

8. Care using select treatments

Cristina A. Mattison and John N. Lavis

Prescription and over-the-counter drugs

Ang.sAs

Key messages for citizens

- The majority of prescription and over-the-counter drugs, complementary and alternative therapies, and dental services are paid for by private insurers or out-of-pocket, with government funding concentrated in two areas:
 - drugs provided in hospital or covered through programs funded

Key messages for policymakers

- From 2000-01 to 2013-14, public prescription drug costs have steadily increased, with prescription drug costs to the government and to recipients increasing, in both cases, by 93%, drug costs at formulary prices increasing by 81%, drug mark-up increasing by 47%, and dispensing and compounding fees increasing by 170%.
- From 2000-01 to 2013-14, Ontario Drug Benefit Program beneficiaries and costs have also increased, with the number of beneficiaries increasing by 39% and claims increasing by 200%.
- While the use of complementary and alternative therapies is growing, they are almost exclusively paid for privately, either out-of-pocket or through private insurance plans.
- Only 1% of dental service expenditures were publicly financed in 2010, and while most dental services are paid for privately, there are a number of dental programs that support children, people with disabilities, and those in need of significant jaw reconstruction (offered in hospitals).

...

In this chapter we profile care that involves three broad categories of treatments: prescription and over-the-counter drugs, complementary and alternative therapies, and dental services. To begin, we focus on prescription and over-the-counter drugs. As covered in Chapter 1, when public and private spending are combined, drugs are the second largest category of health-system expenditure, which places them behind hospitals but before physicians. Complementary and alternative therapies are discussed as they are increasingly being used by many Ontarians either alongside or instead of the types of treatments covered in Chapters 6 and 7, even though their delivery operates entirely outside of the publicly funded health system. Dental services are also discussed, as they are an often taken-for-granted category of treatments that are also delivered largely outside the publicly funded health system.

Program	Benefit
New Drug Funding Program	Full coverage of approved new and expensive intravenous cancer drugs administered in regional cancer centres and hospitals The majority of intravenous cancer drugs are funded through this program, with the exception of older and less expensive drugs, which are covered under the Systemic Treatment Quality-Based Program
Special Drugs Program	Full coverage of disease-specific drugs when prescribed to outpatients by a designated centre/physician (e.g., drugs for cystic fibrosis, Gaucher's disease, schizophrenia, thalassemia, and children with growth failure)
Inherited Metabolic Diseases Program	Full coverage of drugs used to treat inherited metabolic diseases

