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Eligibility requirements for community pharmacy medication review services in Canada

Robert Pammett, BSc (Hons), BSP; Derek Jorgenson, BSP, PharmD, FCSHP

Background

A medication review is defined as a structured, critical examination of a patient's medications with the objectives of reaching an agreement with the patient about his or her treatment and optimizing the impact of medications on the patient's health.¹ Most provinces in Canada have recently implemented government-sponsored programs to compensate community pharmacies for providing medication reviews to patients who meet predefined eligibility requirements. Ontario was the first province to remunerate community pharmacies for a standardized medication review program in 2007 called MedsCheck. Since 2007, similar programs have appeared in other provinces. The remuneration provided to pharmacies ranges from \$52.50 to \$150 per review, with some programs offering \$15 to \$35 for follow-up services.

While the operational details and terminology of each program differ to some degree, all of these programs share the common goal of having a pharmacist meet with patients to provide education about the medications they are taking, to provide the patients (and pharmacy) with a current best possible medication history, to identify and address drug therapy problems and to elucidate and monitor patients' progress toward the goals of their drug therapy.

The provincial funding available for these programs is limited, and pharmacist time continues to be at a premium. Consequently, each province has limited access to these services by developing strict eligibility criteria. The presumed goal of the criteria is to ensure that these new programs improve patient outcomes and use public resources responsibly, by

providing the service to patients who will benefit the most. This article is intended to provide an overview of the eligibility criteria for provincially funded medication review programs across Canada.

Methods

An environmental scan was performed by accessing the websites of each province's or territory's Ministry of Health and pharmacy professional associations (in June 2013) to determine the eligibility criteria being used for any publicly funded, community pharmacy-based medication review program. Documents relating to each jurisdiction's provincially funded pharmacist cognitive services were reviewed. The accuracy of the documents was verified by contacting each professional association directly (via e-mail and telephone; from June to July 2013).

Results

Eight of the 10 provinces in Canada were found to have a provincially funded program that we considered to be a medication review, although not all use this term to describe the service being provided. Manitoba, Quebec and the territories offer a variety of clinical programs in the community pharmacy setting (such as Quebec's *Opinion Pharmaceutique*); they do not offer a provincially funded medication review program similar to the other provinces and are therefore not included in this review. Table 1 contains an overview of the eligibility requirements of these provincial programs. Some provinces offered more than one variation of the service, which is reflected in Table 1. Common aspects such as the

TABLE 1 Overview of eligibility requirements for community pharmacy medication review programs in Canada

Province	Name of program	Eligibility requirements
Newfoundland and Labrador (NL)	Medication Review ²	Individuals with diabetes taking an oral hypoglycemic agent and/or insulin.
Prince Edward Island (PEI)	PEI Basic Medication Review ^{3,4}	Individuals taking 3 or more chronic medications covered by PEI Pharmacare programs, who are participants in 1 of the following PEI provincial programs: Seniors' Drug Cost Assistance, financial assistance or private nursing home.
Prince Edward Island	PEI Diabetes Medication Review ^{3,4}	Individuals enrolled with the PEI Pharmacare Diabetes program and taking at least 1 medication covered by PEI Pharmacare programs used in the treatment of diabetes.
Nova Scotia (NS)	Basic Medication Review Service ⁵	Individuals who are part of any NS Pharmacare program (except the Under 65–Long-Term Care Program), who do not reside in a nursing home or home for special care and who do not receive medication in compliance packaging. Individuals must be taking 3 or more prescription medications that are used for the treatment of chronic conditions and are covered by the NS Pharmacare program.
Nova Scotia	Advanced Medication Review Service ⁵	Individuals of the Seniors' Pharmacare Program who do not reside in a nursing home or home for special care and do not receive medication in compliance packaging. Individuals must be taking 4 or more prescription medications or must be taking 1 of the designated medications.* Individuals must have at least 1 of the designated diseases.†
New Brunswick (NB)	PharmaCheck ⁶	NB Prescription Drug Program Plan A (Seniors) individuals taking 3 or more chronic prescription medications.
Ontario (ON)	MedsCheck ⁷	Individuals must be taking a minimum of 3 prescription medications for a chronic condition.
Ontario	MedsCheck for Ontarians living with Diabetes ⁸	Individuals must be diagnosed with type 1 or type 2 diabetes and must be taking 1 or more medications for treating diabetes.
Ontario	MedsCheck at Home ⁹	Individuals must be taking a minimum of 3 prescription medications for a chronic condition and must be unable to present to the community pharmacy.
Ontario	MedsCheck for Long-Term Care Home Residents ¹⁰	Individuals must reside in a licensed long-term care home.
Saskatchewan (SK)	Compliance Packaging with Medication Assessment ¹¹	Individuals must be home care patients or mental health patients, with a minimum of 1 medication covered by the SK Drug Plan in a compliance package. Patients must also be nominated by either a Regional Health Authority Assessor Coordinator or a Home Care Nurse to receive this service.
Saskatchewan	SK Medication Assessment Program ¹²	Individuals age 65 and over, living in the community and (1) taking 5 or more chronic medications, of which 3 must appear on PIP (the provincial database of dispensed medication); (2) taking an anticoagulant medication; or (3) taking a medication from the "Beers Criteria for Potentially Inappropriate Use in Older Adults."

