26. Life Sciences

Canada boasts a mature life sciences sector with a robust regulatory framework with oversight by both the federal and provincial governments. The federal government regulates the safety and efficacy of health products throughout their lifecycle, while the provinces and territories each legislate over matters related to healthcare generally, including, notably on matters of cost and reimbursement, the nature of the healthcare delivery system, and privatization of the provision of medical services.

The public sector accounts for the majority of healthcare expenditures in Canada, though private insurance and individual expenditures also play a significant role.

The regulatory framework for health products in Canada aims to ensure their safety, efficacy and quality while meeting Canadian's health needs in a cost-efficient manner. In this chapter, we offer a brief overview of the healthcare system in Canada and describe the pathway to accessing the Canadian market.

The Healthcare System in Canada

Canada is known for its public healthcare system. Under the *Canada Health Act*, the federal government provides funding to the provinces to allow them to operate healthcare systems, so long as such systems are publicly administered, comprehensive, universal, portable and accessible.

Specifically, provincial public health insurance must cover medically necessary physician services and hospital services. The provinces are however free to implement their own insurance schemes for drugs and other healthcare products and services that are provided on an outpatient basis. There is considerable variation between the provinces as to when and under what circumstances such drugs, products and services are covered by public insurance, though generally, the services of other healthcare professionals are likely to be beyond the scope of public insurance and may instead be covered by private insurance.

Overall, about 70% of healthcare expenditures, including drugs, in Canada comes from the public sector, with the remainder assumed by private insurance and out-of-pocket payments[1]. As further discussed below, one of the consequences of the foregoing is that in many cases market access is influenced by public sector actors. Insofar as this results in fewer entry points into the healthcare system, it may simplify the process, though it also gives public sector payers considerable negotiating power.

Regulation of Healthcare Products

Healthcare products are regulated throughout their life cycle in Canada, from clinical research through advertising, distribution and dispensing. While drugs represent the largest segment of expenditures, other health products are regulated, namely:

- Medical devices
- Natural health products ("NHPs")
- Cosmetics

Regulation begins at the federal level. Health Canada must grant market authorization in respect of drugs (both innovative and generic), NHPs and medical devices before they can be sold or promoted on the Canadian market.

Health Canada will only provide market authorization for a health product if they are satisfied with the evidence to support their quality safety and efficacy, as well as any claims related thereto.

Clinical Research in Canada

Product safety and efficacy is demonstrated through clinical trials. While Health Canada will accept clinical trials conducted anywhere, Canada's healthcare system is an attractive destination for clinical trials as the country offers world-class medical expertise and facilities, while remaining more economical than comparable countries.[2] Canada participates in the International Conference for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use as a standing regulatory member, and the regulatory framework for the conduct of clinical trials is generally similar to that of most other high-income countries.

Prior to conducting clinical trials in Canada, a clinical trial application and supporting documentation must be submitted to Health Canada. If the application is deemed sound, a "No Objection Letter" will normally be issued within 30 days of receipt of the application. The conduct of a clinical trial is also subject to oversight by Health Canada and review by an ethics committee, which ensures that trial subjects' rights and well-being are respected.

Marketing Authorization

When the necessary data have been gathered in respect of a new drug, a manufacturer may submit a New Drug Submission ("NDS") to Health Canada. The new drug submission must contain sufficient information to allow for an assessment of the drug's safety and efficacy, including administrative, manufacturing, preclinical, clinical and labelling information. If the submission is satisfactory, a Notice of Compliance ("NOC") will be issued in respect of the drug, meaning that the manufacturer is authorized to sell the product in Canada. At that time, Health Canada will also determine whether the drug should be made available only by prescription; on the basis of whether supervision by a healthcare professional is necessary.

Applications must also be submitted to and approved by Health Canada in respect of NHPs and Class II, III and IV medical devices (Class I represents the lowest risk and Class IV represents the highest risk) before such products are sold. In contrast, Class I medical devices (such as a thermometer or ophthalmic lenses) need not be approved before marketing, though Health Canada monitors them through its establishment licence program as discussed below. Finally, most cosmetics may be sold without prior authorization, provided that the manufacturer notifies Health Canada of such sales.