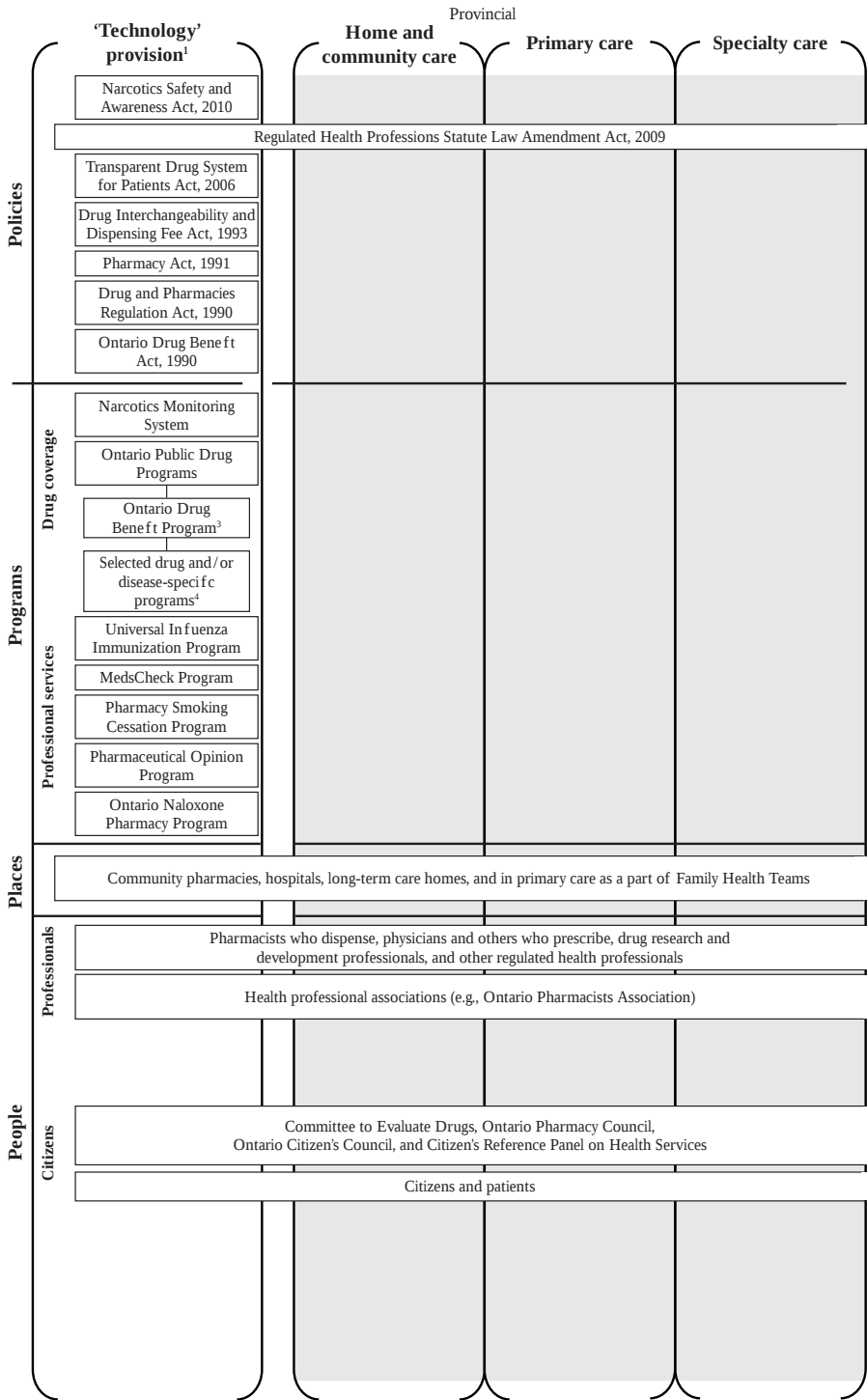
Policies that govern prescription and over-the-counter drugs

The main policies that govern prescription and over-the-counter drugs at the provincial level are listed in Figure 8.1 and include the:

- 1) *Ontario Drug Benefit Act, 1990*, which established the current administration of public drug programs in Ontario and the requirements for the formulary;
- 2) *Drug and Pharmacies Regulation Act, 1990*, which established the regulations governing pharmacies;
- 3) *Pharmacy Act, 1991*, which established the scope of practice of

Under the terms of the *Food and Drugs Act, 1985*, the Therapeutic Products Directorate of Health Canada's Health Products and Food Branch regulates which prescription and over-the-counter drugs, as well as medical devices, can be offered for sale in Canada.(6) Expedited reviews can be conducted under special circumstances. For example, the Priority Review Process provides faster review of promising drugs for life-threatening conditions, and the Special Access Program allows physicians to prescribe drugs that are not currently offered in Canada, albeit under very restricted circumstances (e.g., when standard treatments have failed or are not appropriate in specific circumstances).(2) On the other hand, some drugs undergo a very lengthy review process. The issue of approving medications for abortion in Canada, for example, was prolonged, and the review of Mifegymiso – the

Figure 8.1: Prescription and over-the-counter drugs



Sources: 2; 13; 15; 17; 26;
28-31; 33-37; 44;
79-81; 83; 84

Notes:

- ¹ In this case, 'technology' includes prescription and over-the-counter drugs and vaccines (not devices, diagnostics and surgeries as are sometimes included in this column).
- ² Bans direct-to-consumer advertising for prescription drugs under two provisions of the Food and Drugs Act, 1985 (Schedule A and Schedule F)
- ³ Includes Trillium Drug Program, Exceptional Access Program and Compassionate Review Policy
- ⁴

reports on prescription drug-price trends and on research and development spending by pharmaceutical companies.(13) The board began operation in 1987 and is part of the federal government's 'Health Portfolio,' although it operates at arm's-length from the minister of health and independently from Health Canada, which is the federal government's health department.(13) The Patented Medicine Prices Review Board has jurisdiction over 'factory-gate' prices (i.e., product price at the factory) for patented prescription and over-the-counter drugs, and does not extend to wholesaler or retailer pricing.(14)

While also formally part of governance arrangements, we address below – in the sub-section on 'places and people' – the scope of practice of pharmacists and the few health professions who can prescribe drugs.

