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Health Canada Regulatory Modernization: Yesterday, Today, And Tomorrow

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Overview

In 2017, Health Canada started a five-year initiative on improving regulatory review of drugs and devices (R2D2)[1] . The goal of this initiative was to develop an agile regulatory system that supports better access to therapeutic products based on healthcare system needs. The outcome should result in a modern and flexible operational system with an updated infrastructure supported by an appropriate cost recovery framework. This system will allow access to clinical information to the public. To achieve this goal, Health Canada developed a plan for transformation in three major areas:
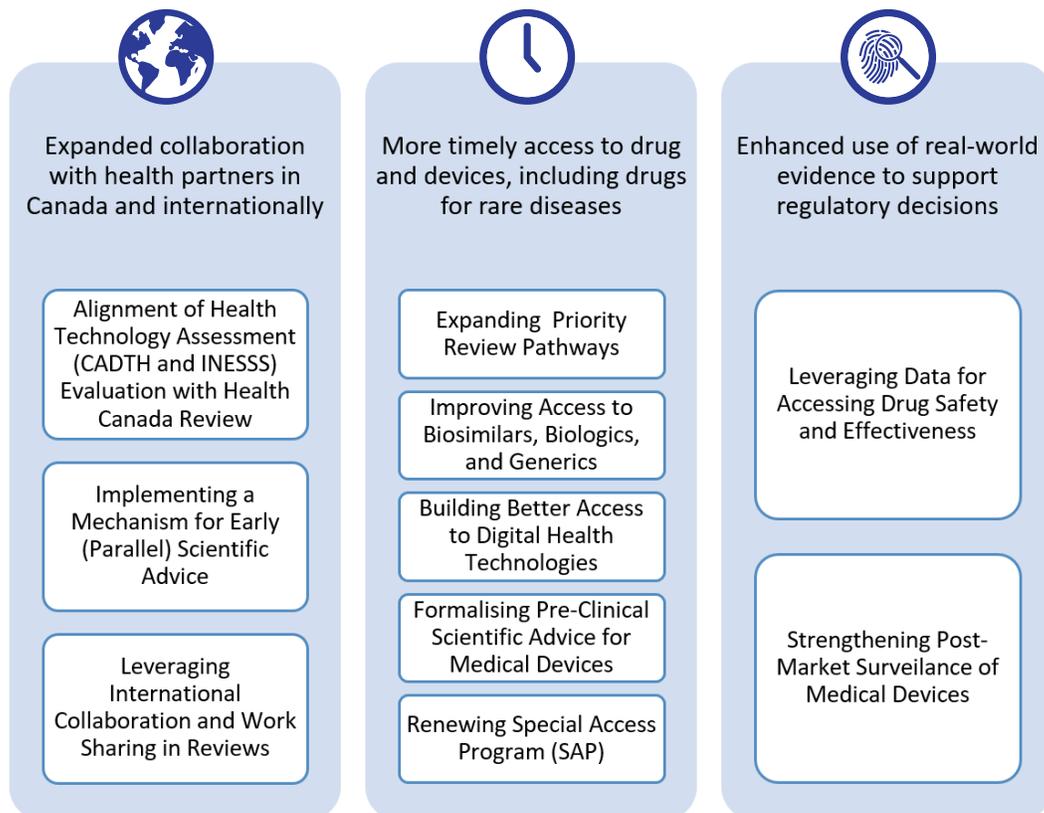
- Collaboration with health partners
- Access to drugs and devices
- Use of real-world evidence

This paper provides overview of the plan, discusses up-to-date progress and gives a glimpse into the future.

What is the Plan?

In support of the plan, Health Canada defined and implemented ten initiatives, as summarized in Figure 1 below :

Figure 1.

Modernization Plan and Initiatives

Expanded collaboration with health partners in Canada and internationally

- Alignment of Health Technology Assessment (CADTH and INESSS) Evaluation with Health Canada Review
- Implementing a Mechanism for Early (Parallel) Scientific Advice
- Leveraging International Collaboration and Work Sharing in Reviews

More timely access to drug and devices, including drugs for rare diseases

- Expanding Priority Review Pathways
- Improving Access to Biosimilars, Biologics, and Generics
- Building Better Access to Digital Health Technologies
- Formalising Pre-Clinical Scientific Advice for Medical Devices
- Renewing Special Access Program (SAP)

Enhanced use of real-world evidence to support regulatory decisions

- Leveraging Data for Accessing Drug Safety and Effectiveness
- Strengthening Post-Market Surveilance of Medical Devices

