



# the **Translator**

Canadian Pharmacy ► Research ► Health Policy ► Practice ► Better Health

## Expanding the scope of practice: Pharmacist's role in the management of minor ailments

**P**harmacists play a fundamental role in the health care system. There are currently 26,000 pharmacists practising in 9000 community pharmacies across Canada. With operating hours that greatly exceed physician clinic hours, pharmacists are the most accessible health care professionals and are ideally situated to provide minor ailment treatment.

A recent report from the Ontario Pharmacists' Association estimates that the implementation of a pharmacist minor ailment program would result in an increased capacity of 570 full-time general practitioners (GPs) and an economic savings of \$4.7 million to \$14 million per year.<sup>1</sup> A proposal by the British Columbia Pharmacy Association states that \$95 million is spent yearly on the treatment of minor ailments by physicians, and transferring those services to a pharmacist would yield savings of \$32 million annually.<sup>2</sup> The New Brunswick Pharmacists' Association conducted a survey that shows 85% of patients support pharmacist role in treating urgent, but non-critical, health care services.<sup>3</sup> The United Kingdom has had this service in place for a decade and has been successful in transferring 33% to 38% of minor ailment visits to pharmacists.<sup>4</sup>

These reports indicate that implementing this service will reduce the burden on the health care system, resulting in economic savings, decreased wait times and improved patient care. With the health system at capacity and limited GPs available, transferring the management of minor ailments to pharmacists will result in a more sustainable health care system.

Currently, pharmacists in Saskatchewan and Nova Scotia are providing minor ailment services to their patients as part of the expanded scope of practice in Canada. With the pharmacy profession moving towards a clinical focus rather than a dispensing role, this service is likely to spread across the country and be implemented in other provinces.

This issue of *the Translator* reviews several international studies and highlights the benefits of pharmacists managing minor ailments on both patients and the health care system:

- **The management of minor ailments by pharmacists can lead to substantial health care savings**
- **Increasing uptake of the minor ailment service provided by pharmacists in Scotland**
- **Community pharmacists are well-trained in the management of various dermatological ailments**
- **Pharmacists are the first port of call for many minor ailments in children**

While the studies in this edition of *the Translator* offer preliminary evidence on the value of pharmacists managing minor ailments, further pharmacy practice research is required to support this expanded scope of practice.

<sup>1</sup> Ontario Pharmacists' Association. An analysis of economic value & health system benefits for pharmacy professional services. September 2009:57-59.

<sup>2</sup> British Columbia Pharmacy Association. Clinical Services Proposal – Treatment of Minor Ailments. March 2013.

<sup>3</sup> New Brunswick Pharmacists' Association. Media Release. NBers overwhelmingly support expanded role for pharmacists. May 23, 2012.

<sup>4</sup> Pharmacy Association of Nova Scotia. 2013. Pharmacy services proposal – treatment of minor ailments.

*The Translator* is an initiative by the Canadian Pharmacists Association to support the knowledge translation between pharmacy practice research and health policy. Each issue selects a number of pharmacy practice research articles, briefly summarizes them and discusses the health care policy implications. These articles are submitted by researchers who have a strong desire to support evidence-based health care policy and best practices.

## The management of minor ailments by pharmacists can lead to substantial health care savings

Baqir W, Learoyd T, Sim A, Todd A. Cost analysis of a community pharmacy 'minor ailment scheme' across three primary care trusts in the north east of England. *J Public Health*. 2011; 33(4):551-555.

**Issue:** Minor ailments are self-limiting conditions that require little medical intervention. Despite this fact, general practitioners (GPs) spend a large portion of their time consulting with patients on these ailments. An estimated 57 million GP consultations involved minor ailments in 2006-2007 in England, at a cost of £2 billion per annum (\$3.24 billion CDN). This unnecessary burden has put a great deal of stress on the health care system, which causes health care costs to rise. In Canada, 38% of provincial and territorial government budgets are spent on health care. In order to decrease the deficit and create a more sustainable economy, maintaining health care costs is essential.<sup>5</sup>

**A solution:** Pharmacists are ideally placed to manage minor ailments and can relieve the burden on other more costly health care resources (GPs, hospitals, etc.). This study found that patients who would have used other parts of the National Health Service (NHS) if the minor ailment scheme was not available in North of Tyne Primary Care Trust (a local organization responsible for the management of health services, now replaced by Clinical Commissioning Groups), would



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have led to additional costs of over £6000 per month (\$9724 CDN). This figure equates to over £12 million per annum (\$19.45 million CDN) across England. The majority of

patients (58.1%) stated they would have visited their GP if this service was not offered, which would have cost their health care system far more than seeing a pharmacist. The minor ailment scheme is similar to pharmacists counselling on and recommending over-the-counter (OTC) medications, which makes this service fairly simple to implement and integrate into the work flow of a pharmacy.