Drug programs

Publicly funded drug programs (Figure 8.1) are administered as part of the Ontario Public Drug Programs, which were re-designed to their current form in 2007 through the *Transparent Drug System for Patients Act, 2006*.(15) The Pp-designed to their current

- 3) Trillium Drug Program for those with very high drug costs relative to household income (those who do not qualify for the ODB Program can apply for the Trillium Drug Program);
- 4) New Drug Funding Program for select intravenous cancer drugs, which are often very expensive (see Chapter 7);
- 5) Special Drugs Program for a range of serious conditions (e.g., full outpatient drug coverage for cystic fibrosis and thalassemia, among others, and including clozapine for schizophrenia);
- 6) Inherited Metabolic Diseases Program for those with metabolic disorders (full outpatient drug coverage, as well as coverage of supplements and specialty foods);
- 7) Respiratory Syncytial Virus Prophylaxis Program for high-risk infants (full coverage of palivizumab, which is used to prevent serious lower respiratory tract infections); and
- 8) Visudyne (Verteporfin) for those with age-related macular degeneration.(18; 19)

The Ministry of Health and Long-Term Care's Drugs for Rare Disease framework was created in 2007 by a panel of clinical and health technology assessment experts as a response to the lack of a national strategy.(20) A draft of the framework is used to assess funding requests for drugs for rare diseases. Five drugs have been evaluated using the framework, three of which are available through the Exceptional Access Program.(20; 21)

The Ontario Public Drug Programs are responsible for: 1) determining which products should be eligible for public reimbursement, which is done based on recommendations from the Committee to Evaluate Drugs; 2) making funding decisions; and; 3) negotiating agreements with drug manufacturers as appropriate.(15)

In making its recommendations, the Committee to Evaluate Drugs, which is comprised of 16 members (physicians with additional expertise in drugs or critical appraisal, pharmacists, health economists, and two patient representatives), considers recommendations about patented drugs from the Canadian Drug Expert Committee (or, in the case of cancer drugs, from the pan-Canadian Oncology Drug Review's Expert Review Committee) and extensive drug reviews provided through the broader Common Drug Review.(22) Up until 2003, provinces and territories conducted drug reviews independently. The Common Drug Review is the result of a 2002 intergovernmental agreement to ensure that publicly funded drugs

retailers (e.g., Guardian);

- 22% (872) are large chains (greater than 15 stores) (e.g., Rexall); and
- 3% (122) are small chains (from three to 15 stores).(32)

Pharmacy departments are important components of hospitals, providing prescription and clinical pharmacy assistance to patients and prescribers.

Most pharmacists work in pharmacies, but some can be found in home and community care organizations, as members of Family Health Teams, and in long-term care homes.(33) As part of the *Regulated Health Professions Statute Law Amendment Act, 2009*, the government expanded the role of pharmacists.(34) Pharmacists' scope of practice and/or publicly funded practice has grown to include:

- 1) one 30-minute annual review of prescriptions for those taking a minimum of three medications for a chronic condition, which was expanded in 2010 to include residents of long-term care homes, people living with diabetes, and people who are home-bound (through MedsCheck);
- 2) influenza vaccine administration in those aged 16 and up, through the Universal Influenza Immunization Program;
- 3) prescription of certain smoking-cessation drugs, through the Pharmacy Smoking Cessation Program
- 4) renewal and adaptation (e.g., dosage amounts) of some prescription medications, through the Pharmaceutical Opinion Program;
- 5) injections or inhalations to patients for education or demonstration purposes;
- 6) procedures on tissue below the dermis for the limited purposes of patient self-care education and chronic-disease monitoring (e.g., blood glucose monitoring); and
- 7) naloxone kit provision without a prescription and at no cost, which involves training from the pharmacist on how to properly administer the drug to treat opioid overdose (intramuscular injection), through the Ontario Naloxone Pharmacy Program.(20; 34-37)

Under the terms of the *Narcotics Safety and Awareness Act, 2010*, pharmacists also contribute data about the dispensing of narcotics and other controlled substances to the Narcotics Monitoring System, and receive warning messages about potential misuse.(17) Pharmacists are represented by the Ontario Pharmacists Association.

