

Documenting coordination of cancer care between primary care providers and oncology specialists in Canada

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Abstract

Objective To report on the findings of the CanIMPACT (Canadian Team to Improve Community-Based Cancer Care along the Continuum) Casebook project, which systematically documented Canadian initiatives (ie, programs and projects) designed to improve or support coordination and continuity of cancer care between primary care providers (PCPs) and oncology specialists.

Design Pan-Canadian environmental scan.

Setting Canada.

Participants Individuals representing the various initiatives provided data for the analysis.

Methods Initiatives included in the Casebook met the following criteria: they supported coordination and collaboration between PCPs and oncology specialists; they were related to diagnosis, treatment, survivorship, or personalized medicine; and they included breast or colorectal cancer or both. Data were collected on forms that were compiled into summaries (ie, profiles) for each initiative. Casebook initiatives were organized based on the targeted stage of the cancer care continuum, jurisdiction, and strategy (ie, model of care or type of intervention) employed. Thematic analysis identified similarities and differences among employed strategies, the level of primary care engagement, implementation barriers and facilitators, and initiative evaluation.

Main findings The *CanIMPACT Casebook* profiles 24 initiatives. Eleven initiatives targeted the survivorship stage of the cancer care continuum and 15 focused specifically on breast or colorectal cancer or both. Initiative teams implemented the following strategies: nurse patient navigation, multidisciplinary care teams, electronic communication or information systems, PCP education, and multicomponent initiatives. Initiatives engaged PCPs at various levels. Implementation barriers included lack of care standardization across jurisdictions and incompatibility among electronic communication systems. Implementation facilitators included having clinical and program leaders publicly support the initiative, repurposing existing resources, receiving financial support, and establishing a motivated and skilled project or program team. The lack of evaluative data made it difficult to identify the most effective interventions or models of care.

Conclusion The *CanIMPACT Casebook* documents Canadian efforts to improve or support the coordination of cancer care by PCPs and oncology specialists as a means to improve patient outcomes and cancer system performance.

EDITOR'S KEY POINTS

- Coordination of care between primary care providers (PCPs) and cancer specialists has proven to be a considerable challenge. This environmental scan aimed to compile a casebook describing current Canadian initiatives targeting improved coordination of cancer care.
- Most initiatives incorporated nurse navigation. Two initiatives focused on the creation of multidisciplinary teams. Six initiatives implemented electronic communication or information systems. Educational resources for PCPs were the focus of 3 initiatives and were incorporated into an additional 6. Eight multicomponent initiatives combined various components of care.
- The Casebook highlighted the challenges of implementing comprehensive cancer care: a suboptimal level of primary care engagement, poor electronic systems that hinder communication and information transfer between PCPs and oncology specialists, and a lack of evaluation protocols that makes it difficult to assess initiatives' effects on patient, provider, and system outcomes.

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Description des mesures utilisées au Canada pour mieux coordonner le travail des soignants de première ligne et celui des spécialistes du cancer dans le traitement des cancéreux.

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Résumé

Objectif Décrire les données obtenues par le projet *Casebook* de *CanIMPACT* (*Canadian Team to Improve Community-Based Cancer Care along the Continuum*), qui documente systématiquement les initiatives canadiennes (c.-à-d. les programmes et les projets) qui visent à assurer plus de soutien et une meilleure coordination entre les IPL et les spécialistes du cancer dans le traitement des cancéreux et sa continuité.

Type d'étude Une vue d'ensemble pancanadienne.

Contexte Le Canada.

Participants Des personnes témoignant au nom des diverses initiatives ont fourni les données à analyser.