Ongoing Surveillance of Product Safety

Health Canada's involvement in the regulatory process is not limited to granting market authorization, but rather spans the product lifecycle. For example, any changes to the information provided in the NDS or other marketing authorization application will generally require that an amended application be submitted and approved prior to implementation. In addition, consistent with its life-cycle approach to health products, Health Canada maintains pharmacovigilance programs to detect adverse reactions that may be associated with marketed products. Health Canada's powers were strengthened under the *Protecting Canadians from Unsafe Drugs Act* (Vanessa's Law), which was adopted in 2014. For example, the regulator can now order any person to provide information related to a drug or medical device where it believes that the product may present a serious risk of injury to human health and order a manufacturer to conduct an assessment of a drug or medical device at any time and to provide Health Canada with the results. The new legislation also requires hospitals to report serious adverse drug reactions and medical device incidents.

Generic Market Entry

Generic manufacturers must demonstrate that their products are equivalent to the innovator product on which they are based in terms of quality, safety and efficacy. In the case of conventional pharmaceuticals, the generic manufacturer may submit an Abbreviated New Drug Submission, in which clinical evidence may be limited to bioequivalence studies.

Health Canada will not issue an NOC in respect of a generic or biosimilar product if the innovator on which it is based holds a patent that is in force. A generic manufacturer may nonetheless submit a "notice of allegation", whereby it asserts that the innovator's patent claims are invalid. The innovator will then have an opportunity to respond to the notice of allegation and submit reasons why the claims are in fact valid. Only if the patent claims are found to be invalid is the NOC in respect of the generic issued.

Furthermore, under Canada's data protection regime, if the innovative drug contains a medicinal ingredient that has not previously been approved, an NOC in respect of the generic drug will not be issued until the data protection period of eight years (starting upon issuance of the NOC in respect of the innovative drug) has lapsed.

Finally, Certificates of Supplementary Protection ("CSPs") may be issued to innovative manufacturers to provide up to two years of additional market exclusivity, starting from the expiry of the applicable patent. CSPs are intended to compensate the manufacturer for time spent in research and development or in obtaining marketing approval.

Establishment Licences

In addition to marketing authorization for specific products, an establishment licence may be required to manufacture, distribute, import, and/or conduct other regulated activities with regards to drugs, NHPs and medical devices. All such facilities must meet the applicable regulatory requirements, including those with respect to record-keeping, mandatory problem reporting, recall procedures, etc. Health Canada regularly inspects such facilities and can require corrective action where deficiencies are noted.

Once a product receives its marketing authorization, it can be sold in Canada. We note however that there are still many regulatory considerations to keep in mind.

The PMPRB

The price of all patented medicines is regulated by the Patented Medicines Prices Review Board ("PMPRB"). The PMPRB is a quasi-judicial body that aims to ensure that the prices of patented medicines in Canada are not excessive. Factors considered in making this determination include the prices at which the medicine under review and similar medicines have been sold in Canada and in comparator countries. Where the price is deemed excessive following an investigation, the manufacturer may be required to offset any revenues the PMPRB has deemed excessive or contest the decision through a public hearing. If the price is deemed to be excessive following the hearing, the PMPRB can order price reductions and/or the offset of excess revenues.

The PMPRB operates in parallel to provincial price regulation.

Health Technology Assessment

Typically, prescription drugs and certain other health products must be covered by the public healthcare plan or by private insurers in order for physicians to prescribe, recommend or use them to treat patients. To be considered as covered, the product must be listed on the applicable formulary.

To obtain such coverage, manufacturers must undergo a very complex process. This process begins with a health technology assessment ("HTA"). An HTA is an evaluation of the therapeutic value and the pharmacoeconomic value of a new treatment or a new indication. In other words, it is an evaluation of the relative "value" of a new product compared to existing therapies or the standard of care, which might include surgery or hospital stay. The result of the review is a recommendation as to whether the drug in question should be covered, and if so, under what conditions.

The pCPA and PLAs

Once an HTA has been performed, a manufacturer will need to negotiate with the pan-Canadian Pharmaceutical Alliance ("pCPA"), a body representing the public insurance plans. The pCPA was created at the initiative of the provinces in order to obtain greater value for the participating drug plans by combining their collective negotiating power. If negotiations are successful, the result is a letter of intent ("LOI") regarding the public formulary list price of the product, typically a prescription drug, as well as confidential rebates, which may be provided to the public insurers.

Manufacturers then need to enter into actual, individual product listing agreements ("PLAs") with each of the public insurers. While the essential terms of the PLA are provided for in the LOI, additional province-specific details may be added. Once a PLA has been negotiated with a province, the province's drug plan will list the drug on its formulary in accordance with the terms of the PLA, meaning that the drug is then covered by the province's public drug insurance.

A similar process including PLAs and rebates or other financial risk mitigation measures can also occur in the private market, though private insurers do not have any equivalent to the pCPA.

