Rapid Synthesis

Enhancing Shared-care Models Between Primary-care and Cancer-care Teams in Post-treatment Care

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Rapid Synthesis:
Enhancing Shared-care Models Between Primary-care and Cancer-care Teams in Post-treatment Care
30-day response

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McMaster Health Forum

The McMaster Health Forum's goal is to generate action on the pressing health-system issues of our time, based on the best available research evidence and systematically elicited citizen values and stakeholder insights. We aim to strengthen health systems – locally, nationally, and internationally – and get the right programs, services and drugs to the people who need them.

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Timeline

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. This synthesis was prepared over a 30-business-day timeframe. An overview of what can be provided and what cannot be provided in each of the different timelines is provided on McMaster Health Forum's Rapid Response program webpage (www.mcmasterforum.org/find-evidence/rapid-response).

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Conflict of interest

The authors declare that they have no professional or commercial interests relevant to the rapid synthesis. The funder played no role in the identification, selection, assessment, synthesis or presentation of the research evidence profiled in the rapid synthesis.

Merit review

The rapid synthesis was reviewed by a small number of policymakers, stakeholders and researchers in order to ensure its scientific rigour and system relevance.

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KEY MESSAGES

Question

- What are the features of shared-care models designed to enhance coordination between primary-care and cancer-care teams in post-treatment care, and whether and how such models contribute to achieving the quadruple aim of enhancing patient experiences and health outcomes with manageable costs and positive provider experiences?

Why the issue is important

- There has been a rise in cancer diagnoses with an estimated 225,800 new cancer cases in 2020, in addition to an increased five-year net survival rate of any type of cancer in Canada.
- The number of people living with cancer or transitioning out of the cancer system into survivorship care will continue to increase.
- In follow-up care, survivors require supports for symptom management, psychosocial needs, lifestyle behaviour changes, and various physical and practical functional challenges.
- It is important to identify the features of shared-care models that are designed to enhance coordination between primary-care teams and oncology in post-treatment care, and whether and how they achieve desired impacts.

What we found

- We identified 32 systematic reviews and 17 primary studies that provide additional insights about the question in relation to the Canadian context.
- These reviews and studies are summarized in relation to: 1) the key features of shared-care models; 2) impacts of shared-care models according to the quadruple-aim outcomes (patient experiences, health outcomes, costs and provider experiences); and 3) barriers and facilitators to implementing them.
- Shared-care models were typically characterized as involving two different institutions and a transition from the hospital to primary care, and/or with a model of multi or interdisciplinary coordination for survivorship care, along with a focus on preventing recurrent and new cancer, interventions for secondary effects of cancer treatment or social adjustments.
- In relation to patient experiences, included reviews found no significant difference in patient-reported outcomes (PROs) between shared-care models and usual care, no significant differences in terms of quality of life and unmet needs, and with some providing inconclusive results.
- For health outcomes, we found that shared-care models compared to usual care have no significant differences in recurrence rates, serious clinical events, mental health outcomes (e.g., distress, depression and anxiety) and other health outcomes, but some systematic reviews reported inconclusive results for outcomes such as survival and side effects of treatment due to heterogeneity of findings.
- Most of the systematic reviews that included cost-related outcomes for shared-care models reported markedly decreased costs for the health system and increases in appropriate healthcare utilization in primary-, acute- and hospice-care settings, emergency departments and intensive-care units.
- For provider experiences, studies that assessed continuity of care found that shared-care models were seen as meeting the requirements of follow-up, and primary-care providers felt their knowledge was improved and that they had the capability of providing healthcare with the support of hospital specialists.
- The shared-care model has been identified as being largely accepted as a viable model across clinical settings, but key implementation challenges include lack of role clarity about the specific role and responsibility of oncologists and primary-care physicians in cancer follow-up, surveillance for secondary cancer, and provision of preventive services, insufficient knowledge about and confidence in survivorship care among primary-care physicians, and lack of confidence from survivors with follow-up care delivered by primary-care physicians.
- Key approaches identified to overcome some of these challenges included educational interventions for primary-care physicians in survivorship care, oncologists engaging and communicating with primary-care physicians during cancer treatment, and developing survivorship-care plans to facilitate care communication between care providers (although these are also cited as being time consuming and patients express not always being able to understand them).
- Three general limitations of the research about shared-care models were identified: 1) the nature of follow-up care for cancer survivors in terms of who is involved, with much of the literature focused on physician-oriented interventions even though others may need to be involved; 2) assessments of survivorship-care plans not consistently taking into account the implementation process or linking survivor-centric outcomes to the specific objectives for introducing the plans; and 3) planning, implementing and evaluating survivorship-care plans can be challenging in the 'real world' (e.g., because such plans may not account for individual and community challenges such as lack of services available).

QUESTION

What are the features of shared-care models designed to enhance coordination between primary-care and cancer-care teams in post-treatment care, and whether and how such models contribute to achieving the quadruple aim of enhancing patient experiences and health outcomes with manageable costs and positive provider experiences?

WHY THE ISSUE IS IMPORTANT

The number of new cancer cases has continued to rise across Canada, with an estimated 225,800 new cancer cases and approximately 83,300 cancer deaths in 2020.(1) It is estimated that nearly one in two Canadians will develop some form of cancer over their lifetimes.(2) The burden that increased cancer prevalence has placed on health systems in Canada has been compounded by the growing aging population, and by improvements in cancer-treatment efficacy. Canada has experienced a demographic shift wherein there are now more persons aged 65 years and older than children under 15, and projections estimate that the 65 years and older age group will more than double, from 4.2 million in 2003-2007, to 9.4 million in 2028-2032.(3) The incidence of cancer increases with age; the majority (90%) of cancer diagnoses in Canada occur among those who are over the age of 50.(2) Additionally, advances in cancer detection and treatment have significantly improved the likelihood of cancer survival. The average five-year net survival rate for people diagnosed with any type of cancer in Canada is 63%.(2) All of these factors suggest that the number of people living with cancer or transitioning out of the cancer system into survivorship care will continue to increase.

Box 1: Background to the rapid synthesis

This rapid synthesis mobilizes both global and local research evidence about a question submitted to the McMaster Health Forum's Rapid Response program. Whenever possible, the rapid synthesis summarizes research evidence drawn from systematic reviews of the research literature and occasionally from single research studies. A systematic review is a summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select and appraise research studies, and to synthesize data from the included studies. The rapid synthesis does not contain recommendations, which would have required the authors to make judgments based on their personal values and preferences.

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. An overview of what can be provided and what cannot be provided in each of these timelines is provided on the McMaster Health Forum's Rapid Response program webpage (www.mcmasterforum.org/find-evidence/rapid-response).

This rapid synthesis was prepared over a 30-business-day timeframe and involved four steps:
1) submission of a question from a policymaker or stakeholder (in this case, the Canadian Partnership Against Cancer);
2) identifying, selecting, appraising and synthesizing relevant research evidence about the question;
3) drafting the rapid synthesis in such a way as to present concisely and in accessible language the research evidence; and
4) finalizing the rapid synthesis based on the input of at least two merit reviewers.

In supporting the growing number of individuals transitioning to survivorship care, there is a need to improve the coordination between primary-care and cancer-care teams. In many jurisdictions across Canada, the provision of cancer services operates using a parallel cancer sub-system, which has limited overlap or integration with primary and community care.(4) The fragmented nature of this care transition is not sustainable and creates numerous challenges for both patients and primary-care providers.(5)

For patients, the skewed balance toward disease treatment within many cancer sub-systems often means that many individuals will transition back into the broader health system without accessing the full range of necessary supports.(6) The transition in care following treatment into survivorship requires survivors and their families to adjust how they interact with the healthcare system. Often, patients are not prepared for what to expect when treatment is over, and the abrupt end to frequent contact with their care team can lead to feelings of anxiety and abandonment (e.g., fear that they are not being cared for or are receiving suboptimal care).(5) Survivors and their families can also experience confusion surrounding which health systems or services to access for which problems, and at what times.(5) Additionally, there is a discrepancy between what individuals need following cancer treatment, and what primary- and community-care services currently provide.(7) In follow-up care, survivors require supports for symptom management, psychosocial needs, lifestyle behaviour changes, and various physical and practical functional challenges.(5; 7–11) These needs are not always effectively accounted for. For primary-care providers, challenges in providing optimal transitional and survivorship care stem from poor coordination and communication across providers (including poor information flow),(5; 11) a lack of speciality training in how to provide effective and person-centred follow-up care,(12) and a lack of clarity about roles and responsibilities (e.g., in the management of late/long-term side effects).(5; 11; 12)

Current models of post-treatment care commonly are oncology-led and involve various cancer specialists.(13) Models of follow-up oncology-led care tend to focus on surveillance for cancer recurrence, failing to address many aspects of holistic care.(13; 14) Some authors consider that these models are not sustainable given the increase in the number of cancer survivors, the limited health workforce, and the inefficient use of oncology specialist expertise.(14; 15) In this scenario, the role of primary care has become important for the management of cancer survivors, not only for the follow-up of cancer, but also for the treatment of non-cancer-related health issues, such as comorbidities, preventive services, and behavioural health consultation.(14) The primary-care practitioners could have two complementary roles, acting as "oncogeneralists" who help transition patients from cancer specialists to primary healthcare, and as co-managers in shared care, where an on-going collaboration is maintained between oncology specialists and primary-care practitioners.(13)

Box 2: Identification, selection and synthesis of research evidence

We identified research evidence (systematic reviews and primary studies) by searching (in February 2021) Health Systems Evidence (www.healthsystemsevidence.org) and PubMed. In Health Systems Evidence we searched for overviews of systematic reviews, systematic reviews of effects and systematic reviews addressing other types of questions using the filters for 'Package of care/care pathways/disease management', Skill-mix – Multidisciplinary teams' and 'Continuity of care' under the filter for delivery arrangements. In PubMed, we searched for primary studies published since 2015 using the following combination of terms: cancer AND care AND coordinat* AND model. We focused on studies from Canada, and other countries that are typical comparators to Canada (e.g., Australia, New Zealand, European countries, the U.K., and the U.S.)

The results from the searches were assessed by one reviewer for inclusion. A document was included if it fit within the scope of the questions posed for the rapid synthesis.

For each systematic review we included in the synthesis, we documented the focus of the review, key findings, last year the literature was searched (as an indicator of how recently it was conducted), methodological quality using the AMSTAR quality appraisal tool (see the Appendix for more detail), and the proportion of the included studies that were conducted in Canada. For primary research (if included), we documented the focus of the study, methods used, a description of the sample, the jurisdiction(s) studied, key features of the intervention, and key findings. We then used this extracted information to develop a synthesis of the key findings from the included reviews and primary studies.

WHAT WE FOUND

We conducted a synthesis of the evidence that we identified from our searches in Box 2 to inform the question. In reviewing evidence in relation to the question, we sought to include documents that provide evidence that supports transitions from cancer care to primary care for survivors, caregivers and their families. Within this scope, we included resources that support shared-care approaches between cancer care and primary care for cancer survivors.

We identified 32 systematic reviews, of which 17 are of high methodological quality,(16–32) 11 are medium quality,(33–43) and four are low quality.(44–47) We also identified 17 primary studies that provide insights about the question in relation to the Canadian context.(48–64)

We summarize the key findings from these documents in three tables. Table 1 presents the features shared-care models identified in the identified literature, including the people involved, activities included in scope of shared-care model, and what is necessary to support coordination and follow-up. In Table 2 the impacts of shared-care models are presented according to the quadruple-aim outcomes (patient experiences, health outcomes, costs and provider experiences). Finally, Table 3 describes barriers and facilitators that were identified in the included literature to implementing shared-care models.

Features of shared-care model

Shared-care models were typically characterized as involving two different institutions and a transition from the hospital to primary care, which included joint follow-up from specialist (hospital-based) care and primary care in a way that ensures interaction between the two groups.(16) Moreover, shared-care models were typically described as including multidisciplinary or interdisciplinary coordination for survivorship care.(25; 28; 38)

The functions of shared-care models we identified were focused on:

1) prevention and surveillance for recurrent and new cancers;
2) long-term effects of cancer treatments;
3) supports for social adjustments (e.g., managing symptoms, distress and concerns related to returning to work); and
4) coordination between all providers to ensure that survivors' needs are met.(15)

Survivorship care plans (SCP) were described in many documents and included in several interventions, including summarizing cancer status, providing a brief treatment history, outlining a future follow-up plan, and specifying additional needs identified by the cancer survivor and/or their caregivers.(23; 25; 41; 42) One high-quality systematic review emphasized the importance of SCPs having a clear outline of the timeline to facilitate care transitions.(25)

Some systematic reviews linked the shared-care model to the use of risk-stratification.(25) In this approach oncology and primary care categorize patients into low-, moderate-, or high-risk categories. According to these categories, the follow-up plan includes explicit actions and moments when the patient should move from primary care to the oncologist.(65)

In studies with cancer survivors who are highly expected to experience relapse (e.g., colorectal and breast), the shared-care models were focused on surveillance. In these cases, primary-care providers played a central role in conducting regular screening and physical assessment with care coordination managed using a survivorship-care plan.(25)

Health promotion and management of side effects, cognitive function, pain, neuropathy, distress, anxiety, depression, and fertility were included as part of the management of many cancer survivors in shared-care models. The provision of psychosocial supports that are directed at reintegrating survivors back to their normal lives or workforce by addressing developmental implications, social relationships, and spiritual needs, were also included as part of several models.(18; 25; 34)

Considering the large spectrum of possible cancer survivors, the management of long-term effects was identified as needing to be specific to exposure. For instance, dental examination is recommended only for survivors with prior chemotherapy and radiation exposure. Nevertheless, some common areas of management in shared-care approaches include vaccinations, medications, fertility-preserving facilities and the standard health promotion areas on exercise and nutrition.(25)

Impacts of shared-care models on achieving the quadruple-aim outcomes

Patient experiences

Of the eight systematic reviews that compared shared-care models and comparators (usual care/follow-up and/or oncologist-led follow-up) and included outcomes related to patient experiences, six found no significant differences in patient-reported outcomes (PROs),(16; 19; 23; 28; 31; 34) four found no significant differences in reported unmet needs,(16; 39; 42; 55) two found no significant differences in quality of life,(16; 31) and two had inconclusive results.(26; 27) Contradictory findings were also found in the systematic review of shared care for non-cancer conditions, in which only half of 18 studies reporting these outcomes identified benefits.(66)

Although SCPs are widely endorsed by stakeholders, the included reviews provide minimal evidence that SCPs affect patient-reported outcomes.(23; 41 42) However, as noted in a medium-quality review, there was some evidence that SCPs may reduce distress in cancer survivors, but it was also noted that distress may be higher in some situations due to increased health-related worries and negative memories that may be triggered by reading the survivorship-care plan.(42)

Lastly, two medium-quality systematic reviews and one primary study found that participants in shared-care models had positive views of receiving care from their primary-care providers after transitioning from cancer treatment.(34; 38; 64) Moreover, another review found that survivors who had experienced shared care had a stronger preference for it in the future.(16)

Health outcomes

Several systematic reviews found that shared-care models compared to usual care (usual care/follow-up and/or oncologist-led follow-up) have no significant differences in recurrence rates,(34; 38) serious clinical events,(16) mental health outcomes (e.g., distress, depression and anxiety) (16; 19; 23; 31; 34) or other health outcomes.(49) Some systematic reviews were inconclusive about patient outcomes such as survival, and side effects of treatment because it was not possible to summarize results given heterogeneity.(27)

One high-quality systematic review evaluating shared-care interventions for chronic-disease management showed little or no difference in clinical outcomes related to physical health, but noted a tendency towards improved blood-pressure management in shared-care studies for hypertension, diabetes, chronic kidney disease and stroke. Regarding mental health outcomes, shared-care models resulted in a better response to depression treatment and greater recovery from depression. Hospital admissions, service utilization, medication-related outcomes, and management of risk factors showed modest benefits.(66)

