From ‘Eh!’ to Zika: The scope of practice and evidence related to Canadian pharmacists as travel health care providers

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Objectives

- Describe variation in pharmacists’ scope of practice across Canada related to the provision of travel health care
- Describe pharmacists’ training and other requirements to administer travel vaccines in Canadian pharmacies
- Review evidence to date on the effectiveness and uptake of pharmacist-delivered travel health care

### Scope of Practice in Canada

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<th>Province</th>
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### Alberta

- Injecting authority (n=4600, 82%):
  - Any vaccine or drug product (with valid Rx, if required)
- Additional Prescribing Authority, APA (n=2100, 39%):
  - Pharmacists with ≥1 year clinical experience can apply
  - If approved, can prescribe any vaccine or drug (except narcotics and other controlled substances) based on personal competence
  - Must be for approved indications only (see off-label prescribing)

### Alberta

- APA application process:
  - Application form (describe practice, preparedness, and judgment)
  - Submission of 3 actual patient cases within the past 2 years
  - Assessed by at least 2 pharmacists, against activities and indicators that assess:
    - Maintain professional relationship with patient
    - Patient counseling
    - Develop care plan and follow-up
    - Collaborative
    - Demonstration
    - Judgement
Manitoba

- Injecting authority (n=1000, 64%):
  - Any vaccine or drug product (with valid Rx, if required)
- Extended Practice Pharmacist (n=14, 0.9%):
  - Pharmacist with Certificate in Travel Health™ (CTH) and ≥ 1000 hours experience can apply
  - If approved, can prescribe drugs or vaccines “within the scope of their specialty practice”

New Brunswick

- Injecting authority (n=620, 7%):
  - Any vaccine or drug product (with valid Rx, if required)
- Prescribing (n=13 total, 1.6%, n=6 with CTH™):
  - All pharmacists: Prescribe for “preventable diseases” including vaccines for cholera, hepatitis, meningococcal disease, MMR, diph, and drugs for malaria and travellers’ diarrhea
  - Pharmacist with CTH: Can also prescribe vaccines against rabies, typhoid, tick-borne encephalitis, Japanese encephalitis, yellow fever

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Manitoba

- Extended Practice Pharmacist conditions:
  - Must have a collaborative practice with MD, NP, or RN with Extended Practice designation
    - “The pharmacist and the [collaborator] share and/or have immediate access to relevant diagnostic and health information”
    - “Patients are common to the pharmacist and the [collaborator], i.e., both are providing care to the patient(s)”
    - “The pharmacist and the [collaborator] understand and acknowledge that they share decision-making roles and responsibilities in the care of the patient(s)”

New Brunswick

- Challenges/gaps:
  - Pharmacists with CTH cannot prescribe drugs for altitude illness, doxycycline for those at higher risk for leishmaniasis, etc.
  - Vaccine against tick-borne encephalitis is not available in Canada....

Commentary

Canadian pharmacists as immunizers: Addressing questions related to this new scope of practice

Shelley D.D. Hunt, BSc, MP, PhD

Abstract

Currently, pharmacists in many Canadian provinces can apply for authorization to administer drugs and vaccines by following the successful completion of a required training program and having visual documentation of training and skills assessment records. This commentary addresses a number of questions commonly raised about pharmacists as immunizers, taking the position that pharmacists are able and willing to play a larger role in vaccination programs.

Keywords: Immunization, vaccine, pharmacist

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Overview

• Training/licensure:
  – Authorization requires additional training in all provinces and
    approval by provincial regulatory body
  – Schools of pharmacy often provide training to undergrad students
  – Practicing pharmacists can access training through pharmacy associations and
    other accredited providers of continuing education
  – Current CPR and First Aid required
  – Professional liability insurance required (amount varies by province)

PHAC Competencies

| The Immune System and Vaccines | Administration of Immunizing Agents |
| Vaccine Preventable Diseases | Adverse Events Following Immunization |
| Vaccine Development and Evaluation | Documentation |
| Types of Immunizing Agents and Their Composition | Populations Requiring Special Considerations |
| Population Health | The Canadian Immunization System |
| Storage and Handling of Immunizing Agents | Immunization Issues (e.g., vaccine hesitancy) |
| Communication | Legal and Ethical Aspects of Immunization |

Injection Scope Challenges

• Access to publicly-funded vaccines other than influenza
• Minimum age of patients varies highly (generally age ≥5-9 for parenteral or ≥2 for Intranasal Influenza, to ≥18 for non-influenza vaccines in PEI)
• Remuneration for injection administration
• Many provinces still do not have electronic immunization records across all care providers

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Methods

- Pharmacist with CITI™ and authorization to prescribe and to administer injections
- Chart review of 103 patients seen for pre-travel consultation
- Post-travel survey to assess patient satisfaction and incidence/management of any health issues abroad

Prescribing/Injecting

- 280 vaccines recommended total across all patients
  - 79% administered in clinic
  - Rabies and JE most commonly declined

- Drugs prescribed:
  - Antibiotic for traveler’s diarrhea (n=102)
  - Malaria prophylaxis (n=36, 4 reported not filling it)
  - Acetazolamide for prevention of altitude illness (n=13)

Satisfaction and Health Status (n=78)

- Only 41% recalled it was a pharmacist who did the consultation
- 94% satisfied or very satisfied overall
- 15 participants reported a health concern during travel:
  - Traveler’s diarrhea (n=9), Respiratory illness (n=4), Vomiting (n=2), Allergic rhinitis, strep throat, altitude sickness, eye infection (n=1 for each)
  - Only 1 of 15 felt inadequately prepared to manage their concern (respiratory illness, in patients with respiratory disease and diabetes)
Methods

- Health administrative data in Alberta, 2008-2017
- Adults dispensed at least 1 dose of a vaccine indicated for travel with ≥1 dose in the series
- Coded as ‘completer’ or ‘non-completer’ based on number of doses received over duration of typical series > 6 months
- Measured association between series completion and proportion of pharmacists with injection authorization

Dec. 2016, scope in Ontario expanded from injection of influenza vaccine only to injection of vaccines against 13 vaccine-preventable diseases

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Figure 4. Pharmacists’ professional confidence in their ability to provide travel-related services.

Figure 5. Factors impacting ability to offer travel-related services.
Summary

- Great variation across the country related to scope of practice
  - Inequitable access to care for patients
  - Confusion on pharmacists’ roles and expertise among patients and other healthcare professionals
- When practicing to full scope and with expertise in travel health, pharmacists can provide high-quality care
- Challenges remain with ensuring vaccine series completion
- Uptake of travel health services by pharmacists remains slow, even following scope expansion

References