Only physicians, dentists, nurse practitioners, midwives and (as noted, in

limited ways) pharmacists are allowed to prescribe drugs to humans (and veterinarians can prescribe drugs to animals). In its 2014 election platform, the Liberal Party signalled the Government of Ontario's intent to further expand nurses' and pharmacists' ability to prescribe.(38; 39) The Health Professions Regulatory Advisory Council recently reviewed three models for registered nurse prescribing (independent prescribing, supplementary prescribing, and use of protocols) and made recommendations to the Minister of Health and Long-Term Care on prescribing by registered nurses in Ontario.(40)

National-level associations represent the brand-name pharmaceutical industry (Innovative Medicines Canada, which was formerly called Rx&D), generic-drug industry (Canadian Generic Pharmaceutical Association), and homeopathic product manufacturers and distributors (Canadian Homeopathic Pharmaceutical Association).(41-43) A national initiative (the pan-Canadian Pharmaceutical Alliance) has been created to achieve greater value for brand-name and generic drugs for publicly funded drug programs, with Ontario leading the brand-name-drugs initiative and Nova Scotia and Saskatchewan co-leading the generic-drug initiative.(44) Other national (non-governmental) initiatives, such as the Canadian Deprescribing Network and Choosing Wisely Canada, have been created to reduce the use of potentially inappropriate prescription and over-the-counter drugs.(45)

Governance, financial and delivery arrangements for prescription and over-the-counter drugs

The governance arrangements for prescription and over-the-counter drugs

Indicators	Beneficiaries and costs ^{1,2}			13-year percentage change ²
	2000-01	2010-11	2013-14	
All beneficiaries and claims (thousands)				
Beneficiaries	2,080	2,600	2,900	39%
Claims	49,000	124,000	147,000	200%
Beneficiaries by ministry (thousands)				
Health and long-term care	—	1,970	2,180	—
Community and social services	—	670	700	—
Beneficiaries by type (thousands)				
Core senior ³	884	1,383	1,609	82%
Ontario Disability Support Program				



Complementary and alternative therapies

Regulated complementary and alternative therapies include:

- 1) chiropractic, which involves the diagnosis and treatment of health issues of the muscular, nervous and skeletal system, with a particular focus on the spine;
- 2) homeopathy, which involves giving very small doses of natural sub-