Costs

Most of the systematic reviews that explored effect on costs of cancer shared-care models, reported markedly decreased costs for the health system. Overall, shared-care models were found to increase appropriate healthcare utilization in primary-, acute- and hospice-care settings, emergency departments and intensive-care units.(26; 49) One systematic review included one study comparing the cost of shared care to usual care, which found that on average, shared care reduced costs by $323 per patient at one-year follow-up.(16) Regarding SCPs, a review showed that they do not make the best use of valuable resources, and at best they may provide a marginal benefit to survivors and healthcare professionals.(23; 52)

One primary study conducted in Canada found that transitional care for low-risk breast cancer survivors from oncologist-led care to primary-care providers were associated with fewer costs, and estimated that a population-wide implementation of the program could result in savings between $9.6 million and $64.3 million in Ontario.(49)

Provider experiences

Studies that assessed continuity of care found that shared-care models could meet the requirements of follow-up, and that primary-care providers felt their knowledge was improved and that they had the capability of providing healthcare with the support of hospital specialists.(16) Another study found that primary-care providers were thought to be unwilling or to have insufficient time and expertise to provide follow-up, and that there were significant communication problems between primary and secondary care (from both groups).(20) Lastly, a shared-care model in the Netherlands, combining hospital clinics with primary care, was found to be feasible and acceptable to patients and primary-care providers.(33)

Barriers and facilitators to implementing shared-care models

The shared care model has been identified as being largely accepted as a viable model across clinical settings.(14) However, there are several challenges in implementing the risk-stratified shared-care model for the follow-up of cancer survivors. For example, lack of role clarity has been identified as an important barrier. In particular, there can be ambiguity about the specific role and responsibility of oncologists and primary-care physicians in primary cancer follow-up, surveillance for secondary cancer, and provision of preventive services, which makes it difficult to implement survivorship care in clinical practice.(14; 17; 20; 36) Given this, it is necessary to clarify the care roles of these providers,(67) but different clinical settings and medical culture among hospitals and regions may pose further challenges to implementing shared-care models with clear roles and responsibilities.(14) Moreover, insufficient knowledge about and confidence in survivorship care among primary-care physicians, as well as lack of confidence from survivors with follow-up care delivered by primary-care physicians, were noted as another challenge in implementing shared-care models.(14; 17)

We also identified several insights about how to overcome some of these implementation barriers. First, more educational interventions for primary-care physicians in survivorship care and coordination of care between oncologists and primary-care physician were identified as an important approach.(17; 36) In addition, to support the transition to primary care, oncologists should engage primary-care physicians in the care of patients during cancer treatment. By communicating with the treatment team during this phase of care, primary-care physicians might be able to offer input regarding non-cancer care and become familiar with any issues that occurred during treatment, and thus avoid the potential loss of information in transition to primary care-led follow-up.(25; 26; 38) Furthermore, communication can help to build interpersonal relationships between the team members that might promote future collaboration and trust. It was also identified that oncologists should be encouraged to reach out to primary-care physicians to provide education and guidance about cancer-related surveillance and management. Such outreach could occur individually via consultation letters or survivorship-care plans, or through informal group teaching in face-to-face or web-based seminars.(67)

Several studies identified survivorship-care plans summarizing the cancer status, brief treatment history, and future follow-up plan for primary cancer.(23; 41; 42) The survivorship-care plan was suggested as a tool to facilitate care communication between care providers. However, completing the care plan might be time-consuming, and sometimes patients are not able to understand it.(14; 42) With limited time and resources, several oncologists are reluctant to provide the SCP as part of their routine care, although they agree with the necessity of these materials.(14)

General limitations of the research about shared-care models

Three general limitations of the research about shared-care models were identified. First, the nature of the survivor's follow-up and which healthcare providers are involved are a source of controversy. Although much research is focused on the role of physicians and nurses, survivorship care should be more than physician-oriented interventions. It is possible that many of these healthcare providers participating in the survivor's care are in private community-based agencies for which there is a cost to purchase services (which can be a barrier to accessing help). Second, regarding survivorship-care plans, one challenge is the way in which those plans are introduced (e.g., by whom, in what setting, at what time in the survivor's journey, etc.). Much of the early work exploring the impact of survivor-care plans did not take the actual implementation process into account nor link realistic or survivor-centric outcomes to the specific objectives for introducing the plans. Third, the nature of the challenge the survivor is experiencing plays a role as there may or may not be services available in the community for them, and the purpose for using a survivorship-care plan with different groups or in different settings might need to vary. This kind of complexity in 'the real world' presents challenges in planning, implementing and evaluating survivorship-care models.

Table 1: Overview of key features of shared-care models

Setting for shared-care model	Key features of shared-care models			
	How it is defined	**Who is involved**	**Activities included in scope of shared-care model**	**What supports are included to support coordination and follow-up**
Primary care	• Cancer is regarded as a chronic disease where survivors are transitioned from oncology specialist care to primary-care providers for long-term management and vice versa, depending on the clinical needs of patients (25) • This requires maintaining communication between primary-care providers and specialists to ensure effective implementation of shared-care models (25) • Health promotion has been highly recommended as an important component of shared-care models (25) • Depending on the condition and type of treatment, other professionals are often	• Primary-care providers and oncologists, along with nurses (25) • Nurses can have a dual and flexible role in care provision, and could serve as an intermediary between oncologists and primary-care providers to support care transitions (25)	• Interventions target a change in referrals or procedures, and use provider-oriented organizational strategies, such as: o Arrangement for follow-up o Transmission of comprehensive treatment summaries between providers o Implementation of care protocols and guidelines o Distribution of educational material to patients and healthcare providers (28) • Regarding the time for the transition, studies differ on recommendations o Some recommend a transition to be made one to two years after treatment completion o Others suggest a five-year period instead. In any time, screening schedules for cancer survivors must be clear and agreeable (25) o Most focused on shared-care models requiring transition in both directions according to the clinical needs of patients • In the studies reviewed, the number of visits varied between nine and 28 over five years	• Risk stratification is commonly used to facilitate the process of transition from oncology specialist care to longer-term care with a primary-care provider o Survivors identified as "high risk" receive more extensive co-management by oncologists and primary-care providers (25) • Survivorship care plans (SCP) were described in many documents and included in several interventions (25) o Each SCP typically includes a treatment summary, expected late side effects, monitoring and surveillance parameters, relevant contact information, and additional survivor-identified needs (25) o SCPs should also include a clear

	involved in shared-care models, such as exercise and rehabilitation professionals, psychiatrists, physical and occupational therapists, pharmacists and dietitians		○ Follow-up visits typically occurred once every three to four months for the first two years, every six months for the next three years. and then annually until year 10 ○ However, schedules differ according to the patient's cancer • Visits with primary-care providers commonly include a clinical history, physical examination, screening tests, and other routine surveillance tests when appropriate (46; 47)	definition of time-points to facilitate the care transition (25)
Specialized clinics	• The multidisciplinary care model is characterized by a dedicated team of healthcare professionals providing a range of health services (25) • This model is largely restricted to cancer centres with an emphasis on multidisciplinary collaboration (25)	• A multidisciplinary team is typically comprised of physicians, nurses, social workers, physiotherapists, psychologists, counsellors, and other allied health practitioners (25 38) • Such models can engage nurses as care coordinators to conduct needs assessment and to make referrals (25) • Interventions might be enabled by general practitioners, family physicians, nurses, care navigators or social workers • Less commonly, interventions might be led by clinical opinion leaders or project-wide clinician and administrative teams and committees (26)	• Shared-care models based in specialized care settings typically include: ○ Local consensus processes ○ Formal integration of services ○ Arrangement for follow-up ○ Coordination of assessment and treatment ○ Implementation of follow-up care plans (28)	• Organizational strategies such as staff organization and creation of teams of healthcare professionals working together to care for patients can be used as part of shared-care models (28) • Risk stratification is also used in this model, with the objective of facilitating a process of transition from oncology specialist care to long-term care with primary-care providers • Survivors identified as "high risk" receive more extensive co-management by oncologists and primary-care providers (25)

Table 2: Overview of impacts of shared-care models on the quadruple-aim outcomes of enhancing patient experiences and health outcomes with manageable costs and positive provider experiences

Setting for shared-care model	**Quadruple-aim outcomes**			
	Patient experiences	**Health outcomes**	**Costs**	**Provider experiences**
Primary care	**Patient-reported Outcomes (PROs)** • A high-quality review found no significant difference in PROs between the intervention and the control groups, in the analyses by type of model of care (28) • Another high-quality review found that cancer-care coordination interventions were effective across 81% of the studies that measured patient outcomes (26) • Although SCPs are widely endorsed by stakeholders, minimal evidence was found in a high-quality review that SCPs affect patient-reported outcomes (23) **Quality of life** • Due to differences in interventions and heterogeneity in the types of cancer patients included, findings from two high-quality systematic reviews were inconclusive regarding the impact of shared-care models on quality of life (26; 27) • Other high-quality systematic reviews showed no significant differences in quality of life between shared care and usual care,(16; 31) or between intensive follow-up and usual shared care(19)	**Survival outcomes** • Some systematic reviews found that shared-care models compared to usual care, usual follow-up, or follow-up oncologist-led care have no significant differences in recurrence rates,(34; 38) serious clinical events,(16) or other health outcomes (49) • A high-quality systematic review found inconclusive results about patient outcomes such as survival, and side effects of treatment because it was not possible to summarize results due to heterogeneity (27) **Adherence** • One of the included studies found that adherence to guideline recommendations were high for surveillance, but examinations were slightly lower than in care provided through cancer-centre care (60) • The same study found that adherence to follow-up was higher among women who had a clear transfer of survivorship care to primary-care providers, and the authors concluded that individuals	• A high-quality review indicated that most of the cost-related evidence for cancer shared-care models, suggests markedly decreased costs for the health system (26) • One high-quality systematic review, with only one study comparing the cost of shared care to usual care, found that shared care on average reduced costs by US$323 per patient at one-year follow-up (16) • One of the included studies that was conducted in Ontario, Canada found that both direct transition to primary care and stepped transition using transition clinics averaged $4,257 lower costs per survivor to the health system, with the main cost drivers attributed to hospitalization, physician visits, medications, and home care (49)	• Studies included in a high-quality review that assessed continuity of care found that shared care could meet the requirements of follow-up, and primary-care providers felt their knowledge was improved and that they had the capability of providing healthcare with the support of hospital specialists (16) • One of the studies included in the same high-quality review found that 77.4% of the primary-care providers considered that they had the capacity to provide follow-up if the SCP was available, while another survey found that only

	• An important confounding factor identified in one high-quality review is that patient-reported results could have been affected by the lack of confidence in primary care since it is impossible to blind study participants to the model they receive (16) • When using survivorship-care plans (SCP), no major or statistically significant differences in quality of life were found in two medium-quality reviews,(41; 42) but one study included in one of the reviews indicated that the use of an SCP in a follow-up care package resulted in fewer unmet needs among patients (42) **Satisfaction** • Two medium-quality systematic reviews and one primary study found that participants who participated in shared-care models compared to usual care, usual follow-up, or follow-up oncologist-led care had positive views of receiving care from their primary-care providers after transitioning from cancer treatment,(34; 38; 64) and a high-quality review found that survivors who had experienced shared care had a stronger preference for shared care in the future (16) • A medium-quality review found that a shared-care model in the	with high ongoing needs could benefit from a telephone-based clinic for transition care (60) • When using SCPs, studies included in a high-quality review found that they may potentially improve survivors' self-reported adherence to medical recommendations and healthcare professionals' knowledge of survivorship care and late effects (23) **Distress, anxiety, depression and fatigue** • A high-quality review found inconclusive results about the impact of coordinated care on improving mental health outcomes (26) • Four high-quality reviews and one medium-quality review found that shared-care models compared to usual care, usual follow-up, or follow-up oncologist-led care have no significant differences in terms of mental health outcomes, distress, depression, anxiety, and unmet needs (16; 19; 23; 31; 34) • When using SCPs, a high-quality meta-analysis of eight articles found no difference in patient-reported anxiety, cancer-specific distress, depression, perceived cancer and survivorship knowledge, and physical functioning (23)	• Additionally, the intervention group had significantly lower mean annual costs for other health services such as surveillance tests, cancer clinic and physicians' visits, medications, long-term care, and home care (49) • The authors of the study reported that transitional care for low-risk breast cancer survivors from oncologist-led care to primary-care providers were associated with fewer costs and estimated that a population-wide implementation of the program could result in savings between $9.6 million and $64.3 million in Ontario (49) • A high-quality review found that, overall, care coordination interventions increased appropriate healthcare utilization in primary-, acute- and hospice-care settings, emergency departments and intensive-care units (26) • Regarding SCPs, a high-quality review and a study showed that they do not make best use of valuable	40% of primary-care providers felt confident in their knowledge in the follow-up of cancer survivors in usual care (16) • A medium-quality review that included a shared-care model in the Netherlands, found that combining hospital clinics with primary care was feasible and acceptable to patients and primary-care providers (33) • One study included in a high-quality review found that GPs were thought to be unwilling or to have insufficient time and expertise to provide follow-up, but there were significant communication problems between primary and secondary care, in both directions (20)

	Netherlands that combined hospital clinics with primary care was feasible and acceptable to patients and primary-care providers,(33) and this finding was supported in studies included in two other medium-quality reviews that included survivors of prostate cancer and breast cancer (35; 41) • A high-quality review found that specialist nurses were considered more supportive than doctors, and patients were satisfied with nurse-led follow-up, but other health professionals lacked confidence in it, and patient-initiated follow-up was more convenient but less reassuring (20) • In qualitative studies included in a medium-quality review, it was identified that patients preferred seeing a family physician rather than being seen in a hospital-based clinic (33) • When using SCPs, a high-quality meta-analysis of eight articles found no difference on patient satisfaction,(23) but a medium-quality systematic review found very high satisfaction, accompanied by positive feelings towards the survivorship-care plans (42)	• A medium-quality review found some evidence that SCPs may reduce distress in cancer survivors; however, other evidence has suggested that distress may be higher due to increased worry about one's health and negative memories that may be triggered by reading the survivorship-care plan (42) • Findings from a medium-quality systematic review suggest that cancer nurses can help survivors adjust to life after treatment, and nurse-led care results in reduced fatigue symptoms for cancer survivors in the longer term (39) **Hospitalization rates, cancer clinic visits** • Compared to the control group, breast cancer survivors in the Well Follow-up Care Initiative intervention reported lower hospitalization rates, cancer-clinic visits and appointments with specialist oncologists, with similar frequency of primary-care visits (49)	resources, and at best they may provide a marginal benefit to survivors and healthcare professionals (23; 52) • A study identified little difference between SCP and standard care regarding the costs of physician visits, diagnostic and laboratory tests and patient travel costs/lost productivity; however, the SCP was associated with $10.41 greater total societal costs and with $40.12 greater healthcare costs per patient (52) • When including the costs of the SCP, the SCP was confirmed to be more expensive (per patient) than standard care ($765.07 versus $694.70, respectively) (52) • Additionally, over the 24-month study time period, the average quality adjusted life years (QALYs) were lower for patients who received the SCP compared to standard care (1.41 versus 1.42, respectively), but the authors concluded that the difference may be considered negligible (52)	

Specialized clinics	**Quality of life** • A high-quality systematic review described that home-based, multidimensional survivorship programs had significant improvement in breast cancer physical, functional, emotional and endocrine domains of quality-of-life post intervention, and at one to three months post intervention (measured with the tools FACT-B, EORTC-C30) • In addition, no improvement in quality of life was shown either at four to six months nor at 12 months post intervention (23) • Another high-quality review found short-term gains at the levels of psychosocial adjustment and quality of life after breast cancer treatment (up to 12 months) (22) **Satisfaction** • A study included in a medium-quality review on the perspectives of survivors and families who had attended a survivorship clinic illustrated that there were a number of perceived health benefits and satisfaction with the follow-up care (33)	**Anxiety, depression and fatigue** • A high-quality review found that home-based, multidimensional survivorship programs may decrease anxiety immediately after the intervention, but the effect of the intervention did not persist at four to six months and there was no improvement in depression immediately after intervention or at follow-up (30) • According to two high-quality reviews and one low-quality review, the evidence for multidimensional interventions so far report statistically significant benefits for the outcomes fatigue, insomnia and physical functioning (22; 30 45)	• One of the included studies, conducted in Ontario, Canada, found that both direct transition to primary care and stepped transition using transition clinics averaged $4,257 lower costs to the health system, with the main cost drivers attributed to hospitalization, physician visits, medications and home care (49)	• A study found nurses expressed their strongest involvement in cancer survivorship care to include care coordination and system navigation, emotional support, and facilitating access to community resources (61)

Table 3: Barriers and facilitators to implementing shared-care models (Led by primary-care settings)

Barriers to implementing shared-care models	Facilitators to implementing shared-care models
• Poor and delayed communication between primary-care providers and cancer specialists (17) • Cancer specialists predominantly express a preference for specialist-based care throughout the cancer continuum, including the surveillance and survivorship phases (17) • Uncertainty of cancer specialists with the knowledge and experience of primary-care providers in oncology (17) • Lack of role clarity between primary-care providers and cancer specialists in shared-care models (17) • Miscommunication, loss of contact with patients, uncertainty of role, and lack of training and information (20; 36) • The lack of reimbursement for survivorship care has been identified as a key barrier to the application of this model (14)	• Patients have been found to cite several benefits of family physician involvement in follow-up cancer care, including greater trust, convenience and continuity of care (36) • Family physicians viewed themselves as advocates, a role which was more likely for rural and remote family physicians and which could be important for implementing shared-care models (36) • Family physicians have identified a number of factors that could facilitate their involvement in follow-up cancer care, including enhanced communication between primary- and tertiary-care providers and the use of electronic records (36) • Primary-care providers have expressed that they play an important role in the cancer continuum, and have willingness to participate in it (17) • Specialist follow-up has been identified as crucial in order to keep patients in the system (20; 36)

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APPENDICES

The following tables provide detailed information about the systematic reviews and primary studies identified in the rapid synthesis. The ensuing information was extracted from the following sources:

- systematic reviews - the focus of the review, key findings, last year the literature was searched, and the proportion of studies conducted in Canada; and
- primary studies - the focus of the study, methods used, study sample, jurisdiction studied, key features of the intervention and the study findings (based on the outcomes reported in the study).