**Implications:** Minor ailment consultations make up 40% of GP visits in England. Two-thirds of these could be managed by pharmacists, leading to substantial health care savings.<sup>6</sup> Pharmacist management of minor ailments would give physicians more time to address patients with more complex conditions, which would then decrease health care costs. Utilizing pharmacists in a cost-effective manner and allowing physicians to manage chronic diseases will improve patients' overall health. Pharmacists are qualified and trained to manage various minor ailments and have been doing so for years. This transition of service to pharmacists will allow patients to have faster access to a health care professional and improve the economy.

**Background or research methods:** This study was conducted in England across three Primary Care Trusts. Pharmacists were required to submit a claim to be reimbursed for the service. The claim included a question to be answered by the patient: "If

this scheme was not available, what other action would you have taken?" This form was available for only one month in February 2010. A total of 396 claims were submitted and a cost-minimization analysis was conducted. The cost impact of this service

was calculated using standard health care reference costs. There was an assumption made that efficacy would not be affected regardless of which part of the health care system was utilized.

<sup>5</sup> Canadian Institute for Health Information. 2012. Canada's Health Care Spending Growth Slows. Available at: [http://www.cihi.ca/CIHI-ext-portal/internet/EN/document/spending+and+health+workforce/spending/release\\_30oct12](http://www.cihi.ca/CIHI-ext-portal/internet/EN/document/spending+and+health+workforce/spending/release_30oct12). Accessed on June 26, 2013.

<sup>6</sup> Accenture. Understanding the value of expanded pharmacist authority in Ontario. 2012.

## Increasing uptake of the minor ailment service provided by pharmacists in Scotland

Wagner A, Noyce PR, Ashcroft DM. Changing patient consultation patterns in primary care: An investigation of uptake of the Minor Ailments Service in Scotland. *Health Policy*. 2011; 99(1):44-51.

**Issue:** Most patients currently visit their GP to treat various minor ailments. The effectiveness of pharmacists providing a minor ailment services (MAS) depends on the uptake of the program. Patients also state that they would choose the health care stream that would result in the least wait time. A 2012 report by Canadian Institute for Health Information stated that 45% of patients felt they have to wait too long for an appointment with a GP.<sup>7</sup> The feasibility study for the UK model of MAS reported in 2001 demonstrated an overall transfer level of

The number of MAS items supplied by multiple pharmacies increased from 64.2% in the first nine months of the service being implemented (July 2006 to March 2007) to 68.9% in 2008-2009.

38% consultations from GPs to community pharmacies, for the 12 conditions piloted.<sup>8</sup>

**A solution:** This study investigated the uptake of the MAS in Scotland. It found that in 2008-2009, 1,211,900 MAS items were supplied and the number of MAS items supplied by multiple pharmacies increased from 64.2% in the first nine months of the service being implemented (July 2006 to March 2007) to 68.9% in 2008-2009. During the study period there was an increasing trend on the uptake of the service. Demographic analysis showed greater uptake in deprived and urban areas as well as higher uptake in pharmacies with multiple owners

and younger patients. Furthermore, a survey conducted in 2006 found that patients would rather self-manage minor ailments and their preferred point of care were pharmacists compared to nurses or the National Health Service (NHS) 24 telephone service.<sup>9</sup> Moreover, the accessibility of pharmacists and longer hours of operation of pharmacies ensures convenient management of minor ailments compared to seeing a GP where wait times are much longer.<sup>10</sup>

**Implications:** With the burden of minor ailments placed on GPs, wait times are increasing and health care costs are rising. Pharmacists are the most accessible health care professionals, making them ideal providers in the MAS. In Nova Scotia, Canada, 5% of patients do not have a family doctor and those who do spend a lot of time waiting to see their physician.<sup>11</sup> Patients can take advantage of the accessibility of pharmacists and avoid long wait times by using this ser-

vice. This study illustrates that patients are using this service; however, there is a discrepancy in demographic uptake. Considering patients in rural areas have to travel long distances to see a physician, it would be beneficial for pharmacists to provide this service. The uptake of the program in Scotland provides assurance that the MAS will be utilized if implemented across Canada.