Overview

Successful implementation of these ten initiatives was supported by fourteen projects, the majority of which were initiated in 2017 with a goal of completion in 2021. Significant progress was made over the last 4 years. However, in 2020 execution was affected by the COVID-19 pandemic. The current status is summarized in the Table 1 below:

Table 1 Summary of Projects in support of the Modernization Plan implementation

R2D2 Initiatives and Projects	Outcome and Current Status (Completed Items are Shaded)
Alignment of Health Technology Assessment (CADTH and INESSS) Evaluation with Health Canada Review [2,3]	• Pilot project for oncology drugs with CADTH was completed in December 2017 • Time savings was approximately 5 weeks for one submission • CADTH and INESSS is now accepting all submissions up to 180 days prior to Notice of Compliance (NOC) • All parts of the project are fully implemented
Implementing a Mechanism for Early (Parallel) Scientific Advice [4]	• Sponsors can obtain advice from the Health Canada (HC) and the Health Technology Assessment (HTA) in parallel • It is built on CADTH's Scientific Advice Program and will follow the same processes and timelines, including CADTH's eligibility criteria and fee requirements • Guidance document was developed for consultation in 2019[5] • Project was targeted for completion by spring 2020, updates are pending due to the impact of COVID-19 pandemic
Leveraging International Collaboration and Work Sharing in Reviews [6]	• Two goals were set: 1) standardize the use of reviews conducted by other Regulatory Agencies to gain efficiencies in HC review of submissions for prescription drugs for human use and 2) allow authorizations for certain drugs that meet an unmet medical need to be based on a foreign decision • On July 4, 2018, Health Canada approved Erleada, the first drug to be evaluated under the Australia-Canada-Singapore-Switzerland (ACSS) Consortium's New Chemical Entities Work Sharing Trial [7]. • Work sharing under framework of ACSS and Project Orbis is fully implemented[8,9].

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R2D2 Initiatives and Projects	Outcome and Current Status (Completed Items are Shaded)
Expanding Priority Review Pathways[10]	• The goal is to build new review pathways for those drugs shown to meet health care system needs • Draft Guidance: Accelerated Review of Human Drug Submissions was released for consultation in 2019[11] • The guidance proposed to establish a single pathway for accelerated review; provide two different options for screening process, and define eligibility criteria for submission under accelerated review • Currently priority review is being applied on a "case-by-case" basis
Improving Access to Biosimilars, Biologics, and Generics [12, 13]	• The goal was to increase review capacity and involve international work-sharing and information sharing for generics • Revision to the Food and Drug Regulations [14], supported by consultation on draft guidance, [15] were proposed, but not yet implemented • Project was targeted for completion by fall 2020, updates are pending due to the impact of the COVID-19 pandemic
Building Better Access to Digital Health Technologies [16]	• The goal was to build capacity for digital health technologies, for example artificial intelligence and telerobotics and increase technical review capacity to ensure faster times to market for innovative devices • The new Digital Health Review Division[17] was created within the Therapeutic Products Directorate's Medical Devices Bureau • Scientific Advisory Committee for Digital Health Technology was established [18] • Project was targeted for completion by fall 2020, updates are pending due to the impact of COVID-19 pandemic
Formalising Pre-Clinical Scientific Advice for Medical Devices[19]	• Project aims to develop new ways for medical device stakeholders to engage with Health Canada. This is done through pre-clinical meetings and an e-learning course/tool • E-learning tool was launched in March 2019 [20] • Pre-clinical meeting pilot is ongoing since 2018 [21] • Project was targeted for completion by June 2020, updates are pending due to the impact of the COVID-19 pandemic

R2D2 Initiatives and Projects	Outcome and Current Status (Completed Items are Shaded)
Renewing Special Access Program (SAP) [22]	• Project intends to reduce paperwork through implementation of an electronic system, increase transparency, and put forward new regulations for military and public health emergencies • Consultations were conducted on Draft Guidance Document for Industry and Practitioners on the Special Access Program (SAP) for Drugs [23] and Draft Guidance: Public or Canadian Armed Forces Health Emergencies- Drugs for Immediate Use or Stockpiling [24] • Project was targeted for completion by fall of 2020, updates are pending due to the impact of COVID-19 pandemic
Leveraging Data for Accessing Drug Safety and Effectiveness [25]	• Project aims to a) increase use of real world evidence (RWE) for regulatory decision making, b) sharing RWE with health system partners, c) increase clarity for stakeholders on where and how RWE can be used, and d) improve access to drugs through the use of new sources of evidence • Project is currently ongoing, target for completion is fall 2022
Strengthening Post-Market Surveillance of Medical Devices [26]	• Project intends to a) improve ability to monitor safety and effectiveness of medical devices, b) better use of RWE for regulatory decision making, c) more proactive surveillance for monitoring devices safety and effectiveness, and d) enhances ability to manage identified safety risks for medical devices • Project was targeted for completion by fall of 2020, updates are pending due to the impact of the COVID-19 pandemic

In addition to the projects listed above, the Cost Recovery Renewal initiative was completed, revised fees were implemented on April 1, 2020, and Final Report: Fees for Drugs and Medical Devices is available.[27] In addition, public release of the clinical information initiative has been completed and the Food and Drug Regulations [28] and Medical Devices Regulations [29] were updated to incorporate provisions for disclosure of information in respect to clinical studies or investigational testing.