Méthodes Pour être incluses dans le *Casebook*, les initiatives devaient répondre aux critères suivants: elles devaient favoriser la coordination et la collaboration entre les IPL et les oncologues; être en rapport avec le diagnostic, le traitement, la période de survie ou une médecine personnalisée; et inclure des cancers du sein ou des cancers colorectaux, ou les deux. Les données ont été recueillies au moyen de formulaires qui mis ensemble, ont donné naissance à des résumés (c.-à-d. des profils) correspondant à chaque initiative. Les initiatives du *Casebook* ont été classées en fonction du stade visé dans l'évolution du traitement du cancer, du niveau de juridiction et des stratégies utilisées (c.-à-d. une forme de traitement ou un type d'intervention). L'analyse thématique a révélé les similarités et les différences entre les stratégies employées, le niveau de participation des soins primaires, les facteurs qui font obstacle ou qui favorisent la mise en œuvre, et l'évaluation des initiatives.

POINTS DE REPÈRE DU RÉDACTEUR

- Coordonner le travail des intervenants de première ligne (IPL) avec celui des spécialistes du cancer s'est avéré un défi considérable. Cette revue générale voulait présenter un compte rendu des initiatives canadiennes existantes qui visent à améliorer la coordination du traitement des cancéreux.

- La plupart des initiatives faisaient appel aux infirmières pivots. Deux autres visaient surtout la création d'équipes multidisciplinaires. Six initiatives proposaient des systèmes de communication ou d'information électroniques. Trois autres suggéraient des ressources pour former les IPL, une mesure qu'on retrouvait aussi dans 6 autres initiatives. Huit initiatives à composantes multiples combinaient divers composants de soins.

- Le *Casebook* soulignait la difficulté de mettre en place un traitement global du cancer: une participation sous-optimale des soins primaires; des systèmes électroniques peu efficaces qui compliquent la communication et le partage de l'information entre les soignants de première ligne et les oncologues; et l'absence de protocole d'évaluation qui rend difficile l'évaluation des effets des diverses initiatives sur les conséquences pour les patients, les intervenants et le système.

Cet article a fait l'objet d'une révision par des pairs.
Can Fam Physician 2016;62:e616-25

Principales observations Le *Casebook* de *CanIMPACT* a permis de tracer le portrait de 24 initiatives. Onze d'entre elles portaient sur le stade de survie dans l'évolution du traitement et 15 portaient spécifiquement sur le cancer du sein ou le cancer colorectal, ou les deux. Les équipes responsables des initiatives utilisaient les stratégies suivantes: l'utilisation d'infirmières pivots, d'équipes multidisciplinaires, de systèmes de communication ou d'information électroniques, de cours pour les IPL et d'autres mesures aux composantes multiples. Les différentes initiatives faisaient intervenir les IPL à divers niveaux. Les obstacles à la mise en œuvre comprenaient l'absence d'une standardisation pour les soins fournis par les différentes juridictions et certaines incompatibilités entre les systèmes de communication électroniques. Les facteurs facilitateurs comprenaient le fait que les leaders des activités cliniques et des programmes avaient publiquement apporté leur appui à cette entreprise, qu'on avait donné de nouveaux objectifs aux ressources existantes, qu'un support financier avait été obtenu, et qu'on avait mis en place une équipe motivée et habile pour gérer un projet ou un programme. En raison du manque de données évaluatives, on pouvait difficilement identifier les interventions ou les modèles de soins les plus efficaces.

Conclusion Le *Casebook* de *CanIMPACT* décrit les efforts canadiens visant à améliorer ou à soutenir la coordination entre MPL et oncologues dans le traitement du cancer comme moyen d'améliorer les issues des patients et le rendement du système.

Individuals diagnosed with cancer typically enter the health care system through primary care. To be comprehensive, cancer care must be coordinated between primary care providers (PCPs) and oncology specialists¹; however, this has proven to be a considerable challenge.^{2,3} Understanding strategies that have achieved this coordination is warranted to learn how to better optimize cancer care.

The Canadian Team to Improve Community-Based Cancer Care along the Continuum (CanIMPACT) is an interdisciplinary pan-Canadian research program.⁴ The CanIMPACT program investigates how to improve coordination between primary care and oncology care, and how to enhance the capacity of primary care to provide support for breast and colorectal cancer patients. One CanIMPACT project was the *CanIMPACT Casebook*, which involved conducting an environmental scan to systematically document Canadian initiatives designed to improve or support continuity and coordination of care between PCPs and oncology specialists. This paper reports the primary findings of the Casebook project.