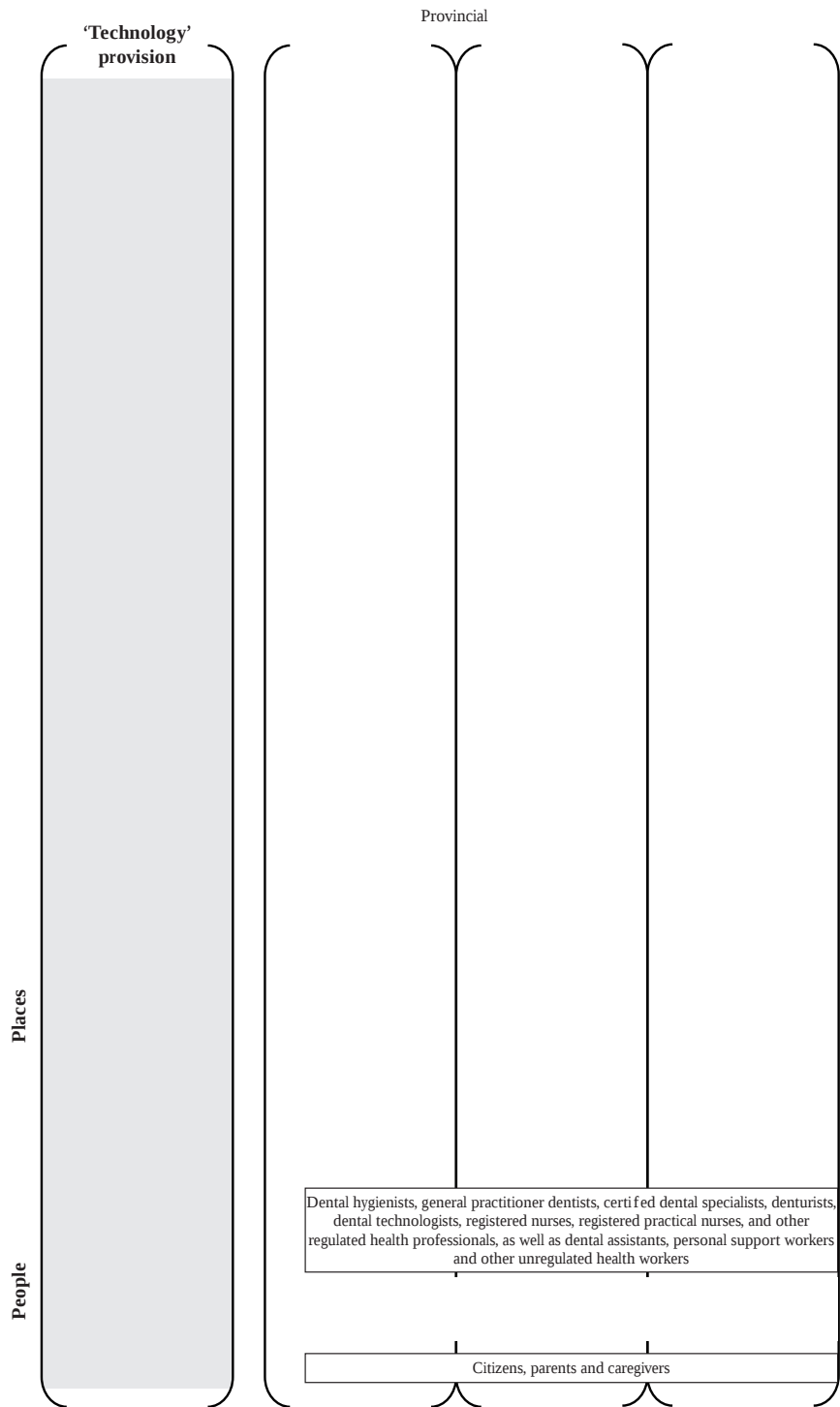
establishment of the regulatory colleges that govern them (College of Chiropractors of Ontario, College of Massage Therapists of Ontario, College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario, College of Homeopaths of Ontario, and College of Naturopaths

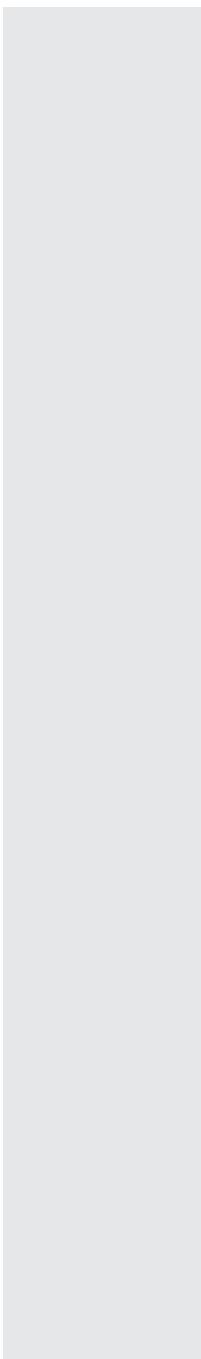
homes (e.g., massage therapy). With the exception of traditional Chinese

Policies that govern dental services

□ e key policies governing the provision of dental services by health pro

Figure 8.2: Dental services





Sources: 54; 90-95

- 3) *Long-Term Care Homes Act, 2007*, which established the nature of the oral care provided for residents (e.g., daily mouth care and physical assistance, and an offer of an annual dental assessment, which is subject to payment authorization); and
- 4) *Health Protection and Promotion Act, 1990*, which established the mandatory health programs and services (which include some dental services) to be provided by boards of health and which we return to below.