For the appendix table providing details about the systematic reviews, the fourth column presents a rating of the overall quality of each review. The quality of each review has been assessed using AMSTAR (A MeaSurement Tool to Assess Reviews), which rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to delivery, financial or governance arrangements within health systems. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered "high scores." A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1):S8).

All of the information provided in the appendix tables was taken into account by the authors in describing the findings in the rapid synthesis.

Appendix 1: Summary of findings from systematic reviews about shared-care models between primary-care and cancer-care teams in post-treatment care

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
Effectiveness of shared-care model during the follow-up of cancer survivors (16)	This systematic review included eight clinical trials and three observational studies. These studies conducted shared care with various and complex multifaceted interventions for improving the follow-up of cancer survivors, especially their quality of life and depression. An overview of the results in the selected studies suggests that survivors and general practitioners reported favouring shared care, and the survivors who had experienced shared care had a stronger preference for shared care in the future. However, there were no significant differences in terms of quality of life, mental health outcomes, unmet needs, and serious clinical events between shared care and usual care. One important confounding factor might be that the patient-reported results could have been affected by the lack of confidence in primary care since it is impossible to blind the survivors. Two models of shared care were identified as offering potential to improve the monitoring of cancer survivors: the transference of survivors, which lies within the information exchange; and the coordination of assessments and treatments, which allows distant health professionals to conduct the monitoring alternately. Several interventional strategies that were utilised played a role in enhancing the efforts in terms of care cooperation: 1) survivorship-care plan; 2) referral and consultation visit; 3) improving the knowledge of primary-care providers; 4) enhancing patients' confidence in health-care practitioners, especially in PCPs; 5) building the communication channel between healthcare professionals; and 6) the register and recall system. The studies that assessed the continuity of care found that shared care could meet the requirements of follow-up, and the PCPs felt their knowledge was improved and that they had the capability of providing healthcare with the support of hospital specialists. Blaauwbroek et al. found that 77.4% of the PCPs considered that they had the capacity of providing follow-up if the survivorship-care plans (SCPs) was available, while another survey found that only 40% of the PCPs felt confident of their knowledge in the follow-up of cancer survivors in the usual care. However, the only study that compared the cost of shared care to usual care found that the shared care on average reduced costs by $323 per patient at one-year follow-up.	2017	11/11	1/11
Models of coordinated care between primary-care providers (PCPs) and cancer specialists (17)	This systematic review and mixed-methods meta-synthesis identified that cancer specialists' communication with PCPs lacks the frequency, timing, and content desired by PCPs. Both PCPs and cancer specialists expressed skepticism regarding the other party's ability to play their role. Cancer specialists cite PCPs' lack of familiarity with cancer treatments and surveillance, and PCPs note that cancer specialists neglect the psychosocial care they believe PCPs are better positioned and equipped to provide. In turn, expectations for care roles are discordant. Cancer specialists predominantly express a preference for specialist-based care throughout the cancer continuum, including the surveillance and survivorship phases. PCPs express a willingness/desire to be more involved during the cancer continuum and believe	2015	11/11	4/35

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	they can provide a perspective focused on the "whole patient" that complements and provides context for active cancer treatments. This review identified six themes that were incorporated into a preliminary conceptual model of the PCP-cancer specialist relationship. The principal findings are: 1) poor and delayed communication between PCPs and cancer specialists; 2) cancer specialists' endorsement of a specialist-based model of care; 3) PCPs' belief that they play an important role in the cancer continuum; 4) PCPs' willingness to participate in the cancer continuum; 5) cancer specialists' and PCPs' uncertainty regarding the PCP's oncology knowledge/experience; and 6) discrepancies between PCPs and cancer specialists regarding roles. These data indicate a pervasive need for improved communication, delineation, and coordination of responsibilities between PCPs and cancer specialists.			
Key components of survivorship-care models with a focus on breast, colorectal, and adolescent and young adult (AYA) cancer survivors (25)	Multidisciplinary care and shared-care models were the two major types of models described in studies. The multidisciplinary care model is characterized by a dedicated team of healthcare professionals such as physicians, nurses, social workers, psychologists, counsellors, and other allied health practitioners providing a range of health services. This model is largely restricted to cancer centres with an emphasis on multidisciplinary collaboration. In the shared-care model, cancers are regarded as chronic diseases where survivors are transited from oncology specialist care to PCPs for long-term management. Three studies suggested using risk stratification to facilitate this process. Survivors identified as "high risk" would be subjected to more extensive co-management by oncologists and PCPs. This review updated and extended current literature by delineating the specific and definitive survivorship-care needs among breast, colorectal, and AYA cancer survivors. The evaluation of studies on survivorship-care models revealed care coordination and clinical outcomes determination as areas for improvement. Under both model types, nurses were described to have a dual and flexible role in care provision. In the multidisciplinary model, they could act as care coordinators to conduct needs assessment and to make referrals. In the shared-care model, they could serve as an intermediary between oncologists and PCPs to ease care transitions. Specifically, for shared-care models, five studies reported recommendations according to the Institute of Medicine components. Key surveillance areas include annual contralateral mammography with ultrasound, annual mammography and lipid screening. **Survivorship-care models for breast cancer survivors** Psychosocial services should be provided together with preventive health measures on exercise, nutrition and smoking cessation. Risk evaluation and genetic counselling were also highlighted to identify women with high risk for recurrence or with genetic predisposition due to familial history. Furthermore, for survivors with receptor-positive breast cancers, one study reported a hormone therapy reassessment	2017	10/11	5/25

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	referral system to refer survivors back to consults with oncologists periodically to follow up on their hormone therapy regimen. Using the self-management strategies proposed by one study, integrated cognitive behavioural strategies and internet-based interventions were utilized as education tools to improve fatigue, insomnia and quality of life with a survival advantage of 4.9%. **Survivorship care model for AYA cancer survivors** Among six studies, two studies alluded to a shared-care model while the rest described a multidisciplinary care model. Specifically, psychosocial supportive services should be directed at reintegrating survivors back to their normal lives or workforce by addressing developmental implications, social relationships, and spiritual needs. Despite the diverse range of cancers, three studies utilized risk stratification to guide care provision. For example, annual phone follow-up was performed in the low-risk group, whereas dedicated programs compromised of neurological and psycho-physical rehabilitation were available for the high-risk group. Age-based assessment tools and education were also emphasized to provide age-appropriate referrals. **Survivorship-care models for colorectal cancer survivors** Studies on colorectal cancer survivors were mainly guidelines and were similar in their consistent adoption of the shared-care model with recommendations targeting the IOM components. As 30% to 50% of survivors are expected to experience relapse, surveillance was a central issue addressed by all studies. PCPs play a pivotal role in conducting regular screening and physical assessment with care coordination maintained via SCPs. Intensive follow-up was proposed to screen for recurrent cancer through scheduled colonoscopy, and other secondary primary cancers. **Evaluation of survivorship-care models** Seven studies reported multidisciplinary models, 13 studies reported shared-care models, and three studies provided recommendations for follow-up care without explicit reference to any model structure. Majority of the multidisciplinary care models described in studies addressed the IOM components fairly well, except for care coordination between specialists and PCPs. Due to the focus on a dedicated care team in cancer centres, PCPs only played a supplementary role in acute-conditions management without significant involvement in survivorship care. Follow-up time points were also poorly delineated, with only explicit recommendations made to the transfer of survivors from primary oncologist to multidisciplinary care team one to two years after treatment completion. The use of SCPs was moderate possibly due to a diminished need to relay clinical information to PCPs. As this model is highly survivor centric, the majority of the models highlighted a focus on survivor's self-management. However, only limited precise strategies were described. Similar to the multidisciplinary care model, the shared-care models described in the studies were also adequately compliant to the IOM recommendations. The performance in the care coordination			

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	component was better due to more extensive engagement with PCPs to distribute the care burden. The value of PCPs was emphasized in the management of colorectal cancer survivors since mortality manifests more often from general causes that would benefit from consistent PCPs' holistic care. Therefore, SCPs' construction emerged as a highly important element to facilitate care transfers. In general, several studies agreed that SCPs should be initiated by an oncologist with each cancer survivor upon treatment completion. Each SCP should include a treatment summary, expected late side effects, types of monitoring and surveillance parameters, relevant contact information, and outstanding survivor-identified needs. Clear definition of time-points is crucial to facilitate this care transition. However, differing recommendations were observed where one study recommended a transition to be made one to two years after treatment completion, and another suggesting a five-year period instead. Nevertheless, screening schedules for both breast and colorectal cancer survivors were clear and agreeable. Overall, the definition of the time points of care was vague and incomprehensive across both model types. Nonetheless, the literature provided valuable information on risk stratification and the significance of care continuity. Risk stratification is a refining strategy that can be employed in both model types. The proposed method of assessing risks obtained information on the complexity and exposure of cancer treatment, survivors' needs-assessment tools, age, coexisting non-cancer comorbidities, and accessibility to PCPs. Furthermore, care transition from oncologists to PCPs or multidisciplinary care team should be smooth to avoid abandonment sentiments among survivors.			
Effectiveness of cancer-care coordination process (26)	According to the National Quality Forum, "Care coordination is about what happens in the space between providers." The totality of findings from this systematic review suggests that a variety of cancer-care coordination interventions were effective across more than four-fifths (81 %) of the studies that measured patient outcomes. Improvement in cancer-care outcomes was greater for cancer detection and diagnosis, treatment, and end-of-life care than for cancer survivorship. Overall, care coordination interventions increased appropriate healthcare utilization in primary-, acute- and hospice-care settings, the emergency department, and the ICU. Importantly, coordinated care decreased costs markedly among survivors. Looking at health-related quality of life and mental health outcomes, however, the findings were equivocal. Primary-care providers and oncologists, along with nurses, are key across the cancer-care continuum. Increased communication across multidisciplinary teams could improve cancer-care coordination. Effective interventions were generally led by nurses, navigators or social workers. In two studies, interventions were led by clinical opinion leaders or project-wide clinician and administrative teams and committees. There is a lack of conceptual clarity about the definition of care coordination. Very few empirical studies even made explicit reference to a specific definition of the construct of "coordination." The studies that	2015	9/11	9/52

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	did include explicit definitions varied substantially, similar to the findings of a recent Agency for Healthcare Research and Quality (AHRQ) review. This review identified potentially significant limitations in the methodological quality of the cancer-care coordination literature; studies had considerable heterogeneity in the measured outcomes and intervention protocols and the psychometric quality of their measures.			
Methods of follow-up care for survivors of childhood cancer (33)	This paper reviewed 4,010 articles to identify studies that evaluated methods of follow-up care for survivors of childhood cancer. This search yielded no comparative studies, indicating a need for this focus on future research efforts. However, this paper retained eight papers from this search in order to reflect current evidence. While the review of these eight studies did not lead to any overall conclusions as to clinical benefits or perceived patient needs, this review did yield a number of important outcomes. A number of different clinical models were examined in these studies. A number of these clinical models explored provision of care that extended past hospital-based clinics. For instance, one study found that targeting high-risk patients to encourage attendance in follow-up clinics led to increased knowledge among patients, and helped to identify areas of further intervention. A shared-care model in the Netherlands, combining hospital clinics with primary care, was found to be feasible and acceptable to patients and primary-care providers. A multidisciplinary clinic was found to enhance clinical efficiency, while providing greater satisfaction to families. A number of the studies in this review focused on hospital-based clinics. A long-term follow-up hospital-based clinic that focused on transferring care from parents to young adults contributed to patient satisfaction, while pointing to patients who preferred seeing a family physician rather than being seen in a hospital-based clinic. A study on the perspectives of survivors and families who had attended a survivorship clinic illustrated that there were a number of perceived health benefits of follow-up care. These included late-effects care, personal relationship with the nurse, and health maintenance. One hospital-based clinic offered support to young adults from a pediatric oncologist, endocrinologist and late-effects special nurse. Clinical care, such as checking for symptoms and developments, was generally rated as more important in this scenario, although supportive care was rated highly among patients with more symptoms and poorer mental health. Finally, a study examining predictors of patient satisfaction in a traditional pediatric late-effects clinic and a multidisciplinary adult clinic found that survivors were satisfied with care regardless of group. Patients who understood the clinical nature of these follow-ups were more satisfied than those who expected psychological support. Taken together, the outcomes of these eight studies were based largely on patient- or parent-reported data. Clinical care was highly valued among survivors, and supportive care was seen as more important by survivors who had greater clinical needs. Ultimately, however, this systematic review did not identify any studies that presented comparative data that evaluated methods of follow-up care for survivors of	2010	6/10 (AMSTAR rating from McMaster Health Forum)	1/8