METHODS

Methodology and study context

The aims of the Casebook project were to assess Canadian strategies to improve coordination of care between PCPs and oncology specialists, and to identify barriers and facilitators to this process, as well as indicators of success. An environmental scan of Canadian initiatives and the compilation of a casebook profiling in-the-field examples was chosen as an effective approach to achieving our goals.⁵ The casebook approach was successfully applied by members of the research team for a project examining knowledge translation interventions in the cancer care field.⁶

Sampling and data collection

Relevant initiatives were defined as programs or projects that were either in development or had been implemented by Canadian individuals, groups, or organizations. In an attempt to identify pertinent initiatives, requests for nomination were sent to clinical and research leaders across Canada in a first wave of recruitment. To be eligible for inclusion, the initiatives had to be designed to support coordination and collaboration between PCPs and oncology specialists; related to diagnosis, treatment, survivorship care, or personalized medicine (*personalized medicine* refers to individualized diagnostic, prognostic, and therapeutic care⁷); and inclusive of breast or colorectal cancer or both. These 2 diagnoses were of particular interest because of their high prevalence.⁸ Initiatives did not have to specifically target breast or colorectal cancer, but did have to be inclusive of at least 1 of the 2 diagnoses.

Telephone interviews were conducted by a research assistant (M.V.) with individuals who represented eligible initiatives. Most interviewees were individuals responsible for the administration or management of the initiative; however, in some cases, an initiative staff member also participated alongside the administrator or manager. Following a structured interview form (available on request), 21 questions were asked in a single telephone interview in order to collect the following data: general information about the initiative and its development; evaluative data; barriers and facilitators to implementation; lessons learned; and future directions. Interviews were audiorecorded, and the research assistant reviewed the recordings to complete the structured interview form.

To ensure adequate jurisdictional representation, purposeful second and third waves of recruitment were conducted. In the second and third waves, initiative contacts self-completed the question forms. Collected forms were then compiled into profiles, which were reviewed by interviewees for accuracy. During the review, interviewees were prompted to fill in any missing information (eg, evaluation results) or modify any of the details they had previously provided about their initiative to ensure their profile was as complete and up to date as possible. Recruitment, data collection, and development of profiles occurred between June 2014 and October 2015 (**Table 1**).

Data analysis

An inductive thematic analysis was conducted to analyze the profiles.⁹ A *thematic analysis* is a standard qualitative method used to identify patterns across a data set. The second and third authors (M.V., J.R.T.) reviewed the information contained in the profiles, coded features of the data in a systematic manner, and categorized these features within themes. Because the information collected on each structured interview template was consistent across initiatives, the grouping of themes was straightforward and did not require deductive coding or the generation of a codebook. Themes were then discussed and verified between coders in relation to the different stages of the cancer continuum targeted (pre-treatment, posttreatment, etc), jurisdictional level (local, provincial, etc), and intervention or strategy employed. Themes were then provided via examples that related back to the original research objective.

Level of primary care engagement

A list of ways in which primary care might be engaged in a cancer care initiative was created. Primary care providers might do any of the following:

- refer patients to the initiative,
- receive initiative- or patient-related information from program contacts,

Table 1. Data collection timeline

STEP IN PROCESS	2014		2015									
	JUNE TO NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
First wave												
• Recruitment	X											
• Interviews conducted		X	X	X	X							
• Initiative profile forms revised (by interviewees)			X	X	X	X						
• Profiles confirmed (by interviewees)							X	X				
Second wave												
• Recruitment				X								
• Initiative profile forms completed						X						
• Profiles confirmed (by initiative contacts)							X	X				
Third wave												
• Recruitment											X	
• Initiative profile forms completed												X
• Profiles confirmed (by initiative contacts)												X

- receive oncology-related education from oncology specialists,
- be supported in their collaboration with oncology specialists, or
- be involved in the development of program materials.

For each initiative, the level of primary care engagement was categorized as being low, moderate, or high. An initiative was categorized as low if only 1 of the aforementioned roles was reported. It was categorized as moderate if more than 1 of the roles was reported. To be classified as high, an initiative had to be implemented in a primary care setting or provide shared care (ie, between primary and oncology care providers) to patients.