**Background or research methods:** This study was conducted in Scotland from 2006 to 2009. Data was collected from the NHS National Services Scotland Information Services Division, which also includes MAS

items. Pharmacies were reimbursed based on the number of patients registered for the service on a banded capitation fee. The Scottish Index of Multiple Deprivation was used to determine zones ranging from areas that

are most deprived to least deprived. Rural or urban areas were grouped into two categories based on the Scottish Executive's eight-fold version of settlement size classifications.

<sup>7</sup> Canadian Institute for Health Information. 2012. Health Care in Canada, 2012: A Focus on Wait Times.

<sup>8</sup> Hassell K, Whittington Z, Cantrill J, Bates F, Rogers A, Noyce P (2001). Managing demand: transfer of management of self-limiting conditions from general practice to community pharmacies. *BMJ*: 323;146-7.

<sup>9</sup> Porteous T, Ryan M, Bond CM, Hannaford P. Preferences for self-care or professional advice for minor illness: a discrete choice experiment. *Br J Gen Pract*. 2006; 56(533):911-917.

<sup>10</sup> Department of Health London. 2008. Partial Impact Assessment of Proposals to Expand the Provision of Minor Ailment Schemes.

<sup>11</sup> Pharmacy Association of Nova Scotia. 2013. Pharmacy services proposal – treatment of minor ailments.

## Community Pharmacists are confident and well-trained in the management of various dermatological ailments

Tucker R. Community pharmacists' perceptions of the skin conditions they encounter and how they view their role in dermatological care. *Int J Pharm Pract*. 2012; 20(5):344-346.

**Issue:** An estimated 25% to 33% of the population experiences a dermatological problem in their lifetime.<sup>12</sup> Skin care purchases account for 20% of retail sales, demonstrating that many patients seek treatment for dermatological conditions.<sup>13</sup> When surveyed, 78% of pharmacists report that dry skin is the most common dermatology problem they encounter on a weekly basis. Other ailments that are commonly seen by pharmacists in England and Wales mirror those being treated by Saskatchewan and Nova Scotia pharmacists, including eczema (72%), oral and vaginal thrush (66%), and cold sores (58%). Patients should be able to approach qualified health care professionals to address these issues.

**A solution:** This study highlighted the frequency with which patients present with a dermatology problem to the pharmacy and showed that pharmacists are well-trained and positioned to provide counselling and treatment recommendations to these patients. A reported 64.8% of the pharmacists involved had completed post-qualifi-



**A reported 64.8% of the pharmacists involved had completed post-qualification education in dermatology.**

cation education in dermatology, emphasizing pharmacists' qualification to provide this care. Pharmacists were also questioned on their perceptions of their role in dermatology care with five statements that were rated on a scale of 1 to 5 (1=very little and 5=a great deal). The statements and mean ratings were: Pharmacists should be the first port of call for patients with a skin problem (4.1), pharmacists have an important role to

play in helping patients with skin problems (4.5), pharmacists are an invaluable source of advice on medicines for skin problems (4.3), more skin conditions should be included in minor ailment schemes (3.9), and pharmacy-based dermatology enhanced services would be beneficial for patients with skin problems (4.1). These results demonstrate that pharmacists are eager and willing to provide this care.

**Implications:** Dermatological conditions are prevalent in the population and patients can benefit from the advice of various health care professionals. Considering a large portion of retail sales are for skin care products, pharmacists are a convenient resource for patients when treating these ailments. Pharmacists are also qualified and confident in their ability to provide this care to patients, which gives them more options when selecting a health care professional to approach, as well as offers a means of accessibility when they are unable to see their physician, dermatologist, etc.

**Background or research methods:** A self-questionnaire was sent to 3500 community pharmacists in England and Wales (excluding two major chains that refused to participate). There were 24 items on the

questionnaire pertaining to the number of dermatological conditions presenting at the pharmacy, confidence, training in dermatology conditions (post-graduate), referring to general practitioners

and involvement with dermatology care. Of the 3500 questionnaires sent out, 881 responded; however, 11 were either incomplete or unanswered, resulting in a total of 870 applicable responses.

<sup>12</sup> The Associate Parliamentary Group on Skin. 2002. Report on the Enquiry into Primary Care Dermatology Services. Available at: <http://www.appgs.co.uk/wp-content/uploads/2012/06/ENQUIRY-INTO-PRIMARY-CARE-DERMATOLOGY-SERVICES-2002.pdf>. Accessed on June 27, 2013.