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	childhood cancer. The results of this review suggest that further research is crucial in exploring models of care that best support survivors of childhood cancer.			
Models of care that aim to improve the coordination of cancer treatment between primary-care and oncology-care providers (27)	This review examined 22 studies in order to evaluate models of care that aim to improve the coordination of cancer treatment, specifically for adults with breast and/or colorectal cancer, between primary-care and oncology-care providers. For people diagnosed with cancer, primary care is often the first and most frequent point of contact with the health system. However, in order to enhance continuity and quality of care, the coordination of treatment between primary- and oncology-care providers is essential. The eligibility of articles for this review did not depend on any specific set of outcomes; however, patient outcomes such as survival, quality of life, and side effects of treatment were prioritized. This review included five systematic reviews, six randomized control trials, and 11 non-randomized studies. The systematic reviews chosen for analysis did not support any one model, largely due to the heterogeneity of outcomes and overall low quality of the studies. The most notable result from this literature was the finding that primary care and nurse-led care are equivalent models in the post-surgical period for patients with colorectal cancer, and following treatment in patients with breast cancer. All studies indicated that better quality research must be pursued in this area. Of the six randomized controlled trials chosen for review, many demonstrated risk of bias. These studies did not indicate any significant changes in the measured outcomes resulting from a specific model of care. Of the 11 non-randomized studies included in this review, eight were of serious risk of bias and three were at moderate risk of bias. While these studies examined a range of care models, interventions and outcomes, all results were inconclusive. The lack of findings presented in this review indicated two conceptual issues with the existing research. First, the studies included in this review did not provide sufficient systematic rationale for the model or intervention being examined. Second, the evaluation of the model at hand was often a secondary objective of the study, which led to inconsistent monitoring and analysis. Methodological concerns such as small sample sizes, bias and lack of clarity were prevalent across studies. Taken together, the inconsistencies and lack of definitiveness demonstrated by these studies indicates that little progress has been made in this field of research. In order to develop policies that strengthen continuity of cancer care across primary and oncological providers, high-quality research must be conducted.	2015	11/11 (AMSTAR rating from McMaster Health Forum)	5/22
Cancer survivorship-care models (34)	This review included nine studies describing various cancer survivorship-care models. Overall, the results found that there is substantial variation in survivorship-care models, with the optimal nature, timing, intensity, format and outcomes of models being uncertain and requiring further research.	2013	7/9 (AMSTAR rating from	Not reported in detail

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	These models were found to be highly individualized to the institution or setting where they are provided. In addition, it is anticipated that future shortages in the oncology workforce may require the expanded use of nurse practitioners, physician assistants, and shared-care models to deliver survivorship care to a growing number of survivors. Concerns associated with survivorship-care models include payment considerations, adequacy of training, and the potential for lack of coordination and fragmented care. In this review models were categorized by: a) type of survivor: disease specific or general; b) setting of care: provided in separate survivorship clinics (with care for survivors provided in a setting other than where cancer treatment was received) versus integrative models (where survivorship care is incorporated into broader oncology practice); c) type(s) of clinician providing care: includes physician-, nurse-, or nurse practitioner–led models; d) led by a care team or be considered "shared care"; and e) the purpose of the survivorship-care program: for example, the transition clinic model, which focuses on the transition from care provided by oncologists to primary-care practitioners. The IOM identified four essential components of cancer survivorship care: prevention, surveillance, intervention, and coordination. Regarding the **outcomes** assessed in this review, the most reported outcomes across the studies were quality of life and satisfaction. The three models focused on SCPs examined both distress/anxiety and patient satisfaction. Only two studies included assessment of overall survival, which may reflect the short duration of follow-up for many of the models. In both studies, no significant impact on survival was observed. Four studies examined recurrence rates. In three of these that included comparison groups, there were no significant differences in recurrence rates. Only the three physician-led models included assessment of resource use. Aside from resource use or costs, all outcomes were at the patient level; no other provider or systems-level outcomes were presented. The type of care preferred by patients may also vary depending on the context. A survey of adult cancer survivors in the United Kingdom suggested that cancer survivors prefer consultant-led (i.e., oncologist or other specialist) care to nurse-led, telephone-based, or family physician–led care. A study of breast cancer survivors in the United States similarly found that visits with oncologists significantly decreased the odds of worrying among survivors compared with visits to primary-care providers. This may reflect survivors' preference for continuity of care and the value they place on relationships with specialists who treat their cancer. Evidence from survivorship-care models was limited, particularly regarding potential advantages of different models, effects on survivors' health outcomes, structural or process barriers to offering survivorship care, evaluation of existing survivorship programs, and costs and benefits of survivorship		McMaster Health Forum)	

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	care. Among the included studies that did provide comparative information on survivors' health outcomes, no significant differences were observed. The authors of the review cite the heterogeneity in program setting, components, timing, healthcare providers involved, and even the very definition of "cancer survivor" as a limitation of the study. The review was also based on a technical brief, which the authors recognize did not capture the entirety of every aspect of survivorship-care models.			
Efficacy of interventions aiming to improve continuity of cancer care on patient, healthcare-provider, and process outcomes (28)	This review included 51 studies aiming to classify, describe and evaluate the effectiveness of interventions aiming to improve continuity of cancer care on patient, healthcare-provider, and process outcomes. Three intervention models were analyzed in the review: case management, shared care, and interdisciplinary teams. Six additional intervention strategies were used in addition to these models: patient-held record, telephone follow-up, communication and case discussion between distant healthcare professionals, change in medical record system, care protocols, directives and guidelines, and coordination of assessments and treatment. No significant difference in patient health-related outcomes was found between patients assigned to interventions and those assigned to usual care. A limited number of studies reported psychological health, satisfaction of providers, or process-of-care measures. The main limitations of this review were the various differences between the included studies, especially in their study designs, interventions, participants, patients' phase of care, measured outcomes, healthcare settings, and length of follow-up. Studies that tested a case management model of care targeted various types of behaviour, but they mainly used strategies consisting of staff organization, arrangement for follow-up, and coordination of assessment and treatment. Interventions that tested shared care generally targeted a change in referrals or procedures, and used provider-oriented organizational strategies, such as arrangement for follow-up, transmission of comprehensive treatment summaries between providers, and the implementation of care protocols, directives and guidelines. Educational materials were distributed to healthcare providers for some of these interventions. Studies evaluating interdisciplinary teams used organizational strategies such as staff organization and the creation of teams of healthcare professionals working together to care for patients. These interventions also used local consensus processes, formal integration of services, arrangement for follow-up, coordination of assessment and treatment, and implementation of follow-up care plans. Regarding the **outcomes** assessed in this review, several studies reported patient health-related measures, such as physical and psychological status, quality of life, and satisfaction, whereas fewer studies reported providers' quality of life and psychological status. Among the processes of healthcare services, included	2009	9/11 (AMSTAR rating from McMaster Health Forum)	4/51

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	studies measured: utilization of healthcare services; care coordination; accessibility to care; and availability and transfer of information between providers. Time to detection of recurrence, survival and place of death were also reported in a limited number of studies. Based on the median effect size estimates and the 95% BCI, no significant difference in patient-health measures was found between the intervention and the control groups, in the analyses by type of continuity of care or by type of model of care. However, according to the authors' descriptive analyses of single interventions on the improvement of patient health-related outcomes, case management and interdisciplinary teams seemed to be the most favourable models of care to improve one or more classes of patient outcomes. Among the few studies reporting provider and informal caregiver outcomes, satisfaction was the outcome most often examined. Mental and physical health of informal caregivers were rarely reported. Outcomes related to health services are difficult to interpret since very few studies reported measures on process of care, and due to their specific context and setting, it is almost impossible to regroup them for analysis. In two of the four studies reporting place of death as an outcome, death occurred at home significantly more frequently in the intervention groups than in the control groups. This is considered as a favourable outcome, since home is generally the preferred place of death by patients with cancer. Overall, included studies are relevant to current clinical practice and are a good representation of the Canadian healthcare system. The relatively large number of studies and participants and the diversity of settings included in this review should have warranted a solid profile of the impact of interventions designed to improve continuity of care, in the follow-up of patients with cancer. The quality of the evidence was evaluated with the GRADE system, and authors assessed the quality of the evidence in each of their analyses and rated all of them as "very low quality", due to inconsistent results and high heterogeneity among studies, especially regarding participants, interventions and outcomes. This high heterogeneity is likely due to our broad inclusion criteria that led to a diversity of study designs, interventions, participants, patients' phases of care, measured outcomes, healthcare settings, and lengths of follow-up. This important heterogeneity between studies precludes any conclusion on the effectiveness of interventions included in this review.			
Exploring the role of family physicians in the provision of follow-up cancer care (36)	This review examined 48 studies to explore the role family physicians in the provision of follow-up cancer care.	2015	7/9 (AMSTAR rating	8/58

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	There are many benefits to including primary-care providers (family physicians) in cancer treatment, including for reasons of cost-effectiveness, management of side effects and symptoms, and continuity of care. However, the existing role of family physicians in cancer care must be explored, from the perspective of both patients and primary-care providers. From the perspective of the patient, thoughts on the family physician role were largely influenced by the existing relationship between patients and providers. Patients were more likely to report the expectation of primary healthcare not related to cancer from their family physician. Patients broadly recognized the benefits of family-physician involvement in follow-up care, citing factors such as greater trust, convenience and continuity of care. However, patients also broadly cited the barriers to engaging family physicians for follow-up care. This engagement was reported to be influenced by a lack of solid relationship, poor communication and coordination, issues with diagnosis/ treatment, and poor access to facilities. Building on these barriers, patients still reported a desire to engage their family physician in care. Patients suggested that family physicians be involved in the management, coordination and reporting aspects of care, as well as providing emotional and social support. From the perspective of the family physician, significant differences in involvement were noted between urban, rural and remote family physicians – level of involvement varied depending on the needs of a family physician's population. Family physicians generally viewed themselves as advocates, a role which was more likely for rural and remote family physicians. The types of care reported by family physicians as being of focus included general medical care, comorbid management, psychosocial care and management of pain and other side effects. Family physicians pointed to a number of factors that could facilitate their involvement in follow-up cancer care, including enhanced communication between primary and tertiary care providers and the use of electronic records. Barriers to care provision were identified as miscommunication, loss of contact with patients, uncertainty of role, and lack of training and information. Family physicians suggested that their role could be improved by addressing these barriers and enhancing the provision of emotional support and symptom relief. Further, a study of Canadian family physicians indicated that specialist follow-up was crucial in order to keep patients in the system. Taken together, this evidence indicates that some of the responsibility for follow-up cancer care should be redirected from the tertiary sector to the primary sector. In order for this transfer to be successful, guidelines must be provided and roles must be outlined.		from McMaster Health Forum)	
Examining the impact of multidimensional rehabilitation programs on physical and psychosocial health outcomes in adult cancer survivors (29)	Increases in the number of people surviving cancer has necessitated the development of ongoing treatment programs. Survivors of cancer may experience adverse physical and psychosocial effects, and access to support becomes difficult after the completion of treatment. Multidimensional rehabilitation programs include physical and psychosocial interventions aimed at enhancing the knowledge, coping behaviour, self-efficacy, and quality of life among persons who have survived cancer. The review examined the effect of multidimensional rehabilitation programs on a range of physical and psychosocial outcomes.	2012	11/11 (AMSTAR rating from McMaster Health Forum	1/11

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	In this systematic review the evidence to assess the effectiveness of multidimensional rehabilitation programs (MDRPs) was derived from 12 eligible studies. The studies involved participants with a range of cancer diagnoses who received a wide variety of interventions that were delivered using various methods, over different time periods and were assessed using numerous outcome measures. It was not meaningful to conduct a full statistical synthesis or meta-analysis due to this heterogeneity. The selected studies examined models of care that were categorized as having either a multidimensional or unidimensional focus. Interventions with a multidimensional focus aimed to improve functioning across both physical and psychosocial domains. The evidence of efficacy among these programs was limited in the current review. Three studies demonstrated physical and psychosocial benefits of programs. The first study combined cognitive behavioural therapy with exercise therapy to enhance the quality of life among nasopharyngeal cancer patients. This intervention indicated positive outcomes among physical, cognitive, emotional, fatigue, and quality-of-life measures. Similarly, the second study combined a stress-management program with physical activity to improve energy levels, quality of life, fitness and distress among breast cancer survivors. Improvement was seen on outcomes of fatigue, energy levels and emotional distress. The third study implemented a social cognitive model, including group discussions, supervised exercise, home-based exercise, and counselling sessions with an exercise specialist. Improvements were seen across measures of physical fitness and psychosocial measures among breast cancer survivors. However, bias among all three of these studies was assessed as moderate or high. None of the remaining multidimensional programs indicated success among physical and psychosocial measures. Regarding the assessment of **outcomes**. Authors were able to pool data on Quality-of-Life outcome measured with the SF-36 in five of the studies. The pooled data detected a significant effect in the SF-36 physical health component scale. Participants who received a multidimensional rehabilitation intervention showed a consistent improvement in their physical functioning following the intervention compared to control participants. However, this finding was not replicated in the narrative synthesis of SF-36 mental health component scores. The limited available studies appear to indicate that MDRPs exert a greater impact on physical functioning than on psychological well-being. Analysis on possible effects of rehabilitation programs according to cancer site, mode of delivery, duration, frequency of contacts and the professionals involved indicate, tentatively, that: • rehabilitation programs with a unidimensional focus may be more successful in terms of generating a positive change in the aspect directly related to their focus or primary aim; • rehabilitation programs that involve participants with a variety of cancer diagnoses show at least similar positive improvements in physical to cancer site-specific programs;			

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	• the most effective mode of delivery is face-to-face contact with a professional, supplemented with at least one follow-up telephone call; • the positive effects of rehabilitation programs appear to plateau after approximately six months; and • the type of healthcare professional does not appear to influence the delivery or outcome of rehabilitation programs.			
Evidence for use of survivorship-care plans for cancer survivors (42)	This paper reviewed 10 studies to examine the evidence for the use of survivorship-care plans for cancer survivors. Survivorship-care plans were recommended by the Institute of Medicine in 2006 to address the many issues that cancer survivors face, including the late effects of treatments, long-term emotional effects, and tumour recurrence. The current review examined the effect of survivorship-care plans on outcomes of health-related quality of life, distress, survivor satisfaction with care plan, understanding of information in the survivorship-care plan, satisfaction with care, uptake of recommended screening, and feasibility. No major differences were found in health-related quality of life – however, one study found that the use of a survivorship-care plan in a follow-up care package resulted in fewer unmet needs among patients. There was some evidence that survivorship-care plans may reduce distress in cancer survivors; however, other evidence has suggested that distress may be higher due to increased worry about one's health and negative memories that may be triggered by reading the survivorship-care plan. Survivor satisfaction with care plans was very high across studies, accompanied by positive feelings towards the survivorship-care plans. Studies demonstrate good understanding of survivorship-care-plan content among survivors. Evidence suggests that patient satisfaction with medical care does not vary greatly based on the use of survivorship-care plans. The use of survivorship-care plans may promote the uptake of recommended screening. While survivorship-care plans are feasible, they are resource intensive, taking hours to develop and coming at a cost to health resources. The unclear benefits of survivorship-care plans drawn from this review may be due to other factors that prevented the detection of these benefits. Patient feedback about survivorship-care plans was extremely positive, with survivors reporting value to the information provided. The fact that some studies point to the potential distress that may arise due to survivorship-care plans points to the fact that some patients may be better suited to this content than others. Going forward, there is a need for more long-term data examining the impacts of survivorship-care plans, in order to examine the potential benefits of use among survivors.	2013	5/10 (AMSTAR rating from McMaster Health Forum)	2/10
How nurse-led follow-up breast cancer interventions have been evaluated, with a specific focus on patient outcomes and cost-effectiveness (37)	This review examined 13 articles in order to explore how nurse-led follow-up interventions in breast cancer have been evaluated, with a specific focus on patient outcomes and cost-effectiveness. Breast-care nurses are key figures in the care pathway for women with breast cancer. Breast-care nurses provide supportive care that improves quality of life for patients with cancer, including supporting the physical, psychological and social needs of patients. As survival rates increase, nurse-led breast cancer	2013	6/10 (AMSTAR rating from McMaster	1/13