FINDINGS

Nominations, inclusions, and exclusions

Across the first wave of recruitment, 159 requests for nomination were made and 32 nominations were received. Six nominations were excluded from further consideration because they were specific to a type of cancer other than breast or colorectal (n=2) or because they focused on screening (n=2), prevention (n=1), or the development of a health policy (n=1). Of the 26 nominations that met inclusion criteria, 7 did not

proceed to data collection because they were duplicate nominations (n=4), they were integrated into another profile (n=1), or they declined to participate (n=2).

Table 2 summarizes the first wave of included nominations by provincial jurisdiction.¹⁰ The second and third waves of recruitment were conducted to broaden provincial representation. During the second wave, targeted requests were made to clinical and research leaders in the Northwest Territories, Ontario, Quebec, Nova Scotia, and Australia. Three nominations were received (1 each, for initiatives based in Quebec, Nova Scotia, and Australia), all of which met inclusion criteria. The Australian initiative was considered based on the advice of an advisor to the CanIMPACT program; the initiative is relevant to the Casebook because it targets breast cancer follow-up care, offers evaluative data documenting its success, and is currently being implemented as a model of care in other sites. The third wave of recruitment identified 1 initiative from Ontario and 1 from Nova Scotia. Both nominations met inclusion criteria. Therefore, a total of 24 profiles were included in the Casebook.

Representation

A total of 23 Canadian initiatives and 1 Australian initiative were reviewed. The Canadian initiatives were

Table 2. First wave of nominations and inclusions, by jurisdiction

JURISDICTION	NOMINATIONS			
	REQUESTS	RECEIVED	INCLUSION CRITERIA MET	PROFILES COMPLETED
Northwest Territories	1	0	0	0
British Columbia	23	3	2	2
Alberta	28	11	9	5
Saskatchewan	3	0	0	0
Manitoba	13	3	3	3
Ontario	55	12	11	8
Quebec	1	1	0	0
Nova Scotia	2	0	0	0
Prince Edward Island	1	0	0	0
National or interprovincial	32	2	1	1
Total	159	32	26	19

Reproduced from the *CanIMPACT Casebook*.¹⁰

primarily based in Ontario (n=9) and Alberta (n=5) (Figure 1).¹⁰ Eleven initiatives specifically targeted the survivorship stage of the cancer care continuum and none targeted personalized medicine (Figure 2).¹⁰ Fifteen initiatives targeted breast or colorectal cancer or both (Figure 3).¹⁰

Organization of profiles

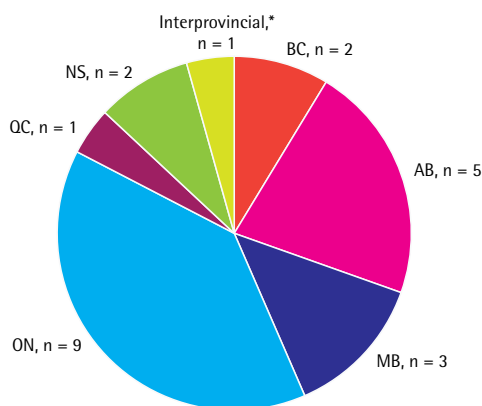
Casebook initiatives were categorized first by the stage of the cancer care continuum (pretreatment, posttreatment, and across the cancer care continuum), then by jurisdictional level (local or regional, provincial, and

other, meaning cross-provincial or international), and last, by tactic or strategy (ie, model of care or intervention type) employed. Table 3 provides the organizational schema of profiles in the Casebook.¹⁰

Strategies employed

Most initiatives incorporated nurse navigation into their model of care, either as the sole strategy (n=9) or as a component of an overall larger program (n=6). The dominant strategy of 2 initiatives was the creation of multidisciplinary care teams. Six initiatives implemented electronic communication or