Several other policies established specific eligibility criteria for the dental services provided as part of social service and public health programs, including the:

- 1) *Children and Family Services Act, 1990*, which established the right for 'children in care' to receive dental services;(56)
- 2) *Ontario Works Act, 1997*, which established the health benefits, including dental services, for Ontarians receiving social assistance payments and their dependents;(57) and

the actions needed when fluoride levels fall below the therapeutic range (0.6 - 0.8 ppm) or above the maximum acceptable concentration (1.5 ppm).(62) As of 2007, 76% of Ontarians (9,229,015) have access to fluoridated water.(63) Including fluoride in health products can also be considered a population-based dental service. When such products contain a large concentration of fluoride (e.g., toothpaste and dental rinse) and carry a therapeutic claim, they are considered under the *Food and Drugs Act, 1985* and regulated under the Natural Health Products Regulations.(64)

As may be inferred from the description of these policies, the public stewardship role set for government is relatively limited for dental services compared to many other healthcare services. Moreover, in Ontario there is no chief dental officer, although there is one at the federal level, within the Public Health Agency of Canada. And with the exception of the limited data collection mandated by the Public Health Program Standards, there are no province-level data collected on dental services and dental health (54) and hence no public reporting about access to dental services (e.g., how many people do not seek care or return for recommended treatments because of cost), costs of dental services (e.g., how much do people pay, including out-of-pocket) or outcomes of dental services (e.g., Community Periodontal Index or number of missing teeth).

Programs that involve dental services

Publicly funded dental programs in Ontario are primarily aimed at children through the Healthy Smiles Ontario program, with a small subset focusing on people with disabilities and those in need of significant surgical dental services delivered in hospital (Table 8.5). Covered dental services focus mainly on prevention (e.g., fluoride application) and basic treatment (e.g., fillings, root canals, dentures and extractions), not cosmetics (e.g., whitening, veneers and orthodontics).

Similar to the federal government-funded drug plans for select groups outlined in the prescription and over-the-counter drugs section, the federal government funds dental services for the following groups:

- 1) status First Nations peoples and eligible Inuit through the First Nations and Inuit Health Branch's Non-Insured Health Benefits program, which will likely be extended to non-status First Nations and Métis

- in light of the 2016 Supreme Court decision (see Chapter 9 for more details on Indigenous health);(65)
- 2) members of the Canadian Forces (and their dependents) through the Department of National Defence;(66)
 - 3) qualified veterans through Veterans Affairs Canada;(67)
 - 4) Royal Canadian Mounted Police through the Public Service Health Care Plan;(30) and
 - 5) federal offenders through Correctional Service Canada.(31)

Places and people involved in dental services

Most primary and specialty dental services are provided in private offices and clinics, and typically not alongside family physicians or other primary-care team members or alongside medical specialists or other specialty team members (Figure 8.2). In select cases, dental services are provided in local public health agency clinics and Community Health Centres, and sometimes alongside other public health practitioners. The maintenance of good oral hygiene is handled by most Ontarians themselves (or in the case of younger children, by their parents), however, those needing help with activities of daily living may receive oral hygiene care in their home or in a school, hospital or long-term care home. Ontarians buy many dental products (e.g., toothpaste, toothbrushes, and interdental cleaning products like dental floss) in pharmacies. Water fluoridation takes place in municipal waterworks.

The people involved in providing dental services include citizens and caregivers as noted above, as well as dental hygienists, dentists, denturists, dental technologists and dental assistants, who are in turn represented by their respective professional associations (e.g., Ontario Dental Association). The Royal College of Dental Surgeons of Ontario (the regulatory college for dentists) offers an online ‘Find a dentist’ service on its website. Registered nurses and registered practical nurses provide assessments of oral health and hygiene practices, and develop care plans for adults requiring help with their activities of daily living (in the home and community sector, hospitals and long-term care homes).(68) Similarly, personal support workers, under the direction of a registered nurse or a registered practical nurse, provide oral hygiene for adults requiring help with their activities of daily living.(69) The Ontario Clean Water Agency provides water services to municipalities, including water fluoridation.

Governance, financial and delivery arrangements for dental services

The key governance arrangements for dental services have been covered in the ‘policies’ section above, but both financial and delivery arrangements warrant additional comments.