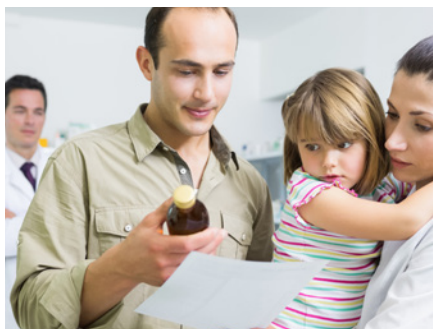
<sup>13</sup> SymphonyIRI Group. 2011. UK OTC Market Summary. Available at: <http://www.pagb.co.uk/about/pdfs/2010marketfigures.pdf>. Accessed on June 27, 2013.

# Pharmacists are the first port of call for many minor ailments in children

Wong ICK, Chua SS, Edmondson H. Children's over-the-counter medicines pharmacoepidemiological (COPE) study. *Int J Pharm Prac.* 2007; 15(1):17-22.

**Issue:** A survey showed that 40% of adults had purchased an over-the-counter (OTC) medication from a pharmacy in the previous month.<sup>14</sup> Children with minor ailments are often treated with OTC medications, which need to be appropriately selected and administered in order to be safe and effective for the child. Other studies found that the most common drug used in children was acetaminophen but only 30% of the respondents knew the correct dose while 12% of parents gave the wrong frequency of the medication.<sup>15,16</sup> There are an estimated 6.5 million consultations on OTC medications for children in Great Britain each year, which stresses the important role that pharmacists play in the management of minor ailments in children.

**A solution:** As pharmacists are the first port of call for various minor ailments in children, it is their responsibility to counsel caregivers on the safe and effective management of such ailments. The National Service Framework for Children promotes pharmacist involvement in OTC medications for children in order to reduce any potential risks. The



Other studies found that the most common drug used in children was acetaminophen but only 30% of the respondents knew the correct dose while 12% of parents gave the wrong frequency of the medication.

COPE study, conducted in Great Britain, found that in 56.2% of cases no action was taken prior to visiting a pharmacy, which demonstrates that pharmacists are typically

the first health care professionals approached for minor ailments in children. When arriving at the pharmacy, 61.5% of requests were for an OTC medication by name. Pharmacists can play a role in determining if the requested medication is appropriate and then counsel on the medication selected. There were cases in which the caregiver requested aspirin for a child under the age of 16, which has been associated with a condition known as Reye's syndrome. Pharmacist intervention in this situation proved to be effective as aspirin was not purchased in any of the cases.

**Implications:** Pharmacists play a vital role in educating caregivers on OTC medications for children and hence can reduce the number of adverse events associated with such medications. This can decrease the number of inappropriate medications selected, over- or under-dosing and no improvement or worsening of symptoms. Children are more sensitive to drugs than adults, which further emphasizes the importance of pharmacists in the management of minor ailments in children.<sup>17</sup>

**Background or research methods:** The COPE study looked at children under the age of 16 in 12 community pharmacies in Hull and East Riding, Great Britain. Only eight pharmacies completed the study, which was conducted over a one-year period in order to include seasonal variations in ailments. Data from the pharmacies

were collected for one week every month. Pharmacy staff filled a form when an OTC item for a child was requested or sold. The following information was recorded: date, type of request, age and sex of the child, customer who made the request, types and duration of symptoms, actions taken before coming to the pharmacy, whether the child

was on other medications or had other medical problems, outcome of the consultation, who served the customer and the duration of the consultation. The data was then entered into and analyzed using the Statistical Program for the Social Sciences.

<sup>14</sup> Boardman H, Lewis M, Croft P, Trinder P, Rajaratnam G. Use of community pharmacies: A population-based survey. *J Public Health.* 2005; 27(3):254-62.

<sup>15</sup> Simon HK, Weinkle DA. Over the counter medications: Do patients give what they intend to give? *Arch Pediatr Adolesc Med.* 1997; 151(7):654-656.

<sup>16</sup> Conroy S et al. An examination of the risk management issues in the handling at home of over-the-counter medicines purchased for children. *Pharm J.* 2003; 271:209-213.

<sup>17</sup> U.S. Food and Drug Administration. 2013. Giving Medication to Children. Available at: <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm164427.htm>. Accessed on June 27, 2013.

## the Translator

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