Figure 1. Profile representation, by province

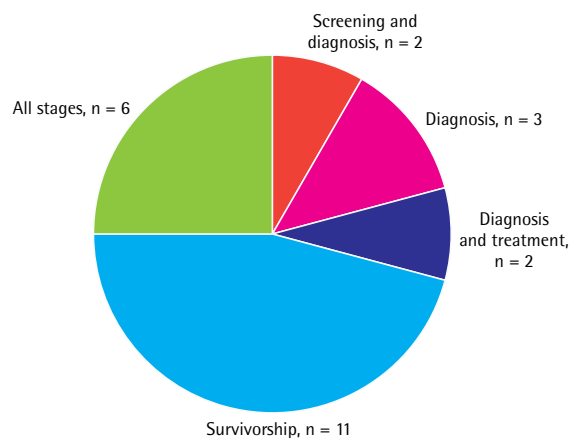


AB—Alberta, BC—British Columbia, MB—Manitoba, NS—Nova Scotia, ON—Ontario, QC—Quebec.

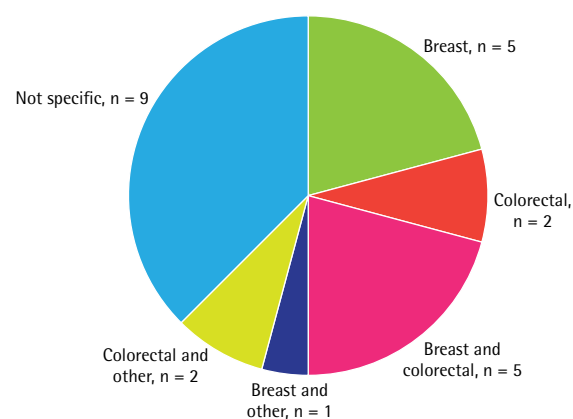
*Interprovincial refers to an initiative that is being implemented collaboratively by 2 provinces.

Reproduced from the *CanIMPACT Casebook*.¹⁰

Figure 2. Profile representation, by targeted stage of the cancer care continuum



Reproduced from the *CanIMPACT Casebook*.¹⁰

Figure 3. Profile representation, by targeted type of cancer

Reproduced from the *CanIMPACT Casebook*.¹⁰

information systems (2 as a primary strategy, and 4 as a component of their overall program). The provision of educational resources for PCPs was implemented by 3 initiatives and was incorporated into larger models of care for an additional 6 initiatives. Last, 8 programs combined various components of care (eg, nurse navigation, transition appointments, dissemination of care plans) into their overall implementation strategy, and were, therefore, considered to be multicomponent initiatives.

Engagement with primary care

Table 4 reports the level of primary care engagement for each initiative.¹⁰ Seven initiatives had low engagement, 11 had moderate engagement, and 6 had high engagement.

Barriers and facilitators

Respondents reported common barriers and facilitators to implementation (as well as to development and adoption). Commonly reported barriers were lack of care standardization across proximate jurisdictions and incompatibility among electronic communication or information systems. Commonly reported facilitators were having clinical and program leaders publicly support the initiative, repurposing existing resources, receiving financial support, and establishing a motivated and skilled project or program team.

Evaluation

Thirteen out of 24 initiatives had not completed formal program evaluations. The lack of evaluative data made it difficult to identify the most effective interventions or models of care.

The complete *CanIMPACT Casebook* and its appendices are available online (<http://canimpact.utoronto.ca/streams-and-themes/knowledge-translation>).¹⁰

DISCUSSION

The purpose of the CanIMPACT project is to improve continuity and coordination of breast and colorectal cancer care between PCPs and oncology specialists in Canada. One component of the CanIMPACT project involved creating a Casebook, which profiled and reviewed 24 initiatives related to that goal. In general, the included initiatives were associated with most stages of the cancer care continuum, employed 5 primary strategies of care delivery, and engaged PCPs at various levels.

Current state of primary care in Canadian cancer care initiatives

The Casebook findings highlighted 3 key contexts for PCP involvement in the initiatives. One focused on intensity of engagement, another focused on a key barrier to improving coordination of care, and the third focused on the research enterprise in this area.

