Improving Time to Patient: Insights from the Canadian Cancer Treatment Hackathons

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CANCER COLORECTAL CANADA — COLORECTAL CANCER CANADA

BACKGROUND

It is estimated that two in five Canadians will receive a diagnosis of cancer in their lifetime and that one in four Canadians will die of cancer [1]. New and often targeted treatments are helping patients with all types of cancer and have improved overall survival and quality of life outcomes [1]. However, timely and efficient access to new treatments can be challenging, as Canada has a complex and lengthy process for reviewing drugs for public reimbursement due to several levels and jurisdictions regulating, reviewing, negotiating, and funding medicines [2].

The current framework for evaluating and reimbursing new medications in Canada warrants reconsideration. Canada ranks 19th out of 20 OECD countries in the time it takes for patients to get access to new medicines following approval, taking an average of 598 days in 2024, which is an improvement from 677 days in 2023, but still longer than the 541-day wait in 2020 [3].

This is double the waiting period seen in most comparable countries [4]. For example, countries with similar healthcare systems, such as the UK, take around 264 days from drug launch to public reimbursement [4]. In Canada, public plans cover only 20% of the new medicines available globally, and even after a successful price negotiation, patients wait an additional 3.5 months on average for coverage in half of public drug plans [4,5]. Consequently, Canadians relying on public health plans must wait significantly longer compared to other OECD countries and to drugs accessible through private plans [6].

OBJECTIVES

The Canadian Cancer Treatment Hackathons aim to:

- Identify ways to streamline the drug approval process to ensure Canadian patients receive timely access to cancer drugs (improve time to patient).
- Engage with stakeholders throughout the health technology assessment (HTA) system to identify process issues and propose new solutions.
- Provide recommendations to key HTA leaders and organizations to improve time to patient.

METHODS

To examine potential improvements in patient access to new cancer drugs, Colorectal Cancer Canada held roundtables, entitled T*he Canadian Cancer Treatment Hackathons,* between November 2022 to July 2025, with Hackathon #10 planned for November 2025.These sessions brought together over 200 thought leaders, including industry leaders, patient groups, clinicians, economists, policy experts, academics, and government officials from Canada and internationally.

The hackathons were conducted both virtually (Hackathons #1-3 and #5-9) and in-person (Hackathon #4). Participants examined how the current review and reimbursement structures could be improved to ensure timely access to innovative cancer medicines. In breakout groups, participants focused on key themes and investigated different aims for each hackathon session. The breakout sessions allowed participants to generate actionable ideas and solutions with an emphasis on tangible initiatives to reshape the Canadian drug access landscape. Subsequently, ideas were shared in plenary sessions, fostering collaborative discussion.

For Hackathons #4 and #6-9, pre-recorded panels were prepared to set the stage for the hackathon sessions, which provided participants valuable insights into crucial topics (e.g., international best practices).

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RESULTS

1 Hackathon #1 - Novel Ideation on Existing Systems

The first Hackathon focused on novel ideation within existing systems, identifying opportunities such as global, simultaneous data review through an expanded Project Orbis, international sharing and streamlining of health technology assessment (HTA) reviews, and concurrent pCPA negotiations alongside HTA reviews to accelerate funding decisions.

2 Hackathon #2- International Best Practices

The second Hackathon explored best practices from five leading HTA agencies to inform Canada's approach, highlighting real-world evidence (RWE) use, managed entry agreements, and early access funds (England/Wales); faster pathways with clear criteria (France); early adoption and pricing transparency (Germany); value-based assessments and national funding (Italy); and stronger collaboration with payers and patients (Australia).

3 Hackathon #3 - Ideate a New Process

The third Hackathon focused on reimagining the drug review and reimbursement process, identifying six themes to improve time to patient and support timely access to new treatments: stronger payer integration, streamlined decision-making, value-based HTA, a patient-centric approach, greater transparency, and innovative agreements like managed access programs.