As demonstrated above, implementation of R2D2 is significantly changing Health Canada's approach to the whole process of evaluation and approval of drugs and devices making it more agile, flexible, and, at the same time, maintaining a quality review and compliance with the Food and Drugs Act [30] and supporting Regulations.

What is the Regulatory Enrollment Process?

Regulatory Enrollment Process (REP) is a recent example of ongoing Health Canada regulatory modernization.

On April 22, 2020, while in the midst of COVID-19 initiatives, Health Canada requested sponsor participation in the Regulatory Enrollment Process (REP), a non-functional pilot for clinical trial regulatory activities.[31] The REP enables clinical trial sponsors to send documents in a secure manner, with reduced transmission times and cost via the Common Electronic Submission Gateway (CESG). The implementation of REP for clinical trial activities is the last stage of overall REP implementation. Its success has been proven during pilot projects for pharmaceutical and biologic human drug regulatory activities, which resulted in mandatory implementation of REP and CESG for these activities on October 1, 2020.[32]

REP replaces the processes for the existing Health Canada 3011: Drug Submission Application Form and the Drug Submission- Application Fee Form for Human and Disinfectant Drugs. REP implementation provides several advantages, such as elimination of the use of media (CDs etc.), speeding up data entry and transmission, and increasing accuracy and reliability of submitted information. Sponsors should be aware that to comply with Health Canada requirements and take advantage of REP, sponsors have to complete the following steps (Figure 2), prior to using REP for first regulatory submission.[33]

Figure 2.

REP Steps and Timeline

3 months prior to submission	1 month prior to submission	2 weeks prior to submission	Included with the submission
• Set a Common Electronic Submission Gateway account	• Obtain company ID: for new company (never submitted to Health Canada) or to amend company information	• Obtain a dossier ID for new dossier or converting dossier from non-eCTD to eCTD format	• Complete REP Product Information Template: duration of preparation depends on the complexity of the product

What is in the Future?

The R2D2 initiative is still ongoing, but its success has laid a foundation for the Forward Regulatory Plan 2020-2022 with the specific focus on modernization of regulations of clinical trials.[34] The ongoing execution of the Modernization Plan has already improved Health Canada's operations. The final goal of the plan is to allow Health Canada to operate faster and more efficiently, while maintaining a high quality of work. This goal is becoming more feasible as plan implementation is progressing. This inevitably will result in more innovative medicines becoming available to Canadian patients.

Summary

The regulatory landscape in Canada is undergoing fundamental change through execution of the Regulatory Modernization Plan. As discussed above, initial implementation of the plan has already demonstrated improvement. For example, replacement of drug submission consecutive review by Health Canada and HTA with parallel review allows significant reduction in time and efforts, from both agencies as well as sponsors. Implementation of a secure electronic submission Gateway allows elimination of non-electronic interactions and increases speed and efficiency of communication.

This new agile regulatory system, in combination with implementation of the REP process and the uncertainty of pandemic, requires sponsors to make additional considerations in their regulatory strategy. It could be particularly challenging for pharma companies to include Canada in their global regulatory strategy because they are often focused on big markets such as the EU and USA. Our Certara/Synchrogenix drug development and regulatory consulting experts are ready to share their knowledge and work with you to ensure that you follow the correct processes and procedures for your development strategy and submissions. We offer a wide range of resources to optimize your development pathway and regulatory strategy for interacting with Health Canada to accelerate your product to the Canadian Market.

Contact us for further assistance.

About the Author

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Dr. Iliach has more than 15 years of experience in the healthcare industry including the last 10+ years in regulatory affairs. She has expertise in developing and executing regulatory strategies for drugs for rare diseases, pediatrics, and biosimilars, with a focus on Chemistry, Manufacturing and Control (CMC). Oxana has experience with the FDA, EMA, Health Canada, and other smaller agencies. She has a MSc in Chemistry and PhD in Pharmaceutical Science. She is also a professor at Seneca College, Toronto, Canada, where she teaches a course on clinical trials regulations.

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