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	follow-up has become an increasingly common route of care as opposed to traditional hospital outpatient clinics. This review explored how nurse-led interventions have been evaluated, focusing on patient outcomes such as quality of life, psychosocial support and cost-effectiveness. The studies included in this review indicated that nurse-led interventions in the follow-up stage of breast cancer contributed positively to quality of life among patients. Significant improvements in symptoms such as constipation, nausea and pain were also seen among patients involved in this intervention. Patients involved in nurse-led care experienced similar levels of anxiety to patients not involved in this form of intervention, but nurse-led programs led to higher levels of satisfaction than hospital clinics. In terms of outcomes of psychosocial support, no significant differences were found along measures of mood disturbance, cancer-related worry, or symptom distress when nurse-led groups were compared to control groups. However, patients enrolled in nurse-led follow-up studies reported more perceived benefits and experienced less worry about their disease-related problems. Patients enrolled in nurse-led interventions reported fewer financial problems, and telephone follow-up visits yielded lower cost. However, telephone-led interventions should be paired with educational group programs in order to benefit patient quality of life while balancing cost-effectiveness. This review found promising results for the effectiveness of nurse-led follow-up breast cancer care. These interventions contributed to continuity of care and psychosocial support, however, future research should focus on survival, recurrence, patient well-being and cost-effectiveness, as no concrete conclusions on these outcomes could be drawn from this review.		Health Forum)	
Assessing the effects of home-based, multidimensional survivorship (HBMS) programs on maintaining or improving quality of life for breast cancer survivors (30)	This review included 22 randomized controlled trials (RCTs) and four quasi-RCTs that assessed the effects of HBMS programs relating to quality of life in breast cancer survivors. Intervention components were categorized into four groups: educational and psychological; educational and physical; physical and psychological; and educational, physical and psychological. Most studies used usual care (i.e., routine medical follow-up) as the comparator, while a few used a lower level or different type of intervention or attention control. The HBMS programs included symptom management, cognitive behavioural therapy, counselling, exercise, and/or wellness activities. All programs were directed towards improving quality of life for women within their first 10 years after breast cancer treatment. The results of this review showed beneficial effects of HBMS programs for some measures of quality of life. For quality of life measured by FACT-B, there was a significant improvement in breast cancer-specific, physical and endocrine domains of quality of life post intervention, and at one to three months post intervention. Similarly, for quality of life measured by the EORTC-C30, there was a beneficial effect of HBMS programs in global, functional and emotional domains of quality of life immediately, and at one to three months post intervention. The quality of evidence across studies was moderate. However, no improvement in quality of life was shown either at four to six months or at 12	2016	11/11 (AMSTAR rating from McMaster Health Forum)	1/26

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	months post intervention. The results suggested that HBMS programs for women with breast cancer post treatment with surgery and/or adjuvant chemotherapy and/or radiotherapy are effective for improving quality of life and their effect persists for three months. There was little to no difference in quality of life between groups at six and 12 months. Findings also reveal that compared to the control, HBMS programs may decrease anxiety immediately after the intervention. However, the effect of the intervention did not persist at four to six months. There was no improvement in depression immediately after intervention or at follow-up. Lastly, it was reported that HBMS programs may decrease insomnia and fatigue immediately after intervention. A possibility limitation of this study is potential for the robustness of the findings of included studies being compromised due to detection and performance bias, as well as by the subjective nature of quality-of-life reporting.			
Clinical effectiveness and cost-effectiveness of clinical nurse specialist (CNS)-led transitional care (24)	This review evaluated 13 randomized controlled trials (RCTs) for clinical and cost-effectiveness of CNS transitional care. Overall, there was low-quality evidence that CNS transitional care delays re-hospitalization and reduces hospital length of stay, rates of re-hospitalization and associated costs. Results indicate that CNS care was superior in reducing patient mortality following cancer surgery. Relating to elderly patients and caregivers, CNS care improved caregiver depression and reduced re-hospitalization rates, length of stay and costs. CNS care for patients with heart failure improved treatment adherence and satisfaction, as well as reduced death or re-hospitalization and the length of re-hospitalization stay (including associated costs). CNS care improved infant immunization rates and maternal satisfaction with care for high-risk pregnant women and very low birthweight infants. Regarding limitations, the studies in this review had low (n=2), moderate (n=8) and high (n=2) risk of bias. Additionally, there was weak economic analyses, and further research that incorporates robust economic evaluation is needed.	2013	10/11	Not reported in detail
Effects of different follow-up strategies following completion of primary cancer treatment in adult cancer survivors (31)	This review included 53 randomized controlled trials (RCTs) that compared the effect of different follow-up strategies (following the completion of primary cancer treatment) in adult cancer survivors on the primary outcomes of time to detection of recurrence and overall survival. The secondary outcomes considered were health-related quality of life, anxiety, depression and cost. This review compared the effectiveness of the following: 1) non-specialist-led follow-up (i.e., general practitioner (GP)-led, nurse-led, patient-initiated or shared care) versus specialist-led follow-up; 2) less intensive versus more intensive follow-up (based on clinical visits, examinations and diagnostic procedures); and 3) follow-up integrating additional care components relevant for detection of recurrence (e.g., patient symptom education or monitoring, or survivorship-care plans) versus usual care. Evidence relating to the effectiveness of the different follow-up strategies varied significantly.	2018	10/11 (AMSTAR rating from McMaster Health Forum)	2/53

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	Seventeen studies compared non-specialist-led follow-up with specialist-led follow-up. Because the certainty of the evidence was very low, it was uncertain how this strategy affected overall survival, time to detection of recurrence, or cost. Additionally, results revealed that non-specialist versus specialist-led follow-up may make little to no difference to anxiety at 12 months, and it is more certain that it has little or no effect on depression at 12 months. Twenty-four studies compared intensity of follow-up. Results revealed that less intensive versus more intensive follow-up may make little to no difference to overall survival, but likely increases time to detection of recurrence. No studies reported on depression, and because the certainty of the evidence was very low, it was uncertain how this strategy affected health-related quality of life, cost or anxiety. Twelve studies compared patient symptom education/monitoring or survivorship plans with usual care; however, none of these studies reported on overall survival time or time to detection of recurrence. Because the certainty of evidence was very low, it was not certain if this strategy made a difference to health-related quality of life, anxiety, depression or cost. A limit to this review is the low certainty of much of the evidence. Among the studies included, the risk of bias was generally low, with a higher risk of bias in the smaller trials.			
Effects of self-management interventions (SMIs) for cancer survivors who completed primary treatment (32)	This review evaluated the effects of 12 self-management intervention (SMI) studies (randomized controlled trials) for cancer survivors who completed primary treatment. The 12 studies were systematically reviewed for the following components: self-management content, session composition, mode of delivery and type of self-management skills used. Following this component review, a meta-analysis (using nine of the interventions) was conducted to compare SMIs with usual care, attention control, and a wait-list group. Results of the qualitative synthesis indicated that breast cancer survivors made up most of the study population. Results also indicated that SMIs focused on medical/behavioural and emotional management, and the most common SMI delivery method was web-based. The most frequently evaluated outcomes of SMIs were self-efficacy, depression and health-related quality of life. Quantitative results revealed that there were no statistically significant effects of SMIs on anxiety, depression and self-efficacy. However, SMIs had a significant medium effect on health-related quality of life, and a large effect on fatigue (borderline significance). The findings of this review should be cautiously interpreted because of substantial heterogeneity.	2016	8/10 (AMSTAR rating from McMaster Health Forum)	0/12
Ability of health-coaching interventions to grow capacity in cancer survivors (43)	This review included 12 health-coaching intervention studies (six randomized controlled trials and six pre-post) that explored the ability of health coaching to grow capacity among cancer survivors. These studies compared health coaching to alternative interventions. These studies included 1,038 cancer survivors with various types of cancer, including lung, breast, colorectal and prostate. The Theory of Patient Capacity was used to analyze data. This theory is represented by the acronym BREWS, where capacity is affected by factors that influence ability to reframe biology (B), recruit or mobilize resources (R), interact with the care environment (E), accomplish work (W) and function socially (S).	2018 (publication date)	5/9 (AMSTAR rating from McMaster Health Forum)	Not reported in detail

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	Results revealed that health coaching was not associated with self-efficacy, but was associated with improved mood, physical activity and quality of life. Results according to BREWS indicated that 67% of the studies included had statistically significant B outcomes relating to quality of life, acceptance and spirituality. Further, 75% of studies included had statistically significant R outcomes (e.g., decreased fatigue, pain), 67% had statistically significant W outcomes (e.g., increased physical activity) and 33% had statistically significant S outcomes according to the social deprivation index. None of the studies addressed elements of E. Overall, results suggested that health coaching improved quality of life and supported patient capacity in cancer survivors.			
Effectiveness of interventions that aim to enhance the return-to-work process for cancer patients (18)	This review included 15 randomized controlled trials (RCTs) that represented 1,835 cancer patients in order to evaluate the effectiveness of interventions in facilitating the return-to-work (RTW) process for cancer patients. Of the 15 studies, three had multiple study arms, therefore this review included 19 evaluations of interventions. All of the studies included were conducted in high-income countries. Seven studies described interventions that were aimed at breast cancer patients, two studies involved prostate cancer patients and one study each reported results for patients with thyroid cancer, head and neck cancer, laryngeal cancer, leukemia, mixed cancer diagnoses and gynecological patients. This review included any type of intervention that aimed to enhance RTW. The primary outcome measure was RTW, which included return to either full- or part-time employment, to the same or a reduced role and to either the previous job or any new employment. Quality of life (QoL) was the secondary outcome, which included overall QoL, physical QoL and emotional QoL measured with validated or unvalidated questionnaires. Four main types of RTW intervention were identified: psycho-educational interventions (two studies), where participants learned about physical side effects, stress/coping and took part in group discussions; physical interventions (one study), where participants completed physical training or exercises such as walking; medical interventions (seven studies), where patients received interventions ranging from cancer drugs to surgery; and multidisciplinary interventions (five studies), which combined vocational counselling, patient education/counselling, behavioural training and/or physical exercises. The studies assessing psycho-educational interventions (two) included a total of 260 patients (n=148 in intervention groups, n=112 in control groups). Two arms of one RCT compared the effect of a psycho-educational intervention, or a psychosocial intervention plus group discussion, to usual care. Two arms of another RCT compared the effect of radiotherapy fatigue education (delivered either pre- or post-radiotherapy) to usual care. The combined results of these assessments indicated that there is low-quality evidence of no considerable difference in the effect of psycho-educational interventions compared to usual care on RTW, or on QoL. The study assessing a physical intervention (breast cancer patients were offered a physical training program) indicated that there is low-quality evidence that the intervention was not more effective that usual care in improving RTW or QoL.	2014	10/11 (AMSTAR rating from McMaster Health Forum)	0/15

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	The studies assessing medical interventions (seven) included a total of 1,097 patients; in all studies, a less radical medical intervention was compared with a more radical medical intervention. Pooled results (using a meta-analysis) of all these studies indicated that less radical (function-conserving) approaches produced similar RTW rates as more radical treatment. Two studies reported moderate-quality evidence of no differences in the effect of less radical medical interventions compared to more radical treatment on QoL. The studies assessing multidisciplinary interventions (five) included a total of 450 patients. Pooled results (using a meta-analysis) of all of these studies indicated moderate-quality evidence that multidisciplinary interventions, in which vocational counselling, patient education/counselling, biofeedback-assisted behavioural training and/or physical exercises were combined, led to higher RTW rates than usual care. Two studies reported low-quality evidence of no differences in the effect of multidisciplinary interventions compared to usual care on QoL. This reviewed included patients from the United States and Europe. Therefore, for the generalization of patients outside of the United States or Europe, cultural differences regarding cancer disclosure and employment should be taken into account. Additionally, breast cancer patients were the most studied diagnosis group, which should be considered in the generalizability of the findings.			
Necessary services and models of care for post-treatment follow-up of adult cancer survivors (38)	This review included 10 practice guidelines and nine studies (randomized controlled trials, RCTs) to assess the effectiveness of models of care that can enhance health and quality of life in the post-treatment cancer-survivor population. The aim of the review was to determine the optimum organization and care-delivery structure for cancer survivorship services. Evidence was summarized according to four categories: 1) models of care and provider type; 2) site of care; 3) structure of care/care transition process; and 4) structure of care/preparation of providers. In terms of models of care, five clinical practice guidelines contained recommendations for some aspects of models of survivorship care. For the post-primary treatment follow-up of cancer survivors, models of care included survivorship clinics, shared care between oncologists and primary-care physicians, nurse-led survivorship care and multidisciplinary models of care. Two guidelines recommended that a survivorship-care team should be interdisciplinary, including oncology nurses, urology nurses, radiotherapy nurses, dietitians, physiotherapists, psychologists and sexologists. One guideline recommended that rehabilitation services should be available to patients throughout the continuum of cancer care. One guideline highlighted the importance of collecting data on health-related outcomes and the costs associated with the delivery of cancer survivorship care by different healthcare providers. Evidence to support any of the recommendations relating to models of care across the guidelines was weak and was based primarily on consensus. Nine RCTs also examined models of care. In these RCTs, standard follow-up provided by the oncologist was compared to care provided by either primary-care physicians (three trials) or by nurses (four trials). The three trials that compared primary-care physician- and oncologist-led follow-up reported no differences in quality-of-life or disease-recurrence outcomes. The four trials that compared nurse- and oncologist-led follow-up reported no differences in quality-of-life or disease-recurrence outcomes.	2009	7/10 (AMSTAR rating from McMaster Health Forum)	Not reported in detail

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	However, patient satisfaction was higher for nurse-led care in one trial, higher scores for emotional functioning at 12 months were reported with nurse-led care in one trial, and less psychological distress was reported with nurse-led care in one trial. Additionally, higher patient satisfaction was reported in one nurse-led follow-up care model that included patient-initiated care. In terms of site of care, none of the guidelines contained specific recommendations that addressed the site of survivorship care. Additionally, none of the RCTs described any advantages or disadvantages associated with the site of care. In terms of the structure of care related to transition-care processes, most of the guidelines contained recommendations for the structure of follow-up care processes, including the provision of survivorship-care plans. Two guidelines suggested the need for written survivorship-care plans that prepare patients for the transition from active treatment into follow-up. It was also recommended that patients be educated on late adverse effects that can occur in survivorship, and symptoms to report without waiting for their next scheduled appointment. Additionally, it was recommended that patients be educated on which care provider to contact for different emerging problems. In terms of the structure of care related to the preparation of providers, four guidelines recommended that survivorship-care teams be provided with ongoing education opportunities. It was also recommended that organizations that provide research funding should support the assessment of the implementation of education, training and clinical-practice outcomes of the workforce competencies necessary to provide psychosocial care. The RCTs reviewed suggest that nurse-led and primary-care physician follow-up care are equivalent in detecting disease recurrence when compared to oncologist follow-up care, and that patients are satisfied with this approach. However, the evidence base is limited, and further research is needed on how to best structure care for post-treatment cancer survivors (including cost-effectiveness).			
Categorizations of models of aftercare for survivors of childhood cancer (44)	This review evaluated nine previous categorizations of models of care for survivors of childhood cancer to identify the key program features of these classifications. The purpose was to develop a revised taxonomy that allows for more consistency in the classification and description of these models. Six fundamental program features were identified in previous classifications:1) the provider primarily responsible for managing aftercare; 2) other providers who are frequently involved in providing aftercare; 3) location of care; 4) method of engaging survivors (including aftercare delivery method and how the population is tracked); 5) aftercare services provided; and 6) who receives care through the aftercare program (e.g., risk-stratified, focused on select survivor groups). Based on the review, the newly proposed model begins with the primary provider (who it is) as the basis of the classification of the models of aftercare. Aftercare is initially provided by the pediatric team; however, following adolescence, cancer programs vary in terms of who is responsible for providing care. The models of care proposed are: a) pediatric-led model; b) adult oncology-led model; c) primary care-led model; d) hybrid oncology/primary care model;	2019 (publication date)	2/9 (AMSTAR rating from McMaster Health Forum)	Not reported in detail