With the exception of the publicly funded dental programs that cover a relatively small proportion of the population and the dental surgery performed in hospital, most dental services are paid for privately (as described in the introduction to this section). These payments are almost always made on a fee-for-service basis, with suggested (usually lower bounds for) fees for dental services set annually by the Ontario Dental Association, (70) and with fixed fees for the small subset of dental services provided in hospitals set in

pharmaceutical policy advocates and researchers to encourage the creation of a universal pharmacare program that would complement Ontario's existing insurance programs for hospital-based and physician-provided care, and this effort has been supported by the Ontario Liberal government.(38; 77) However, there are no such initiatives for dental services, no talk of alternative remuneration methods for dental professionals that could give greater attention to prevention, and no mention of dental professionals in the *Patients First Act, 2016* despite its focus on interprofessional primary-care teams being accountable for defined populations.

References

1. Statistics Canada. Prescription medication use by Canadians aged 6 to 79. Ottawa: Statistics Canada; 2015. <http://www.statcan.gc.ca/pub/82-003-x/2014006/article/14032-eng.htm> (accessed 24 August 2016).
2. Health Canada. Drugs and health products. How drugs are reviewed in Canada. Ottawa: Health Canada; 2015. http://www.hc-sc.gc.ca/dhp-mps/prodpharma/activiti/fs-/reviewfs_examenfd-eng.php (accessed 25 August 2016).
3. Health Canada. Drugs and health products. Protecting Canadians from Unsafe Drugs Act (Vanessa's Law): Questions/answers. Ottawa: Health Canada; 2016. <http://www.hc-sc.gc.ca/dhp-mps/legislation/unsafedrugs-droguessangereuses-faq-eng.php> (accessed 27 August 2016).
4. Patented Medicine Prices Review Board. List of act and regulations. Ottawa: Government of Canada; 2014. <http://www.pmprb-cepmb.gc.ca/view.asp?ccid=1003> (accessed 24 August 2016).
5. Health Canada. Drug and health products. Guidance document: Patented medicines (notice of compliance) regulations. Ottawa: Health Canada; 2015. http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/patmedbrev/pmreg3_mbreg3-eng.php (accessed 26 August 2016).
6. Health Products and Food Branch. Therapeutic Products Directorate. Ottawa: Health Canada; 2014. <http://www.hc-sc.gc.ca/ahc-asc/branch-dirgen/hpfb-dgpsa/tpd-dpt/index-eng.php> (accessed 25 August 2016).
7. Health Canada. Drugs and health products. Mifegymiso. Ottawa: Health Canada; 2016. <http://www.hc-sc.gc.ca/dhp-mps/prodpharma/sbd-smd/drug-med/sbd-smd-2016-mifegymiso-160063-eng.php> (accessed 25 August 2016).
8. Erdman JN, Grenon A, Harrison-Wilson L. Medication abortion in Canada: A right-to-health perspective. *American Journal of Public Health* 2008;98(10): 1764-69.
9. Mintzes B. Direct-to-consumer advertising of prescription drugs in Canada: What are the public health implications? Toronto: Health Council of Canada; 2006.
10. Health Canada. Drug and health products. Interim guidance - Fair balance in direct-to-consumer advertising of vaccines. Ottawa: Health Canada; 2009. http://www.hc-sc.gc.ca/dhp-mps/advert-publicit/pol/guide-ldir_dtca-pdac_vaccine-vaccins-eng.php (accessed 25 August 2016).
11. Pilon JC, Williams-Jones B. Preparing for the arrival of "pink Viagra": Strengthening Canadian direct-to-consumer information regulations. *Canadian Medical Association Journal* 2016;188(5): 319-20.
12. Health Canada. Drugs and health products. Regulatory requirements for advertising. Ottawa: Health Canada; 2015. <http://www.hc-sc.gc.ca/dhp-mps/advert-publicit/index-eng.php> (accessed 25 August 2016).
13. Patented Medicine Prices Review Board. Mandate and jurisdiction. Ottawa: Government of Canada; 2015. <http://pmprb-cepmb.gc.ca/about-us/mandate-and-jurisdiction> (accessed 26 August 2016).
14. Organisation for Economic Co-operation and Development. Glossary of statistical terms - Factory gate price. Paris: Organisation for Economic Co-operation and Development; 2003. <https://stats.oecd.org/glossary/detail.asp?ID=5623> (accessed 24 August 2016).
15. Ministry of Health and Long-Term Care. Tough decisions, made responsibly. Ontario Public Drug Programs annual report 2012-2013. Toronto: Queen's date-and-id/uRuncate ax-eng.pa-id/uRunMsTugust 2016).