The collected data revealed that PCPs are involved in initiatives at various levels, and that most established initiatives have only a moderate level of primary care engagement. The collaboration between PCPs and oncology specialists will likely be impeded if PCPs are on the periphery of cancer care, rather than participating as equal partners or leaders.

Another primary challenge with better cooperation between disciplines was the technical challenges associated with implementing electronic communication or information systems. Electronic systems are important for communication among care providers, and for transferring patient records, referrals, and other information; however, project teams often encountered problems when developing and implementing these systems. Thorough testing during development and ensuring that adequate technical support is on hand mitigates some of these issues. The failure in Canada to optimize technology and find workable solutions is anticipated to be the continued primary barrier to enabling collaborative approaches to cancer care.

A final observation relates to the state of the research enterprise and, more specifically, the lack of complete evaluations and availability of evaluative data, which are essential for measuring program effectiveness. Eleven of the profiled initiative teams had completed formal evaluations, although not all provided evaluative data to the research team during the interview or profile revision process. The remaining initiative teams (n=13) were in the process of creating an evaluation framework

Table 3. Organizational schema of profiles

STAGE OF CONTINUUM	JURISDICTIONAL LEVEL	TACTIC OR STRATEGY TYPE	INITIATIVE (PROVINCE)
Pretreatment (ie, screening, diagnosis, and transitioning from diagnosis into treatment)	Local or regional	Nurse patient navigation	Clinical Breast Health Program (AB) Comprehensive Breast Care Program (AB) Diagnostic Assessment Programs (ON)
	Provincial	Electronic communication or information systems	eReferral (AB)
		Physician education	LEAN on cME (MB)
		Multidisciplinary care teams	Ontario Breast Screening Program (ON) Nova Scotia Breast Screening Program (NS)
Posttreatment (ie, transitioning from treatment to survivorship or follow-up care)	Local or regional	Providing survivorship and primary care to “unattached patients”	Survivorship Nurse Practitioner Program (BC)
		Multicomponent initiatives	Juravinski Cancer Centre well follow-up clinics (ON) Optimizing a Cancer Survivorship Care Model for Northeast Ontario (ON) Wellness Beyond Cancer Program (ON) Transition Care Clinic (ON) Well follow-up care for colorectal cancer survivors and their circles of care (ON)
	Provincial	Electronic communication or information systems	Embedding disease pathway management published pathways into process of care (ON)
		Multicomponent initiatives	Provincial Integrated Cancer Survivorship Program (AB) Moving Forward after Cancer Treatment (MB)
	Other jurisdiction	Patient navigation and education	Transition Volunteer Navigator Program (BC, NS)
		Multicomponent initiatives	Victorian Cancer Survivorship Program (AU)
Across the cancer care continuum (ie, initiatives that address multiple stages of care)	Local or regional	Nurse patient navigation	Oncology Navigation Program (ON)
	Provincial	Nurse patient navigation	Alberta Cancer Foundation Cancer Patient Navigation (AB)
			Establishing oncology pivot nurses in Quebec (QC)
		Community-based cancer patient navigation (NS)	
Physician education	Uniting Primary Care and Oncology (MB) British Columbia Family Practice Oncology Network (BC)		

AB—Alberta, AU—Australia, BC—British Columbia, MB—Manitoba, NS—Nova Scotia, ON—Ontario, QC—Quebec.
Reproduced from the *CanIMPACT Casebook*.¹⁰