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	e) nurse-led model; f) distant follow-up model; and g) minimal follow-up model Following identifying the lead provider, the proposed model then collects data on five other relevant features: 1) which providers are regularly involved in providing aftercare; 2) location of care; 3) how survivors are engaged; 4) services provided; and 5) who receives services. These features are useful to include in identifying models of aftercare; however, in practice, attempts to develop specific categories for each of the features can force artificial distinctions, and cause relevant information to be missed. Therefore, instead of categorizing each of the five key features, the intent is to capture the detail information around each. The goal of the newly proposed model is to allow for grouping of relevant programs, while also allowing for a level of detail to be collected to be able to distinguish key program features. A limitation cited was that some models of aftercare for survivors of childhood cancer may have been missed in conducting the systematic review. Further, the distant follow-up model (under provider type) may be seen as a communication type rather than a provider type.			
Effectiveness and cost-effectiveness of multidimensional rehabilitation programs (45)	Many cancer survivors suffer from a combination of disease- and treatment-related morbidities and complaints after primary treatment. There is a growing evidence base for the effectiveness of mono-dimensional rehabilitation interventions; in practice, however, patients often participate in multidimensional programs. In this review 16 effectiveness and six cost-effectiveness studies were included. Multidimensional rehabilitation programs were found to be effective, but not more effective than mono-dimensional interventions, and not on all outcome measures. The majority of existing studies focused on exercise interventions plus a cognitive behavioural therapy (CBT) or psychological educational intervention, whereas studies including other interventions, like return-to-work programs or patient empowerment, are lacking. A similar pattern was found for mono-dimensional interventions in the economic evaluations. Incremental cost-effectiveness ratios ranged from 16,976 euros, indicating cost savings, to 11,057 euros per quality-adjusted life year. The evidence for multidimensional interventions and the economic impact of rehabilitation studies is scarce and dominated by breast cancer studies. Studies published so far report statistically significant benefits for multidimensional interventions over usual care, most notably for the outcomes fatigue and physical functioning. An additional benefit of multidimensional over mono-dimensional rehabilitation was not found, but this was also sparsely reported on. Available economic evaluations assessed very different rehabilitation interventions. Yet, despite low comparability, all showed favourable cost-effectiveness ratios.	2012	4/10 (AMSTAR rating from McMaster Health Forum)	1/22
Follow-up strategies for patient survivors of non-metastatic colorectal cancer (19)	This is the fourth update of a Cochrane Review first published in 2002 and last updated in 2016. It is common clinical practice to follow patients with colorectal cancer for several years following their curative surgery or adjuvant therapy, or both. Despite this widespread practice, there is considerable controversy	2019	11/11 (AMSTAR rating	0/19

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	about how often patients should be seen, what tests should be performed, and whether these varying strategies have any significant impact on patient outcomes. This systematic review identified 19 studies, which enrolled 13,216 participants (four new studies were included in this update). Although the studies varied in setting (general practitioner (GP)-led, nurse-led, or surgeon-led) and 'intensity' of follow-up, there was very little inconsistency in the results. The results of the review suggest that there is no overall survival benefit for intensifying the follow-up of participants after curative surgery for colorectal cancer. The analyses did not show a significant difference in the incidence of recurrence between the participants in the intensively followed groups and the control groups. However, significantly more surgical procedures for recurrence were performed in the experimental arms of the studies. Recurrences in the more intensively followed groups may have been detected earlier allowing for effective salvage treatments, but this did not lead to better overall survival. Each study follow-up strategy combined a number of different components, including frequency of visits, type of clinical assessment, types and frequency of tests, and the setting in which follow-up was conducted. No study compared the addition of one specific intervention, and the feasibility of comparing strategies with a variety of components and varying complexity becomes problematic. Intensive follow-up probably makes little or no difference to quality of life, anxiety, or depression (reported in seven studies, moderate-quality evidence). The data were not available in a form that allowed analysis. Intensive follow-up may increase the complications (perforation or hemorrhage) from colonoscopies (one study, 326 participants, very low-quality evidence). The limited data on costs suggests that the cost of more intensive follow-up may be increased in comparison with less intense follow-up (low-quality evidence). The data were not available in a form that allowed analysis. The authors concluded that the results of our review suggest that there is no overall survival benefit for intensifying the follow-up of patients after curative surgery for colorectal cancer. Although more participants were treated with salvage surgery with curative intent in the intensive follow-up groups, this was not associated with improved survival. Harms related to intensive follow-up and salvage therapy were not well reported.		from McMaster Health Forum)	
Perceptions of patients and healthcare professionals about follow-up of cancer survivors (20)	Cancer follow-up places a significant burden on hospital outpatient clinics. There are increasing calls to develop alternative models of provision. This systematic review included 19 studies; seven were linked to randomized controlled trials. Eight studies examined the views of healthcare professionals (four of which included GPs) and 16 examined the views of patients. Twelve descriptive themes were identified. Fear of recurrence was the main concern for patients, which was temporarily alleviated by attending routine follow-up with cancer specialists. Information regarding	2007	8/9 (AMSTAR rating from McMaster Health Forum)	2/19

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	the limitations of routine hospital follow-up (or lack of effectiveness of examinations and tests) was not conveyed to patients, who also had unmet needs for information, which would help them cope and be more involved. Continuity of care, unhurried consultation, and psychosocial support were important to patients. The expertise of hospital specialists and quick access to tests were highly valued, but time, emotional support, and continuity of care were sometimes lacking in routine hospital follow-up. Patients were reluctant to use their GP for cancer-related support in between hospital visits, and GPs were thought to be unwilling or to have insufficient time and expertise to provide follow-up. There were significant communication problems between primary and secondary care, in both directions. Specialist nurses were considered more supportive than doctors, and patients were satisfied with nurse-led follow-up, but other health professionals lacked confidence in it. Patient-initiated follow-up was more convenient but less reassuring. The included studies were heterogeneous in terms of population studied, underlying theory used, and methods of data collection. Although there is some controversy about the value of combining the findings from studies using different methods or informed by different theories of knowledge,(43; 44) this enabled the researchers to identify a range of common themes.			
Feasibility, acceptability, and efficacy of online interventions to follow-up of prostate cancer survivors (35)	The aim of this systematic review was to examine the feasibility, acceptability, and efficacy of online supportive-care programs for prostate cancer survivors (PCS). Sixteen studies met inclusion criteria; 10 were classified as RCTs. Overall, 2,446 men (average age 64 years) were included. Studies reported on the following outcomes: feasibility and acceptability of an online intervention (e.g., patient support, online medical record/follow-ups, or decision aids); reducing decisional conflict/distress; improving cancer-related distress and health-related quality of life; and satisfaction with cancer care. Overall, the results showed that using online delivery can be feasible and acceptable to men with prostate cancer; however, the field is still in its infancy. The results showed trends toward the programs being efficacious; however, among these trials, few were large enough to make meaningful conclusions on the efficacy of online supportive-care programs, and selection bias was a consistent issue. According to the authors, as the majority of studies reviewed in this paper suffered from selection bias it is likely that the included sample is not entirely representative of the intended target group. Acceptability and efficacy findings should be interpreted with this in mind. In this sense, these results indicate that using online delivery for supportive-care programs is feasible and acceptable, at least in some sub-groups of men with prostate cancer.	2017	5/9 (AMSTAR rating from McMaster Health Forum)	1/16
Follow-up strategies for survivors of epithelial ovarian cancer (21)	Traditionally, many patients who have been treated for ovarian cancer undergo long-term follow-up in secondary care. Recently however, it has been suggested that the use of routine review may not be effective in improving survival, quality of life (QoL), and relieving anxiety. In addition, it may not be cost-effective.	2010	9/11 (AMSTAR rating from	0/8

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	This review found only one RCT (Rustin 2010) that met the inclusion criteria. This trial included 529 women and reported data on immediate treatment versus delayed treatment in women with confirmation of remission and with normal CA125 concentration, and no radiological evidence of disease after surgery and first-line chemotherapy. Overall survival showed no significant difference between the immediate and delayed arms after a median follow-up of 56.9 months. Limited evidence from a single trial suggests that routine surveillance with CA125 in asymptomatic patients, with treatment at CA125 relapse, does not seem to offer survival advantage when compared to treatment at symptomatic relapse.		McMaster Health Forum)	
Effects of multidisciplinary rehabilitation for follow-up of women treated for breast cancer (22)	Multidisciplinary rehabilitation aims to improve outcomes for women, but the evidence base for its effectiveness is yet to be established. This review included two RCTs, including 262 participants. Both trials scored poorly for methodological quality. There was 'low level' evidence that multidisciplinary rehabilitation produced short-term gains at the levels of impairment (that is range of shoulder movement), psychosocial adjustment and quality of life after breast cancer treatment (up to 12 months). No evidence was available for the longer-term functional outcomes for caregivers or the cost-effectiveness of these programs. It was not possible to suggest the most appropriate frequency and duration of therapy, or choice of one type of intervention over another.	2011	11/11 (AMSTAR rating from McMaster Health Forum)	0/2
Follow-up strategies for survivors of cervical cancer (46)	This study aimed to determine the optimal recommended program for the follow-up of patients who are disease free after completed primary therapy for cervical cancer. The review included 17 retrospective trials. Most studies reported similar intervals for follow-up and ranged from a low of nine visits to a high of 28 visits over five years. Follow-up visits typically occurred once every three to four months for the first two years, every six months for the next three years, and then annually until year 10. All 17 trials reported that a physical exam was performed at each visit. Vaginal vault cytology was analyzed in 13 trials. Other routine surveillance tests included chest X-ray, ultrasound, CT scans, MRI, intravenous pyelography and tumour markers. Median time to recurrence ranged from seven to 36 months after primary treatment. There was modest low-quality evidence to inform the most appropriate follow-up strategy for patients with cervical cancer who are clinically disease free after receiving primary treatment. Authors concluded that follow-up visits should include a complete physical examination, whereas frequent vaginal vault cytology does not add significantly to the detection of early disease recurrence. Patients should return to annual population-based screening after five years of recurrence-free follow-up.	2007	4/10 (AMSTAR rating from McMaster Health Forum)	0/17
Benefits, harms and costs of different follow-up protocols for women who have completed primary treatment for cervical cancer (47)	Although surveillance of women after completion of primary treatment for cervical cancer is purported to have an impact on their overall survival (OS), no strictly defined follow-up protocols are available for these women. Wide diversity in management has been noted in the follow-up of women who have completed primary treatment for cervical cancer. Traditionally, women treated for cervical cancer undergo routine long-term, even life-long, follow-up.	2013	5/5 (AMSTAR rating from McMaster	Not available

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	The review was planned to evaluate three models of follow-up: a) intensive (i.e., protocol-driven): follow-up that is medical or nurse-led and is characterised by the use of • clinical history taking, • clinical examination, and • additional routine surveillance tests; b) non-intensive (i.e., driven by clinical need) that is medical or nurse-led rather than following a predefined protocol, but is routinely characterised by the use of • clinical history taking, • clinical examination, and • if clinical concern arises, other surveillance tests; and c) patient-led: follow-up that is initiated by the patient and in which further intervention and investigation are provided as a response to the patient's initial report, with this model relying on clinical history taking only. No trials were found that accomplished the inclusion criteria of authors.		Health Forum)	
Patient-reported outcomes for nurse-led models of survivorship care for adult cancer patients (39)	This systematic review aimed to determine the effectiveness of nurse-led cancer survivorship care, compared with existing models of care, on patient-reported outcomes for cancer survivors. This systematic review found 15 RCTs and CBA studies of nurse-led models of cancer survivorship care for patients with breast, gynecological, head and neck, colorectal, oesophageal or gastric cardia or prostate cancer, and who were within two years of treatment completion. The majority of nurse-led survivorship interventions commenced after treatment completion and continued for six months with a planned schedule of six or less evenly spaced visits. Care settings and intervention modalities varied and included outpatient, telephone, home or a combination of settings. Nurses were generally described as either oncology nurses or advanced practice nurses, or sometimes both, although this was incompletely described across studies. In most models of care, the nurse's role included at least two of the following elements: patient assessment, general management of a problem, and patient education or advice. Some recommended features of survivorship care were delivered such as individualised care, patient self-management, illness prevention and well-being promotion, however, other recommended elements were less frequently observed. Almost all studies assessed QoL and most studies measured tumour-specific or common cancer-related symptom outcomes. Several also included psychological measures and some evaluated unmet needs, care coordination, health information and patient satisfaction. Generally, within studies, there were few significant differences between the control group and the nurse-led care group for most measures. Some studies demonstrated a benefit of nurse-led survivorship care post intervention completion on: emotional, physical, role, social and global QoL; pain; sexuality; and depression. During the intervention, benefits of	2017	7/10 (AMSTAR rating from McMaster Health Forum)	0/21

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	nurse-led care were found for emotional and physical QoL, and depression and pain. These findings were predominantly from two studies which were notable for being the two head and neck tumour models of care, both of 12 months duration with six visits. Meta-analysis of the EORTC-C30 scale scores synthesized the results from seven studies and found higher cognitive and social functioning in patients who were receiving the nurse-led survivorship intervention (four to six months). Post intervention completion, patients who had received the nurse-led survivorship-care intervention had significantly reduced fatigue symptoms. The finding that nurse-led care provides a benefit to cancer survivors in terms of cognitive and social QoL is an important contribution which suggests cancer nurses can assist survivors adjust to life after treatment, and nurse-led care results in reduced fatigue symptoms for cancer survivors in the longer term. One deleterious effect of nurse-led interventions found by meta-analysis was appetite loss (four to six months) was significantly lower in the control group. Half of the weighting for this sub-group analysis was attributed to head and neck, esophageal and gastric cardia models of care. Authors concluded that this review was limited by the risk of bias in many included studies for blinding of treatment personnel and outcome assessors. Nurse-led care appears beneficial for cancer survivors for some QoL domains.			
Supportive-care needs of adolescent and young adult childhood brain tumour survivors (40)	Long-term issues following diagnosis and treatment of a childhood brain tumour often become apparent as the survivor enters adolescence and young adulthood. Their caregivers may additionally face long-term impacts on their emotional and psychological functioning. This review synthesized 56 articles (49 studies) that met the inclusion criteria. Social issues (i.e., isolation and impaired daily functioning) were most commonly reported by survivors, followed by cognitive (i.e., impaired memory and attention) and physical issues (i.e., endocrine dysfunctions and fatigue). Survivors experienced poorer social functioning and sexual functioning and were less likely to be employed or have children, when compared with other AYA cancer survivors. Caregivers experienced reduced support as the survivor moved into young adulthood. Caregivers reported uncertainty, increased responsibilities, and problems maintaining their own well-being and family relationships. Survivors expressed a need for better educational support and age-specific psychosocial services.	2017	7/9 (AMSTAR rating from McMaster Health Forum)	4/56
Effectiveness of individualized survivorship-care plans for female breast cancer survivors (41)	Breast cancer survivors need ongoing healthcare during survivorship. In 2006, The Institute of Medicine (IOM) recommended that all cancer survivors, along with their healthcare providers, be given a survivorship care plan on completion of active treatment that incorporates cancer treatment, potential consequences, specific follow-up and preventive health maintenance information. This plan also provides information regarding employment, health insurance, and psychosocial support in the community. A survivorship-care plan (SCP), when individualized and utilized effectively, may maximize health outcomes and have a positive impact on the quality of life of breast cancer survivors.	2013	7/10 (AMSTAR rating from McMaster Health Forum)	Not available

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	This review considered individualized survivorship-care plans as the additional intervention provided to adult female breast cancer survivors receiving the standard or routine care. One randomized controlled trial (RCT) and one study, consisting of two small RCTs and one pre-experimental study, were included. The single RCT found no statistically significant differences or clinically important differences between the groups that received the intervention (SCP) and the control group (no SCP) based on the outcome variables of cancer-related distress, any of the secondary outcomes, or quality of life. All patients showed a non-clinically important improvement in the impact of event scale (IES) scores and its subscales over time. In the second study, breast cancer survivors aged 65 and over were recruited for three pilot studies (two small randomized clinical trials and one pre-experimental study) conducted in the U.S. In all three pilot studies, the breast cancer survivors' symptoms of distress significantly decreased and symptom management behaviours positively increased in the intervention group. In the third pilot study there was also a statistically significant decrease in negative mood symptoms. There was no statistically significant change in specific quality-of-life measures in all three pilot studies. Based on participants' very positive ratings and feedback, the intervention was assessed as feasible and acceptable. Authors concluded that there is a paucity of evidence on the effectiveness of survivorship-care plans. In the two studies selected for inclusion, the first one found no significant difference or change in measured patient outcomes. The second suggests that it is important to understand the older breast cancer survivor beliefs about symptoms and how these beliefs motivate the symptom management behaviours. Such knowledge could lead to better assessment and symptom management interventions when caring for older cancer survivors.			
Effects of survivorship-care plans and feasibility for implementation (23)	This systematic review and meta-analysis focused on survivorship-care plans (SCPs,) some studies used the SCPs as part of interventions in shared-care models. Authors found similar results to those presented in previous reviews. That is, although SCPs are widely endorsed by stakeholders, there is minimal evidence that SCPs affect patient-reported outcomes. The meta-analysis of eight articles found no difference between SCP recipients and controls on patient-reported anxiety, cancer-specific distress, depression, perceived cancer and survivorship knowledge, physical functioning, satisfaction with follow-up care and information provision, and self-efficacy. Because of the limited number of studies in this meta-analysis, authors were unable to assess the effectiveness of SCPs according to mode of SCP delivery and tumour type. Although evidence relating to many feasibility outcomes was inconclusive in this systematic review of 50 articles, it appears that SCPs are acceptable and may potentially improve survivors' self-reported adherence to medical recommendations, and healthcare professionals' knowledge of survivorship care and late effects. Authors suggest three possible explanations for this paradox in their results: SCPs may ultimately	2018	11/11	3/50