TABLE 1 (continued)

Province	Name of program	Eligibility requirements
Alberta (AB)	Comprehensive Annual Care Plans for Albertans ¹³	Individuals must have “complex needs.” [‡]
Alberta	Standard Medication Management Assessment for Albertans ¹³	Individuals must have at least 1 “chronic condition” [‡] and must be taking at least 3 different prescription medications or 2 prescription medications and insulin.
British Columbia (BC)	Medication Review Services ¹⁴	Individuals must have at least 5 qualifying medications (discreet DINs) active within the last 6 months on the provincial PharmaNet system, and there must be a clinical need. [§]

*Designated medications include methyl dopa, indomethacin, cyclobenzaprine, diazepam, chlorthalidone, clonazepam and amitriptyline.

†Designated diseases include asthma, diabetes, hypertension, hyperlipidemia, congestive heart failure, chronic obstructive pulmonary disease and arthritis.

‡“Complex needs” defined as the presence of both chronic conditions and risk factors. There are 2 categories of patients with complex needs: those with at least 2 chronic conditions and those with 1 chronic condition and 1 or more risk factors. Chronic conditions include hypertensive disease, diabetes mellitus, chronic obstructive pulmonary disease, asthma, heart failure, ischemic heart disease and mental health disorder. Risk factors include tobacco use, obesity and addictions.

§Clinical need is obtained when a prescriber requests a medication review, the patient has multiple diseases, the patient has chronic diseases, the patient’s medication regimen includes 1 or more nonprescription medications, the patient’s medication regimen includes 1 or more natural health products, the patient has a drug therapy problem, the patient was recently discharged from hospital, the patient has multiple prescribers and/or the patient is receiving a medication that requires laboratory monitoring.

need for patient consent and the requirement that the review be performed in person have not been included in the table. There is also an implied expectation within each medication review program that pharmacists use their professional judgment and only offer the service to those patients who meet the prespecified eligibility criteria and who (the pharmacists believe) need the service. Some provinces have explicit definitions of what constitutes patient need, and those definitions are included in Table 1.

Discussion

The most striking aspect of the results of this policy review is the lack of consistency with respect to the eligibility criteria used by each provincial program. Although the programs provide similar clinical pharmacist interventions, there appears to be little congruence among programs regarding the patients who are eligible to receive the services. Some programs require patients to be taking a minimum number of chronic medications to be eligible (but no consistent number of medications is used), while other programs are available to patients taking certain high-risk medications (e.g., anticoagulants) or patients with specific chronic diseases (e.g., diabetes), regardless of the number

of medications taken. Some programs use a combination of these approaches, where eligible patients must suffer from a specific chronic disease and must be taking a minimum number or type of medications. Very few programs were found to use exactly the same eligibility criteria.

The most commonly used criterion is that patients must be taking at least 3 medications to be eligible for the medication review (PEI Basic Medication Review, Nova Scotia Basic Medication Review Service, Ontario MedsCheck and MedsCheck at Home). However, there is also a program that uses 4 or more medications as the cutoff (Nova Scotia Advanced Medication Review Service), another that uses 5 or more medications (British Columbia Medication Review Services) and still another that covers patients taking 5 or more medications who are also age 65 and over (Saskatchewan Medication Assessment Program). There is a similar lack of consistency among programs that use specific medications (e.g., anticoagulants, Beers Criteria drugs, drugs for the treatment of diabetes) or chronic diseases (e.g., diabetes, mental illness) to define eligibility criteria.

The prevailing similarity in the eligibility criteria for these programs is that most appear to be based on known risk factors for preventable

medication-related adverse drug reactions or the presence of drug therapy problems. There are many agreed upon risk factors for adverse drug reactions and drug therapy problems, including, but not limited to, advanced age, certain medical conditions, high number of medications or medication doses per day, narrow therapeutic index drugs and large number of comorbidities.¹⁵⁻¹⁷ Unfortunately, the evidence supporting these risk factors does not provide clear thresholds for people who are “high risk” or “low risk,” making it very difficult to use these risk factors to create appropriate eligibility criteria for medication review programs.

It is completely understandable that provincial health ministries have focused on a risk factor approach for developing medication review program eligibility criteria. After performing an extensive literature search, we were unable to identify a single screening tool or protocol previously validated within a community pharmacy setting to identify patients who will benefit the most from pharmacist-delivered clinical services such as medication reviews. The lack of an existing validated and evidence-based process for identifying people at highest risk (who would theoretically benefit most from a medication review) may be one explanation

for the wide variation in eligibility criteria observed in the medication review programs across Canada. We recognize that other local factors, such as differences in provincial health care priorities and the size of the budget allotted to these programs, likely also contribute to the variation. Considering that evidence-based eligibility criteria do not exist for pharmacist-led medication reviews, it is essential that existing provincial programs be evaluated to ensure they are enrolling appropriate patients who are benefitting from the service.