Public Procurement

Health products are also frequently procured by hospitals or governmental group purchasing organizations. As most healthcare facilities in Canada are operated as public institutions, they are generally required to follow a competitive bid process that is open, fair, and transparent. See our chapter on Procurement in Canada, for additional detail on the fundamental principles governing the procurement process.

We note that there may be exceptions to the requirement for competitive bidding, which deserve particular attention in the healthcare context. These include:

- If an emergency situation exists (including, e.g. as occurred in the context of the COVID-19 pandemic)
- When there is only one possible contract due to exclusive aspect of product or service

In the context of a competitive tender, manufacturers may be inclined to offer value-adds in order to help win the bid. A value-add is a product, service, or funding of any nature that is solicited in a request for proposal (RFP) or offered by a supplier company as part of an RFP response at no additional charge or on concessionary terms.

Generally speaking, manufacturers are not prohibited from offering value-adds in connection with RFPs so long as the value-adds offered are not undue inducements and are limited to product(s) or service(s) provided for a related purpose and are reasonably necessary or useful for proper installation, use, or servicing of the product.

Drug Advertising

Once a product has insurance coverage or is procured by hospitals, manufacturers still need to tell physicians and/or patients about the product to ensure that it is used or prescribed.

Advertising of health products is highly regulated in Canada. To begin, all advertising is prohibited prior to marketing authorization. After market authorization, advertising is permitted, albeit under stringent conditions. For example, any claim made must be consistent with the terms of the marketing authorization otherwise it may be considered false, misleading or deceptive. In addition, health products may not be advertised to the general public for the treatment, preventative or cure for certain diseases for which self-care is not appropriate, including, e.g. diabetes and hypertension. An exception, however, is that preventive claims for non-prescription drugs and NHPs are permitted in advertising. Furthermore, promotion of a prescription drug to the general public is limited to name, price and quantity; in other words, an ad cannot mention the name of a drug and the condition it treats. Despite the foregoing, and although the term “advertisement” is broadly defined as any representation whose purpose is to promote a product, manufacturers remain free to communicate non-promotional messages, such as press releases and patient support group literature provided certain criteria are respected.

Interactions with Healthcare Professionals

Transparency and Anti-Kickback Legislation

To date, there is no legislation in force in Canada that would require the public disclosure of payments to healthcare professionals or healthcare organizations in a manner comparable to the *U.S. Sunshine Act*.

Furthermore, there is no anti-kickback statute that specifically prohibits parties from making or accepting any form of payment that is intended to encourage or reward a purchaser to recommend, prescribe, or purchase any good or service that can be reimbursed or paid for by a government-funded healthcare program. Quebec, however, is an exception as the province prohibits benefits to prescribers in connection with the sale or purchase of listed medications.

Instead of specific legislation, Canada relies on the Criminal Code's provisions prohibiting bribery of public officials to address domestic corruption, as well as professional codes of ethics and industry self-regulation to ensure ethical behaviour and avoid any improper incentives.

Professional Codes of Ethics

Professional codes of ethics generally prohibit healthcare professionals ("HCPs") from accepting any material benefit from industry or otherwise placing themselves in a conflict of interest position.

In the majority of provinces, these professional rules strictly speaking apply only to HCPs and so technically there is no related legal risk to manufacturers, though there may be business and/or reputational risks.

Nevertheless, in the province of Quebec, there is a unique provision which stipulates that every person who helps or leads a member of a professional order to contravene a provision of a professional code of ethics is guilty of an offence.

Industry Self-Regulation

In Canada, the control of interactions between companies and HCPs is largely based on a system of self-regulation. Industry associations have developed guidelines that govern their members, including:

- Innovative Medicines Canada: Code of Ethical Practices
- Canadian Generic Pharmaceutical Association: Code of Marketing Conduct Governing the Sale of Generic Pharmaceutical Products in Canada
- Medtech Canada: Code of Conduct

While not binding on non-members, these codes represent best practices for all manufacturers in the respective market segments.

These codes regulate matters interactions between industry and healthcare professionals. For example, the codes address the conditions under which a manufacturer may retain the services of a healthcare professional, provide a grant or sponsorship, offer meals and refreshments, etc.

Provincial Regulation of the Supply Chain

In addition to the foregoing, the provinces have regulatory power over the supply chain for health products, in particular those that are covered by government-funded healthcare programs. The rules respecting the wholesaling and distribution of drugs vary by province and may include measures such as:

- Restrictions on exclusivity and preferential supply agreements
- Prohibitions on rebates paid to wholesalers and pharmacies
- Limits on wholesalers mark-ups and pharmacists dispensing fees