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	be ineffective; there may be deficiencies in the implementation of SCPs; and SCP comparative effectiveness studies have been designed inappropriately. According to the authors, their results may indicate that SCPs are fundamentally ineffective. Given the volume of information typically provided to survivors throughout their cancer treatment and survivorship care, it may be unreasonable to expect that survivors will remember or utilize such a document. Although SCPs appear to be feasible, at worst they squander valuable resources, and at best they provide only a marginal benefit to survivors and healthcare professionals. The current format, content and delivery of SCPs should be revisited. SCP interventions are not limited to a single, independent document, but viewed within the broader context of survivorship care. Without clarifying the role and mechanisms involved in SCPs, such interventions will continue to be limited by poor adherence and minimal efficacy. As adherence is a key determinant of treatment effectiveness, it is difficult to accurately evaluate SCPs. It is possible that poor SCP adherence resulted from inadequate training and support provided to healthcare professionals and survivors. One study assessed the readability level of SCPs in the IOM report and found that because of the use of medical jargon they were considerably above the typical U.S. reading level. The authors conclude that it is essential that future research investigates and addresses poor SCP adherence. Future research is also needed to clarify the purpose, content and administration of SCPs.			
Shared care in management of long-term, non-cancer conditions (66)	This review identified 42 studies of shared-care interventions for chronic disease management (N = 18,859), 39 of which were RCTs, two CBAs and one an NRCT. Of these 42 studies, 41 examined complex multi-faceted interventions and lasted from six to 24 months. Overall, the authors' confidence in results regarding the effectiveness of interventions ranged from moderate to high certainty. Results showed probably few or no differences in clinical outcomes overall, with a tendency towards improved blood pressure management in the small number of studies on shared care for hypertension, chronic kidney disease and stroke (mean difference (MD) 3.47, 95% confidence interval (CI) 1.68 to 5.25) based on moderate-certainty evidence. Mental health outcomes improved, particularly in response to depression treatment (risk ratio (RR) 1.40, 95% confidence interval (CI) 1.22 to 1.62; six studies, N = 1,708) and recovery from depression (RR 2.59, 95% CI 1.57 to 4.26; 10 studies, N = 4,482) in studies examining the 'stepped care' design of shared-care interventions based on high-certainty evidence. Investigators noted modest effects on mean depression scores (standardized mean difference (SMD) -0.29, 95% CI -0.37 to -0.20; six studies, N = 3,250). Differences in patient-reported outcome measures (PROMs), processes of care and participation and default rates in shared-care services were probably limited (based on moderate-certainty evidence). Studies probably showed little or no difference in hospital admissions, service utilization and patient health behaviours (with evidence of moderate certainty).	2015	8/11 (AMSTAR rating from McMaster Health Forum)	0/42

Appendix 2: Summary of findings from primary studies about shared-care models between primary-care and cancer-care teams in post-treatment care

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
Supporting models to transition breast cancer survivors to primary care (48)	*Publication date:* 2015 *Jurisdiction studied:* Ontario, Canada *Methods used:* Qualitative formative evaluation	Data collection consisted of submissions of budget plans, annual reports, and a seven-item questionnaire to assess patient experience over an 18-month period from 14 Regional Cancer Centers (RCCs) in Ontario	The model involved engagement from primary-care providers, specialist oncologists, and breast cancer survivors, with supporting guidelines, "Follow-up after treatment for breast cancer", by the Clinical Practice Guidelines for the Care and Treatment of Breast Cancer Steering Committee	Breast cancer survivors were defined as individuals identified by primary-care providers who completed their planned radiation and/or chemotherapy with no reoccurrence. Of the allocated $1.4 million to 14 RRCs in 2012, the majority of the funding was used for personnel support, followed by project management, coordination support, and information technology support and software development. The RCCs reported three main models of follow-up care, including direct to primary care, transition clinics, and shared care. Direct to primary care transitions breast cancer survivors directly to their primary-care provider after a final transition visit. Transition clinics were incorporated within the RCC that were operated by a nurse practitioner, advanced practice nurse, or a general practice oncologist. In the transition clinics, the nurse would complete an updated history, identify any healthcare needs, and provide resources or health education on follow-up care, disease prevention, and health promotion. Additionally, the nurses connect with primary-care providers to establish seamless transition of care and direct survivors who developed a recurrence. Among the RCCs that provide this model of care, cancer survivors typically visited the transition clinic between one to three times before fully transitioning to their primary-care provider. Five regions developed a shared-care model, where survivors considered high risk (e.g., persistent side effects, receiving hormonal treatment) were provided follow-up care with their primary-care provider and their specialist oncologist. The majority of the RCCs implemented one model, while five implemented a combination of two or three models. Related to patient resources, all RCCs developed survivorship-care plans, transition letters, and patient education material. Most survivorship-care plans were completed by a nurse at the cancer centre and sent to the primary-care provider by fax or email. Most of the care plans consisted of information on treatment history, long-term effects, screening recommendations, and up-to-date lists of community-based resources. Cancer survivors and the primary-care providers had access to transition-clinic nurses or RCCs for any additional follow-up, facilitated repatriation, or to triage other related

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				questions (including suspected recurrence). Of the 752 cancer survivors surveyed, 85% felt prepared for their transition given their satisfaction of the received information. Overall, the authors reported that investments are needed in the delivery of transitional care.
Examining health system resources and costs associated with transitioning cancer survivors to primary care (49)	*Publication date:* 2018 *Jurisdiction studied:* Ontario, Canada *Methods used:* Propensity-score-matched quasi-experimental study	2,324 low-risk breast cancer survivors in the Well Follow-Up Care Initiative (WFCI) who were transitioned from oncologist-led clinics to primary-care providers	WFCI involved survivorship-care plans, patient education materials, direct transition to primary care and stepped-approach for transition clinics, with an average 25 months of follow-up	Compared to the control group, breast cancer survivors in the WFCI intervention reported lower hospitalization rates, cancer-clinic visits and appointments with specialist oncologists, with similar frequency of primary-care visits. The intervention group averaged $4,257 lower costs per survivor to the health system, with main cost drivers attributed to hospitalization, physician visits, medications and home care. Additionally, the intervention group had a significantly lower mean annual cost for other health services such as surveillance tests, cancer-clinic and physicians' visits, medications, long-term care, and home care. The authors concluded that transitional care did not compromise health outcomes in the intervention group. Effective communication and resources such as survivorship-care plans and discharge visits are integral to cancer survivorship transitions. Based on these findings, the authors reported that transitional care for low-risk breast cancer survivors from oncologist-led care to primary-care providers were associated with fewer costs, and estimated that a population-wide implementation of the program could result in savings between $9.6 million and $64.3 million in Ontario.
Optimizing childhood oncology care transition from pediatric to adult settings (57)	*Publication date:* 2020 *Jurisdiction studied:* Quebec, Canada *Methods used:* Qualitative survey	Primary-care providers and family-medicine residents identified through Fédération des médecins omnipraticiens du Québec (FMOQ) and the Fédération des médecins résidents du Québec (FMRQ)	The survey consisted of knowledge assessment, role of primary-care provider, patient barriers, and selection or tailoring of interventions related to cancer-survivor care	According to a survey of 238 participants, a significant proportion did not have knowledge on long-term health complications related to adults who survived childhood cancer and information resources available to them. Based on the survey results, it appears that primary-care providers and residents are unaware of screening guidelines for cancer survivors. Knowledge-related barriers such as lack of exposure to the population group and lack of awareness on existing guidelines were identified by primary-care providers and residents. Primary-care providers preferred receiving patient information directly from specialist oncologists in one-to-one settings. Additional resources and integration of training in primary-care provider residency curriculum were identified as potential facilitators to improve the general awareness of oncology care transition of adults.
Examining a breast cancer survivorship planning tool (58)	*Publication date:* 2020	Breast cancer survivors seeking survivorship care	The tool was based on a systematic literature review and reviewed by	The Breast Cancer Survivorship Tool (BCST) was developed for breast cancer survivors and their primary-care providers to provide guidance on patient history, cancer surveillance,

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
	Jurisdiction studied: Canada *Methods used:* Literature review	in the primary-care setting	medical oncologists and the Cancer Care Program Committee in Canada	management of long-term effects, and health promotion. The tool includes gathering information on a patient's medical history and cancer therapy. The tool recommends breast cancer survivors to complete follow-up visits with their primary-care provider every six months for the first five years after treatment completion, with completing a thorough history, screening for symptoms, and treating any side effects. Additional screening is recommended such as psychosocial and behavioural changes, and other common long-term side effects of treatment. Additionally, the tool recommends primary-care providers to provide health education and preventive care to patients.
Implementing colorectal cancer patient-centred transitions program (59)	*Publication date:* 2020 *Jurisdiction studied:* Manitoba, Canada *Methods used:* Qualitative post-implementation survey	Curatively treated stage II and III colorectal cancer survivors participating in the Moving Forward after Cancer province-wide transition program	Patients were identified by their treating oncology team at the first post-treatment CT scan. The transitional clinic visit involves the oncologic clinic nurse and the oncologist where patients can ask questions about their future care and to develop a survivorship-care plan. The plan involves three parts: 1) summary of the patient's treatment, tabulated schedule of follow-up tests and appointments, list of potential ongoing symptoms; 2) printed resource manual on specific information on colorectal cancer such as diet and nutrition, follow-up care and side effects, exercise and activity, emotional and psychological impacts due to treatment; and 3) general survivorship resources related to returning to work, navigating primary care,	The survivorship-care plans were well-received by patients and primary-care providers, which the authors attribute to the success of implementation due to the involvement of patients and community providers in the development of the survivorship-care plan. A standardized template integrated into the EMR improved its acceptance into primary-care workflow. The transition program may work best in jurisdictions with a strong primary-care foundation. Overall, patients reported improved coordination, continuity in their care, and self-management due to the transition program.

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
			sleep wellness, and decision-making. The survivorship-care plan is faxed to the patient's primary-care provider.	
Examining discharge to primary care for survivorship follow-up (60)	*Publication date:* 2015 *Jurisdiction studied:* Alberta, Canada *Methods used:* Mixed methods	240 structured telephone interviews with women aged 18 years or older who had stage I, II, or III invasive breast cancer diagnosed June 2006 to September 2009, treated at cancer centres	Structured interviews included gathering information on current symptoms, type of treatment and surgeries, adherence to treatment and health promotion, and follow-up care assistance	Of the completed telephone interviews, 68.8% of participants were transferred from cancer centres to primary-care providers for transitional care. Adherence to guideline recommendations were high for surveillance, but examinations were slightly lower than cancer-centre care. Adherence to follow-up was higher among women who had a clear transfer of survivorship care to primary-care providers. The authors concluded that individuals with high ongoing needs could benefit from a telephone-based clinic for transition care.
Optimizing registered nurse roles in the delivery of cancer survivorship care with primary-care settings (61)	*Publication date:* 2016 *Jurisdiction studied:* Ontario, Canada *Methods used:* Qualitative	18 registered nurses in a primary-care setting such as family health groups, family health networks, family health organizations, community health centres, family health teams, and solo family practices	Semi-structured interviews consisted of questions on demography and practice setting	Nurses expressed their strongest involvement in cancer survivorship care to include care coordination and system navigation, emotional support, and facilitating access to community resources. In terms of accessing community resources, nurses utilized a combination of formal referrals, brochures and professional connections for their patients. The level of involvement from nurses varied among the primary-care settings, with some actively connecting patients to community resources and subsequent follow-ups, whereas as some nurses only informed patients about existing resources. Promoting health and self-management skills to cancer survivor patients were less frequently mentioned by the participating nurses. Examples of those who did provide health education include coordinating and conducting cancer screening, goal setting, and supports related to home and education on lifestyle choices. Most of the participating nurses described the lack of knowledge support or awareness on resources related to cancer survivorship care on delivering effective care. At the practice-setting level, lack of care structure, demanding workload, clinic workflow, and competing priorities limited their activities with providing effective cancer survivorship care. In contrast, nurses described that the use of clinical information systems such as EMRs played a major role in nurse-delivered interventions related to survivorship care. The nurses highlighted possible solutions such as developing protected time for cancer survivorship care, and education materials and resources for support in practice settings. The authors indicate that there are existing gaps that need to be addressed such as identifying priority needs, strengthening communication between oncology

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				interprofessional teams, and providing community resource information to nurses.
Evaluating a survivorship-care plan for breast cancer survivors (62)	*Publication date:* 2014 *Jurisdiction studied:* Ontario, Canada *Methods used:* Randomized clinical trial	408 patients with early-stage breast cancer randomized into intervention (survivorship-care plan) or control group	Patient self-completed questionnaires with telephone interviews during a 24-month study period with cancer-specific distress as the primary outcome	The intervention involved a 30-minute educational session with a nurse and a comprehensive care plan that involves personalized treatment summary, guidelines tailored to patients, and a resource kit. The care plan in addition to information on follow-up care and follow-up visit reminder table were forwarded to their primary-care provider. The authors reported no negative effect in health service and patient-reported outcomes. Additionally, there was improved adherence to guidelines among women in Quebec (compared to women in Western Canada), women within two years of treatment completion, and who had a higher SF-36 mental component score. The authors concluded that additional investigation is required before spreading the implementation of survivorship-care plans in clinical practice.
Evaluating the impact of post-treatment self-management guidelines for prostate cancer survivors (63)	*Publication date:* 2019 *Jurisdiction studied:* Alberta, Canada *Methods used:* Prospective qualitative study	18 English-speaking cancer survivors aged 18 years and older who completed curative prostate external beam radiation therapy between October and November 2017	Cancer survivors were provided self-management guidelines after their final treatment with a follow-up after four weeks, where they answered questions related to guideline timeliness, patient-centredness, safety, effectiveness, and comprehensiveness	The self-management guidelines included sections on basic follow-up care information, side effects, genetics, fertility, sexuality, psychosocial issues, resources for support, lifestyle recommendations, and additional health resources such as workshops on post-treatment recovery. The authors reported that participants were satisfied with the self-management guidelines, but a majority of the participants preferred receiving the information before their last appointment and to receive information in multiple formats (e.g., internet-based, paper-based) and in combination with an in-person educational visit with their healthcare provider. Additional information tailored to the needs of the patient population may be warranted.
Examining the continuity of care of colorectal cancer survivors at the end of treatment: The oncology-primary care interface (64)	*Publication date:* 2012 *Jurisdiction studied:* Manitoba, Canada *Methods used:* Qualitative survey	246 cancer survivors that had stage II or III colorectal cancer in 2008 or 2009	The survey included questions from the patient continuity-of-care questionnaire that assessed care before and after the end of cancer treatment, functional assessment of cancer therapy (colorectal) and the colorectal cancer subscale to assess quality of life	Over 60% of the participants reported receiving a care plan, and health information and other resources about support services. Overall, participants had positive views of receiving care from their primary-care providers after transitioning from cancer treatment. However, there is a need for additional support to clarify roles and coordination of care.
Evaluating a multifaceted survivorship-care plan (50)	*Publication date:* 2013	Breast cancer survivors and family physicians recruited from one	The multi-phased approach involved conducting 35 interviews	The survivorship cancer plans were tailored for both patients and family physicians and included a summary of treatments and individualized follow-up plans. The plans were considered