Table 4. Level of primary care engagement

INITIATIVE (PROVINCE)	LEVEL OF PRIMARY CARE ENGAGEMENT	DESCRIPTION
Clinical Breast Health Program (AB)	Moderate	<ul style="list-style-type: none"> • PCPs refer patients to the program and receive updates on the progress of their patients
Comprehensive Breast Health Program (AB)	Moderate	<ul style="list-style-type: none"> • PCPs refer patients to the program and receive updates on the progress of their patients
Diagnostic Assessment Programs (ON)	Low	<ul style="list-style-type: none"> • PCPs refer patients to the program
eReferral (AB)	Moderate	<ul style="list-style-type: none"> • PCPs worked alongside specialists to design the referral process • PCPs provide electronic referrals for specialty care
LEAN on cME (MB)	Low	<ul style="list-style-type: none"> • Program provides PCPs with oncology education
Ontario Breast Screening Program (ON)	Moderate	<ul style="list-style-type: none"> • PCPs refer patients to the program and patients' screening results are shared with PCPs
Nova Scotia Breast Screening Program (NS)	Moderate	<ul style="list-style-type: none"> • Most patients report that their PCPs encouraged them to get screened • Patients' screening results and follow-up appointments are shared with PCPs • Diagnostic examinations are booked through the program then forwarded to PCPs, who inform their patients
Survivorship Nurse Practitioner Program (BC)	High	<ul style="list-style-type: none"> • Program takes place in a primary care setting and nurses interact and collaborate with PCPs daily
Juravinski Cancer Centre well follow-up clinics (ON)	Low	<ul style="list-style-type: none"> • PCPs receive copies of their patients' transition letters and SCPs
Optimizing a Cancer Survivorship Care Model for Northeast Ontario (ON)	High	<ul style="list-style-type: none"> • PCPs involved in development of clinical pathways and educational materials for patients • Specialized PCPs help patients transition to their PCPs after completion of treatment (ie, shared care) • PCPs receive oncologists' discharge notes, patients' medical records, and surveillance guidelines • PCPs have the opportunity to attend educational workshops
Wellness Beyond Cancer Program (ON)	High	<ul style="list-style-type: none"> • PCPs provide shared care with nurse practitioners • PCPs receive copies of their patients' discharge letters and SCPs
Transition Care Clinic (ON)	Moderate	<ul style="list-style-type: none"> • PCPs receive access to their patients' electronic care summaries • PCPs receive oncology-related education from specialists
Well follow-up care for colorectal cancer survivors and their circles of care (ON)	High	<ul style="list-style-type: none"> • PCPs were consulted and informed throughout program development • Program provides shared care to patients • Program provides PCPs with patient information and oncology-related resources
Embedding disease pathway management published pathways into process of care (ON)	Moderate	<ul style="list-style-type: none"> • PCPs involved in the development of clinical pathways • PCPs receive copies of their patients' SCPs and reminder letters for follow-up care
Provincial Integrated Cancer Survivorship Program (AB)	Low	<ul style="list-style-type: none"> • PCPs involved in the design and testing of mechanisms that embed follow-up guidelines into PCPs' electronic medical records
Moving Forward after Cancer Treatment (MB)	Moderate	<ul style="list-style-type: none"> • PCPs involved in the development of program materials • PCPs receive copies of their patients' SCPs
Transition Volunteer Navigator Program (BC, NS)	Low	<ul style="list-style-type: none"> • PCPs receive information about the initiative
Victorian Cancer Survivorship Program (AU)	Moderate	<ul style="list-style-type: none"> • PCPs receive copies of their patients' SCPs • PCPs meet with patients to review their SCPs and to address their concerns

Continued on page e624

Table 4 continued from page e623

INITIATIVE (PROVINCE)	LEVEL OF PRIMARY CARE ENGAGEMENT	DESCRIPTION
Oncology Navigation Program (ON)	High	<ul style="list-style-type: none"> • PCPs involved in the development of program materials and refer patients to the program • Program takes place in a primary care setting, and specialized nurses interact and collaborate with PCPs daily
Alberta Cancer Foundation Cancer Patient Navigation (AB)	Low	<ul style="list-style-type: none"> • PCPs refer patients to the program
Establishing oncology pivot nurses in Quebec (QC)	Low	<ul style="list-style-type: none"> • PCPs contact program providers to receive updates about their patients
Community-based cancer patient navigation (NS)	High	<ul style="list-style-type: none"> • Program provides shared care to patients
Uniting Primary Care and Oncology (MB)	Moderate	<ul style="list-style-type: none"> • Program provides PCPs with oncology-related education • Program provides a platform for collaboration and communication between specialty and primary care
British Columbia Family Practice Oncology Network (BC)	Moderate	<ul style="list-style-type: none"> • PCPs are involved in the development of program materials • Program provides PCPs with oncology-related education and resources • Program provides a platform for collaboration and communication between specialty and primary care