4 Hackathon #4- High-Priority Ideas

In the fourth Hackathon, high-priority ideas aimed at expediting public access to new and effective drugs emerged based on international collaboration agreements. Top priorities included learning from the UK's Innovative Medicines Fund, ensuring jurisdictions and the pCPA prepare for listings during HTA review instead of waiting for a Letter of Intent (LOI), and engaging provinces earlier in the review process with clear timelines for public listing.

5 Hackathon #5- Impactful Actions

The fifth Hackathon built on lessons from previous sessions, focusing on actionable changes across stakeholders such as patient groups, industry, clinicians, and academics. Key priorities included leveraging patient support programs to generate real-world evidence, developing guidance for study designs beyond RCTs for rare diseases and small populations, incorporating the patient voice in pCPA decisions, reducing duplication by using international HTA assessments, and increasing transparency and accountability in the drug review process.

6 Hackathon #6- Integrating the Patient Value Story

The sixth Hackathon evaluated the price negotiation process, exploring how the pCPA could better integrate the patient value story to improve timely access to cancer drugs in Canada. Key actions included examining global comparators for early access and reassessment processes, identifying best practices and alternative models such as New Zealand's capped drug budget system, assessing acceptance of "no reimbursement" decisions through literature reviews and surveys, and developing tools and training to empower patients to engage in and influence policy using global leadership examples.

7 Hackathon #7 - Improving Patient Input

The seventh Hackathon focused on improving patient experience data (PED) collection to ensure meaningful patient input in drug evaluation and reimbursement. Key themes included standardizing PED practices, increasing transparency in HTA deliberations, expanding data methods beyond surveys, ensuring equitable representation, and applying global best practices such as NICE's patient involvement and the FDA's early engagement framework

8 Hackathon #8 - Exploring Outcomes-Based Agreements (OBAs)

The eighth Hackathon explored OBAs to improve timely access, with discussions segmented by industry, HTA agencies, public payers, and patient groups. Key findings highlighted Canada's lack of a formal OBA pathway, emphasizing simplicity, robust data quality, and stakeholder trust. Industry stressed clear criteria, early HTA engagement, and patient-centered outcomes; public payers, scalable and feasible models; HTA bodies, structured frameworks with standardized RWE; and patient groups, meaningful outcomes, transparency, and active engagement.

9 Hackathon #9 - Improving Post-LOI Processes

The ninth Hackathon explored action solutions to streamline post-LOI processes to ensure faster, more equitable access to new cancer medicines. Key findings highlighted the need for clear accountability, standardized reporting, and coordinated product listing agreement (PLA) processes to reduce redundancy. Early budget alignment, centralized monitoring, and targeted support for smaller provinces were critical, while performance-based funding and predictable timelines were seen as key to timely implementation, industry engagement, and sustainable innovation.

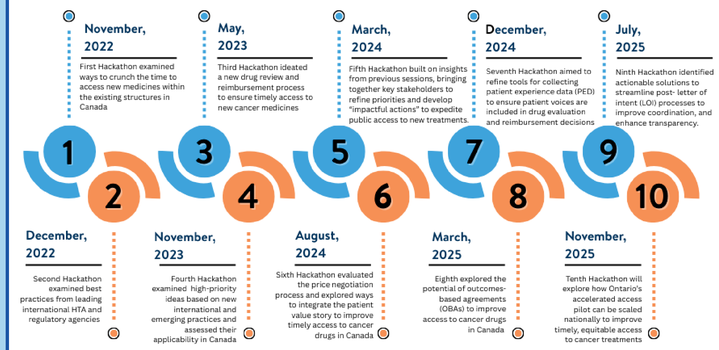
10 Hackathon #10- Expanding Ontario's Accelerated Access Pilot

The tenth Hackathon will discuss Ontario's accelerated access pilot and explore if, and how, it can be adapted across other provinces and territories to improve timely and equitable access to cancer treatments nationwide. Building on past learnings, the session will examine related initiatives like Project Orbis, identify barriers, and outline advocacy steps to support broader implementation. Discussions will focus on equity, political feasibility, policy sustainability, and system efficiency.