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
	Jurisdiction studied: Ontario, Canada *Methods used:* Qualitative pilot study	tertiary-care academic teaching hospital	with family physicians, patients with breast cancer, and oncologist specialists to inform the survivorship-care plan package (web-based, paper-based tailored resources), which was then developed and evaluated with focus groups and interviews with 26 participants	helpful by both the patients and their family physicians as they felt more engaged with transition care. For patients, they were additionally provided with a patient information booklet called a passport that included appointment bookings, key contact numbers and program information, in addition to an online resource with information available on community resources, and side effects from treatments. Family physicians were provided with digital information on clinical practice guidelines, symptom management and community resources for their patients. All the patients indicated that they would prefer to receive these resources before the transition phase. Additionally, the support services section on the online resource was considered helpful by patients, but they wanted more information on breast reconstruction and support groups in their community. An emphasis on health and wellness instead of clinical terms was also identified by the patients. For providers, they expressed the need for succinct instructions, printable checklists, and validated patient-scored instruments to improve clinic visits. Further research is needed to understand how this intervention can be integrated to existing infrastructure of care.
Describing the experiences of care delivery for endometrial cancer survivors at end of treatment (51)	*Publication date:* 2011 *Jurisdiction studied:* Ontario, Canada *Methods used:* Cross-sectional mixed-methods	English-speaking women aged 18 years and older who are within two years of completing their final cancer treatment from early stage endometrial cancer, and have no persistent recurrence of disease	169 patients completed the survey, and 14 patients were part of a focus group	Most of the participants indicated that they did not receive information after treatment ended or who to contact if they had questions or concerns, which led the participants to seek information on the internet or at community programs. Participants expressed that they needed a health provider to discuss any long-term effects of treatment and how to access resources. All of the participants requested additional information such as follow-up appointment schedules and a tailored document such as a survivorship-care plan. The authors recommend developing a survivorship-care plan with information on long-term physical and psychosocial effects of cancer, monitoring for symptoms, and promoting lifestyle changes, in addition to primary-care providers playing a central role in providing education. They also recommend that oncology programs need to develop a comprehensive list of evidence-based resources and community programs for patients.
Evaluating the cost-effectiveness of a survivorship-care plan for breast cancer survivors (52)	*Publication date:* 2013 *Jurisdiction studied:* Canada	Patients (n=408) with early-stage breast cancer who had successfully completed primary treatment at least three	The survivorship-care plan (SCP) package included a treatment summary, a patient-friendly version of	This study used data from a recent RCT to assess the cost-effectiveness of an SCP intervention compared with standard care. Cost-effectiveness of the SCP was assessed from the healthcare-system perspective as well as from the societal

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
	Methods used: Randomized controlled trial (RCT)	months previously, and were to have their care transferred to their own primary-care physician (PCP)	follow-up guidelines and information about local supportive care resources; patients received this package and had an educational session with a nurse, and PCPs were given a copy of all of the documents (including full follow-up guidelines)	perspective through measuring incremental costs and incremental quality-adjusted life years (QALYs). The time of the analysis was restricted to 24 months, and all costs were measured in 2011 Canadian dollars. Four defined cost groups were measured: 1) physician visits; 2) diagnostic and laboratory tests; 3) patient travel costs/lost productivity; and 4) additional SCP-associated costs. The analysis identified little difference between SCP and standard care regarding the costs of physician visits, diagnostic and laboratory tests and patient travel costs/lost productivity. The analysis revealed that the total costs of the four cost categories were almost the same over the 24-month time period; however, the SCP was associated with $10.41 greater total societal costs and with $40.12 greater healthcare costs per patient. When including the costs of the SCP, the SCP was confirmed to be more expensive (per patient) than standard care ($765.07 versus $694.70, respectively). Additionally, over the 24-month time period, the average QALYs were lower for patients who received the SCP compared to standard care (1.41 versus 1.42, respectively). However, the difference may be considered negligible. Probabilistic analysis determined that the probability that the SCP was cost-effective was only 0.26 at a threshold value of a QALY of $50,000. A variety of sensitivity analyses were conducted, which did not change the conclusions of the analysis. Overall, the study concluded that the SCP would be costly to introduce and would not be an effective use of healthcare resources. The study cited that a limitation to the results may be the restricted time period of the RCT, which could limit the ability of the economic evaluation to identify significant differences in quality or life or resource use.
Examining healthcare-system barriers to long-term follow-up for adult survivors of childhood cancer in British Columbia, Canada (53)	*Publication date:* 2018 *Jurisdiction studied:* British Columbia (B.C.), Canada *Methods used:*	Adult childhood cancer survivors (CCS) (n=30) and healthcare professionals (HCPs) (n=13) in B.C.; the CCS ranged from 19 to 43 years of age at the time	In-depth interviews with CCS and HCPs; interviews were conducted either in-person or via telephone, lasted from 45 to 120 minutes, and consisted of	Using 43 in-depth interviews, this study examined the perspectives of CCS and HCPs relating to health-system factors that act as barriers to long-term follow-up (LTFU) in B.C. Inductive, thematic analysis of the interview transcripts revealed five main themes that highlighted CCS and HCP perspectives

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
	Qualitative thematic analysis (of in-depth interviews) and constant comparative methods	of the interview, and HCPs included six physicians, two registered nurses, two healthcare administrators and one (each) social worker, counsellor and patient/parent advocate	open-ended questions that explored the personal factors, interpersonal relationships and social contexts that shaped the participants' experiences	of health-system factors acting as barriers to the accessibility of LTFU. The first theme was the difficult and abrupt transition from pediatric to adult healthcare. From the perspective of CCS, participants reported feeling 'kicked out' of pediatric healthcare and reported being unprepared to navigate adult healthcare services, which led to worry about if they were receiving adequate healthcare. From the HCP perspective, the transition is problematic because there is no professional ownership in this period and the timing is compounded by developmental transitions. The second theme was inconvenient and under-resourced healthcare services, which involved the location of multiple services, lack of HCP time and limited designated LTFU funding. From the perspective of CCS, there is burden associated with travel and time off work, and participants reported feeling like doctors are unable to address numerous health challenges. HCPs reported experiencing financial burdens due to missed appointments and loss to follow-up, as well as compromised quality of care due to lack of time and resources. The third theme was shifting patient-HCP relationships, wherein CCS were reluctant to seek care and discuss late effects with their HCP when a foundation of trust was not previously built. HCPs reported a lack of time to build positive patient-HCP relations in this transition period. The fourth theme was family doctors having inadequate experience with late effects. CCS feelings that their HCP had inadequate knowledge of cancer treatment details and health risks often led to CCS seeking out an oncology HCP for care. HCPs reported this to be a consequence of evolving evidence about late effects, as well as the small number of CCS followed by family doctors. The fifth theme was overdue and insufficient late-effects communication with CCS. Lacking knowledge about late effects prevented CCS from engaging in late-effects prevention and early detection, and prevented CCS from incorporating late-effects information into life decisions. HCPs reported this

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				as a failure of communication and information provision along the healthcare continuum. Overall, the results suggested that the relationship between CCS and LTFU HCPs influences patient-provider communication and ongoing health-seeking and engagement behaviours. A cited limitation to the study was that CCS who were already receiving cancer-related LTFU were over-represented. Further, there was limited input from CCS whose LTFU was primarily managed by their family doctor (i.e., pre-existing trusting relationship).
Exploring main challenges in survivorship transitions for older adults with cancer (54)	*Publication date:* 2020 *Jurisdiction studied:* Pan-Canadian, 10 provinces (those residing in the three territories not included) *Methods used:* Cross-sectional survey study	Older adult (75+) cancer survivors (n=3,274); 55% of survivors were male (n=1,788), 37% reported their treatment had occurred between one and three years previously (n=1,214), and prostate cancer (26.5%) and colorectal cancer (26%) represented the largest respondent groups	National survey that was conducted across the 10 Canadian provinces to assess the experiences of cancer survivors relating to follow-up (one to three years post-treatment); the survey was designed to identify the needs of cancer survivors who are being followed in the community, and to explore their experiences in transitioning to follow-up care	This paper focused on the survey responses to the open-ended question: "What was the main challenge you experienced after you completed cancer treatment?" Of the total sample population (n=3,274), 2,057 wrote responses to this question, and of these, 23.6% (n=486) reported they had not experienced a main challenge or wrote a positive response. This left 1,571 respondents who identified at least one main challenge. Regarding the frequency of major challenges, the 1,571 respondents reported experiencing 2,426 main challenges. Less than half of respondents in each age group (75-84 and 85+) identified a main challenge, and of these, the majority (61.9%) identified a single main challenge, while 26.2% identified two, 9.2% identified three and 2.8% listed more than three. The challenges were categorized into physical, emotional, practical, lifestyle adjustments, healthcare delivery and relationships/support. Physical challenges (e.g., physical capacity, symptoms/side effects, changes in body function/appearance) accounted for 68.2% of the main challenges identified, and the second most frequently identified challenges were emotional (10.2%; e.g., psychological effects, coping with changes). Three major themes emerged across the major challenges. The first theme was 'getting back on my feet', which reflected participants' strong desire to recover, including overcoming the resulting physical limitations from cancer treatment and restoring their previous level of functioning. The second theme was 'adjusting to changes', which involved a wide range of emotional and practical adjustments that participants faced after treatment. The third was 'finding the support I needed', which addressed the ways in which respondents desired support.

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				Under this theme, many respondents acknowledged their need for help or expressed appreciation for help they received after their primary cancer treatment. Respondents also believed that healthcare providers should provide survivorship care; specifically, they expected to receive a care plan and have a clear idea about who to contact if issues arose. The paper concludes that the patterns in the challenges point to structural ageism, which may be situated within an individual healthcare provider and/or the wider organizational structure through which people access care. The paper suggests that highlighting structural ageism as a common element to be identified and examined creates the opportunity to address patterns in survivorship care. Limitations cited include that the issues reported may not be reflective of all the issues that respondents experienced. Further, written comments from respondents reflect how they interpreted the question. Lastly, though the survey focused on a specific time period (one to three years after cancer treatment), it cannot be verified that responses focused only on this time period.
Evaluating the factors associated with unmet needs in adult cancer survivors in Canada (55)	*Publication date:* 2020 *Jurisdiction studied:* Pan-Canadian, 10 provinces (those residing in the three territories not included) *Methods used:* Cross-sectional survey study	Adult (30+) cancer survivors (n=10,717) who underwent chemotherapy, radiation therapy, surgical treatment (or a combination of these) within the past one to three years for breast, prostate, colorectal, melanoma or hematological cancer; 53% (n=5,660) of respondents were female, 60% (n=6,367) were 65 years or older, and breast cancer was the most represented cancer type (34%)	National survey that was conducted across the 10 Canadian provinces (disseminated via mail or completed online); the survey was designed to assess the physical, emotional and practical needs of cancer survivors, identify the specific needs of most survivors, identify the most vulnerable survivors and to determine the factors/resources associated with needs being unmet	This study obtained data from the Experiences of Cancer Patients in Transitions Study of the Canadian Partnership Against Cancer. The outcomes of the study were: 1) quantification of the proportion and median of the physical, emotional and practical concerns reported; 2) examining the magnitude of associated unmet needs; and 3) identification of specific factors (related to patients, treatment, clinicians or cancer) associated with reporting unmet needs. An unmet need was defined as the percentage of respondents who reported not receiving help for their concern, regardless of whether they sought help. The median number [interquartile range (IQR)] of concerns reported per respondent was six (3-10). Those who reported concerns reported seeking help for a median (IQR) of two (0-4) concerns. Unmet needs were reported for a median (IQR) of four (2-7) concerns. Physical concerns were reported by the greatest number of respondents (n=9,236, 86%), followed by emotional concerns (n=8,330, 78%) and practical concerns (n=4,668, 44%). Among

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				those with emotional concerns, 84% reported at least one unmet need. The same was true for 81% of those with physical concerns, and 74% of those with practical concerns. The top reported physical concerns with the highest proportion of associated unmet needs were fatigue (68%), change in sexual activity (45%), change in concentration and memory (39%) and nervous system problems (37%). The top reported emotional concerns were anxiety (69%), depression (47%), change in sexual intimacy (43%) and change in body image (40%). Of those who reported emotional concerns, more than 70% reported unmet needs, regardless of the type of emotional concern. Less than 25% of respondents reported any type of practical concern; however, the extent of unmet needs for practical concerns ranged from transport to appointments (55%) to difficulty getting insurance (73%). Significant factors found to be associated with unmet needs included age, sex, annual income, marital status, geographic location, language and treatment type. Specific to the different cancer types represented, melanoma survivors were significantly more likely to report unmet emotional needs. Compared to breast cancer survivors, prostate and hematological cancer survivors were significantly less likely to report unmet needs for physical concerns. Additionally, involving the general practitioner and the oncologist in providing care was associated with a significantly lower likelihood of reporting unmet emotional or practical needs. This paper suggests that the findings of the study should be used to develop tools for risk-stratification (according to factors associated with unmet needs) of patients with cancer before they transition into survivorship. Other actionable recommendations included: 1) better patient education; 2) early involvement of primary-care physicians in cancer care; 3) improved coordination between primary care physicians and oncologists; and 4) access to alternative-care practitioners (e.g., nurses, social workers). This paper cited a few limitations, including that the survey tool was not validated. The response rate and inability to apply weightings may also limit the generalizability of the findings to all cancer survivors in Canada. Lastly, the sample may include a large proportion of older adults with other comorbidities,

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				which may make the symptoms associated with cancer hard to distinguish from those of the comorbidities.
Exploring main challenges in survivorship transitions for older adults with cancer (56)	*Publication date:* 2016 *Jurisdiction studied:* Northwest Territories, British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Nova Scotia, Prince Edward Island, and 32 documents of national or interprovincial focus. *Methods used:* Qualitative thematic analysis	Relevant initiatives were defined as programs or projects that were either in development or had been implemented by Canadian individuals, groups, or organizations. To identify pertinent initiatives, requests for nomination were sent to clinical and research leaders across Canada in three different waves of recruitment.	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 five primary strategies of care delivery, and engaged PCPs at various levels. The Casebook findings highlighted three 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 authors suggested that 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.

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				The remaining initiative teams (n = 13) were in the process of creating an evaluation framework. The authors concluded that 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.
Describing a transitions program centred on standardized and personalized survivorship-care plans (SCP) to guide follow-up care and recovery (59)	*Publication date:* 2019 *Jurisdiction studied:* Manitoba *Methods used:* Cross-sectional survey study	The pre-implementation registry-based survey had a response rate of 68.3% with 246 usable responses (42.6% female responders, 152 patients with cancer of colon, and 94 with cancer of rectum). For the post implementation group, 83 completed surveys were received from 126 participants recruited in clinic for a response rate of 66%.	In 2010, CancerCare Manitoba (CCMB), introduced the Moving Forward After Cancer (MFAC) program for stages II and III colorectal cancer patients at the time of discharge to primary care. Prior to this, there was no consistent approach to information sharing for follow-up care. Discharge letters to the family physician were inconsistently sent, and patients did not routinely receive any written information. This study presents a comparison of the responses on a self-administered mailed survey completed by two patient groups - one before and one after the implementation of the MFAC program in 2010.	Significant shifts were seen in the organization of follow-up care consistent with the intent of the survivorship-care program to support primary-care responsibility for follow-up. About three-quarters of participants in the process viewed a family physician in the community as a main provider of their follow-up care, in some cases alongside others. This represented a 33% increase that was mirrored by a similar drop in the percentage of those viewing an oncologist as the main provider, which was only about 11% in the post-implementation group. The surveyed patients from the post-implementation cohort felt better prepared for the transition and had less perceived concerns upon return to their family physicians following treatment.