AB—Alberta, AU—Australia, BC—British Columbia, MB—Manitoba, NS—Nova Scotia, ON—Ontario, PCP—primary care provider, QC—Quebec, SCP—survivorship care plan.
 Reproduced from the *CanIMPACT Casebook*.¹⁰

or collecting data. Ultimately, the limited availability of evaluative data made it challenging to identify whether existing initiatives have been successful at coordinating care between PCPs and oncology specialists.

Casebook limitations

Although the Casebook captures 24 established initiatives, it is likely that not all of the relevant initiatives were captured through the nomination and targeted recruitment processes. Further, initiative contacts were asked the same set of questions, yet the amount of information and the level of detail that was provided by the contacts varied. Consequently, the length of the profiles, and the level of detail presented in them, differs.

Another limitation of the Casebook is that the profiled initiatives are not representative of all Canadian provinces and territories. The absence of nominations from stakeholders in northern and Atlantic Canada suggests that initiatives that support coordination between PCPs and oncology specialists either do not exist in those regions or that they do exist but have been overlooked or are still in early stages of development. Additionally, Quebec was undergoing a restructuring of its health system during the call for nominations. This made it difficult to connect with research and clinical leaders in the province and to confirm their participation in the Casebook project.

As mentioned, the objective of the Casebook was to profile Canadian initiatives. However, a single Australian initiative (identified as being an effective model of comprehensive breast cancer follow-up care) was included following the recommendation of a CanIMPACT advisor.

This is considered to be a limitation of the Casebook, as a systematic search for other initiatives in Australia and other countries was not performed.

Last, in order to be eligible for inclusion in the Casebook, initiatives had to address at least one of the following stages of care: diagnosis, treatment, survivorship, or personalized medicine. Casebook initiatives targeted diagnosis, treatment, and survivorship; however, none targeted personalized medicine. This might be because these initiatives are still in early stages of development or because they were overlooked or not nominated.

These limitations suggest that the Casebook findings provide only a “snapshot” of the current state of collaboration among PCPs and oncology specialists in Canada and not a complete representation of cancer care coordination in the country.

Study importance and future directions

Casebook findings can inform researchers and clinicians when establishing programs that aim to coordinate cancer care between PCPs and oncology specialists in Canada. Existing initiatives used the following strategies to enhance continuity and coordination of care: nurse patient navigation, multidisciplinary care teams, electronic communication or information systems, PCP education, and multicomponent initiatives. Most initiatives targeted survivorship and none targeted personalized medicine. The Casebook highlighted the challenges of implementing comprehensive cancer care: the suboptimal engagement of PCPs in the delivery of cancer care, the technical challenges associated with the

implementation of electronic systems (which can hinder communication and information transfer between PCPs and oncology specialists), and a lack of evaluation protocols, making it difficult to assess initiatives' effects on patient, provider, and system outcomes.

Owing to the lack of evaluative data for the profiled initiatives, we cannot identify indicators of program success; however, Casebook findings will inform the CanIMPACT program of research moving forward.

Conclusion

The *CanIMPACT Casebook* profiles Canadian initiatives that aim to improve or support coordination and continuity of cancer care between PCPs and oncology specialists. Twenty-four initiatives were identified, and findings provide insight about the current state of cancer care in Canada. The general lack of evaluative data emphasizes the importance of establishing an evaluation protocol to assess the effectiveness and sustainability of different strategies being employed across the country. 🌿

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Contributors

Dr Brouwers was involved in project conception and design, and manuscript writing. **Ms Vukmirovic** and **Dr Tomasone** participated in data collection, analysis, and interpretation, as well as manuscript writing. **Drs Grunfeld, Urquhart, O'Brien, Walker, and Webster** provided input into project conception and data interpretation, and critically reviewed the manuscript. **Dr Fitch** provided input into project conception and data interpretation. All authors read and approved the final manuscript.

Competing interests

None declared

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