and to the health care system. Pharmacists can play a more significant role in ensuring that patients receive evidence-based care by providing them with increased access to education, monitoring and management tools. This increased access to care would help patients achieve better quality of life and potentially generate cost savings for the health care system by preventing unnecessary use of health care services.

This proposed Asthma Consultation Program would build on existing collaboration between pharmacists and physicians and aim to improve health outcomes for patients with poorly controlled asthma.

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