26. First Nations and Inuit Health Branch. Fact sheet - First Nations and Inuit Health Branch Ottawa: Health Canada; 2008. <http://www.hc-sc.gc.ca/ahc-asc/branch-dirgen/fnihb-dgspni/fact-fiche-eng.php> (accessed 25 August 2016).
27. National Defence and the Canadian Armed Forces. Spectrum of care: Medical and dental benefits and services Ottawa: Government of Canada; 2015. <http://www.forces.gc.ca/en/caf-community-health-services-benefits-drug-coverage/index.page> (accessed 25 August 2016).
28. National Defence and the Canadian Armed Forces. Canadian Armed Forces Drug Benefit list. Ottawa: Government of Canada; 2014. <http://hrapp.forces.gc.ca/drugbenefit-list-listed-medicaments/index-en.asp> (accessed 26 August 2016).
- 29.

54. Shaw J, Farmer J. An environmental scan of publicly financed dental care in Canada: 2015 update. Ottawa: Public Health Agency of Canada; 2015.
55. Ramraj C, Weitzner E, Figueiredo R, Quinonez C. A macroeconomic review of dentistry in Canada in the 2000s. *Journal - Canadian Dental Association* 2014;80: e55.
56. Legislative Assembly of Ontario. Child and Family Services Act, R.S.O. 1990, c. C.11. Toronto: Queen's Printer for Ontario; 2016. <https://www.ontario.ca/laws/statute/90c11> (accessed 24 August 2016).
57. Legislative Assembly of Ontario. Ontario Works Act, 1997, R.S.O. 1997, c. 25, Sched. A. Toronto: Queen's Printer for Ontario; 2016. <https://www.ontario.ca/laws/statute/97o25a> (accessed 24 August 2016).
58. Legislative Assembly of Ontario. Ontario Disability Support Program Act, 1997, S.O. 1997, c. 25, Sched. B. Toronto: Queen's Printer for Ontario; 2016. <https://www.ontario.ca/laws/statute/97o25b> (accessed 24 August 2016).
59. Legislative Assembly of Ontario. Fluoridation Act, R.S.O. 1990, c. F.22. Toronto: Queen's Printer for Ontario; 2016. <https://www.ontario.ca/laws/statute/90f22> (accessed 24 August 2016).
60. Legislative Assembly of Ontario. O. Reg. 170/03 Drinking water systems. Toronto: Queen's Printer for Ontario; 2016. <https://www.ontario.ca/laws/regulation/030170> (accessed 24 August 2016).
61. Legislative Assembly of Ontario. Safe Drinking Water Act, 2002. Toronto: Queen's Printer for Ontario; 2016. <https://www.ontario.ca/laws/statute/02s32> (accessed 24 August 2016).
- 62.

83. Ministry of Health and Long-Term Care. MedsCheck. Toronto: Queen's Printer for Ontario; 2015. http://www.health.gov.on.ca/en/pro/programs/drugs/medscheck/medscheck_original.aspx (accessed 25 August 2016).
84. Ministry of Health and Long-Term Care. Legislation - Ministry statutes. Toronto: Queen's Printer for Ontario; 2016. <http://www.health.gov.on.ca/en/common/legislation/statutes/default.aspx> (accessed 25 August 2016).
85. Ministry of Health and Long-Term Care. 2001/2002 report card for the Ontario Drug Benefit program. Toronto: Queen's Printer for Ontario; 2003.
86. Ministry of Health and Long-Term Care. 2010/11 report card for the Ontario Drug Benefit program. Toronto: Queen's Printer for Ontario; 2012.
87. Ministry of Health and Long-Term Care. 2011/12 report card for the Ontario Drug Benefit program. Toronto: Queen's Printer for Ontario; 2013.
88. Statistics Canada. Table 326-0020 - Consumer Price Index, monthly (2002=100 unless otherwise noted), CANSIM (database). Ottawa: Statistics Canada; 2016. <http://www5.statcan.gc.ca/cansim/a26?id=3260020> (accessed 24 August 2016).
89. Ministry of Health and Long-Term Care. 2012/13 report card for the Ontario Drug Benefit Program. Toronto: Queen's Printer for Ontario; 2014.
- 90.