Conclusion

The eligibility criteria used by provincially funded medication review programs in Canada are inconsistent and highly variable, raising doubt that all patients in need of such services are eligible to receive them as an insured health benefit. The development of a validated tool or screening protocol that is capable of identifying patients who will benefit from a medication review would allow provincially funded medication review programs to adopt consistent eligibility criteria that would make it more likely that health care resources are used responsibly and patient outcomes are improved optimally. ■

*From the College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Saskatchewan.
Contact derek.jorgenson@usask.ca.*

References

1. Hatah E, Braund R, Tordoff J, Duffull SB. A systematic review and meta-analysis of pharmacist-led fee-for-services medication review. *Br J Clin Pharmacol* 2013 April 18. Epub ahead of print.
2. Newfoundland Labrador Department of Health and Community Services. *Notice to providers: medication review*. September 2012. Available: <https://nlpdp.xwave.com/GeneralBulletins.aspx> (accessed June 20, 2013).
3. PEI Pharmacists Association. *PEI PharmaCheck program guide*. April 2013 Available: www.peipharm.info/docs/Pharmacheckprogramguide2013.pdf (accessed June 21, 2013).
4. PEI Department of Health and Wellness. *Provincial Pharmacare program now providing medication reviews*. 2013. Available: www.gov.pe.ca/health/index.php3?number=news&newsnumber=8955&dept=&lang=E (accessed June 20, 2013).
5. Nova Scotia Health. *Insured professional services*. 2011. Available: www.gov.ns.ca/health/Pharmacare/info_pro/pharmacists_bulletins/Pharmacists%20Bulletin%202011-08.pdf (accessed June 21, 2013).
6. New Brunswick Department of Health. *NB PharmaCheck*. Available: www.gnb.ca/0212/NBPharmaCheck-e.asp (accessed June 21, 2013).
7. Ontario Ministry of Health and Long-Term Care. *MedsCheck*. Available: www.health.gov.on.ca/en/pro/programs/drugs/medscheck/medscheck_original.aspx (accessed June 22, 2013).
8. Ontario Ministry of Health and Long-Term Care. *MedsCheck Program for Ontarians living with diabetes*. Available: www.health.gov.on.ca/en/pro/programs/drugs/medscheck/medscheck_diabetes.aspx (accessed June 22, 2013).
9. Ontario Ministry of Health and Long-Term Care. *MedsCheck at home*. Cited June 22, 2013. Available: www.health.gov.on.ca/en/pro/programs/drugs/medscheck/medscheck_home.aspx (accessed June 22, 2013).
10. Ontario Ministry of Health and Long-Term Care. *MedsCheck program for LTC home residents*. Available: www.health.gov.on.ca/en/pro/programs/drugs/medscheck/medscheck_home.aspx (accessed June 22, 2013).

- health.gov.on.ca/en/pro/programs/drugs/medscheck/ltc_residents.aspx (accessed June 22, 2013).
11. Pharmacists' Association of Saskatchewan. *Medication assessment and compliance packaging policy and procedure*. Available: www.skpharmacists.ca/Files/Compliance%20Packaging%20and%20Medication%20Assessment%20Policy%20FINAL.pdf (accessed June 20, 2013).
12. Pharmacists' Association of Saskatchewan. *Saskatchewan Medication Assessment Program (SMAP) information*. 2013. Available: [www.skpharmacists.ca/default.aspx?whatsnew=smap-training-july-\(revised\)](http://www.skpharmacists.ca/default.aspx?whatsnew=smap-training-july-(revised)) (accessed July 3, 2013).
13. Alberta Health. *Compensation plan for pharmacy services*. 2012. Available: www.health.alberta.ca/documents/Pharmacy-Services-Compensation-Plan-2012.pdf (accessed June 20, 2013).
14. BC Ministry of Health. *Medication review services*. Available: www.health.gov.bc.ca/pharmacare/pdf/8-7to8-10.pdf (accessed June 20, 2013).
15. Field TS, Gurwitz JH, Harrold LR, et al. Risk factors for adverse drug events among older adults in the ambulatory setting. *J Am Geriatr Soc* 2004;52:1349-54.
16. Hanlon JT, Schmader KE, Koronkowski MJ, et al. Adverse drug events in high-risk older outpatients. *J Am Geriatr Soc* 1997;45:945-8.
17. Koecheler JA, Abramowitz PW, Swim SE, Daniels CE. Indicators for the selection of ambulatory patients who warrant pharmacist monitoring. *Am J Hosp Pharm* 1989;46:729-32.