CONCLUSIONS

The Canadian Cancer Treatment Hackathons underscored the need to streamline Canada's drug review, negotiation, and reimbursement processes to ensure timely, equitable access to cancer medicines. Each hackathon built on previous sessions, addressing different stages of the process and generating actionable solutions. Key priorities included adopting international best practices from HTA bodies such as NICE and PBAC, expanding collaborations such as Project Orbis, and strengthening early engagement across federal, provincial, and territorial stakeholders. The sessions emphasized a patient-centric approach, including standardized collection and integration of patient experience data (PED), greater transparency in HTA deliberations, and better representation of diverse patient voices. Participants also called for earlier involvement of the pCPA and provinces, concurrent preparation for listings during HTA reviews, and streamlined PLA processes to reduce redundancy and delays. OBAs and other innovative funding models were explored to link access to real-world outcomes, supported by strong data infrastructure and stakeholder trust.Equity was a consistent theme, with calls to address jurisdictional disparities, strengthen accountability, and move beyond rigid ICER/QALY thresholds. By leveraging real-world evidence (RWE), aligning budgets earlier, and integrating patient perspectives throughout the process, these collaborative efforts offer a roadmap to transform Canada's drug access system and improve outcomes for cancer patients nationwide.

CANADIAN CANCER TREATMENT HACKATHONS TIMELINES : 2022–2025



RECOMMENDATIONS

Strengthen International Collaborations & Adopt Global Best Practices

- Expand global partnerships such as Project Orbis to allow for concurrent submission and review of cancer drugs across other jurisdictions to streamline access to cancer drugs.
- Implement early access drug funds, drawing on models like England's Cancer Drugs Fund (CDF) and Innovative Medicines Fund.
- Adopt international best practices, such as the collection and use of real-world evidence (RWE) and structured patient involvement framework from England/Wales (NICE).
- Explore alternative funding models such as New Zealand's capped drug budget system to promote predictability and sustainability.

Build a Patient-Centric & Equitable Approach

- Standardize PED collection and submission, providing flexible formats (e.g., video testimonials, narratives) and real-world examples of strong patient submissions to guide patient groups.
- Strengthen equity in PED representation by engaging underrepresented communities through partnerships and multilingual tools.
- Improve transparency in HTA deliberations by providing structured feedback on how PED informs decisions.
- Simplify and accelerate HTA reviews for rare diseases and small populations while incorporating value-based assessments and clinician input.

Optimize Early & Inclusive Stakeholder Collaboration

- Engage with provinces/territories earlier in the review and negotiation process to ensure commitments to timelines and timely access
- Hold pre-submission meetings with the pCPA, patient groups, clinicians, and other stakeholders to align on expectations and priorities.
- Establish a multi-stakeholder task force to coordinate cross-jurisdictional drug reviews and identify shared solutions.

Streamline post-LOI Processes and Provincial Implementation

- Standardize PLA processes across provinces using shared templates, interjurisdictional agreements, and integrated implementation teams to reduce redundancy and delays.
- Establish a national coordinating body to track and publicly report metrics such as time to PLA and time to first patient treatment.
- Use centralized monitoring and horizon scanning to anticipate needs, reduce duplication, and improve system readiness.

Improve Funding Models and System Efficiency

- Develop a national OBA framework, led by Canada's Drug Agency, with clear eligibility criteria, roles, and guidelines.
- Invest in digital infrastructure and standardized RWE systems to track agreements, measure outcomes, and support ongoing reassessment of drug value.
- Implement performance-based and risk-sharing funding models to align incentives, encourage sustainable innovation, and promote timely access.
- Support smaller provinces with shared resources and centralized expertise to address capacity gaps, reduce inequities, and improve system efficiency.