What do primary care providers think about implementing breast cancer survivorship care?

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ABSTRACT

Purpose As cancer centres move forward with earlier discharge of stable survivors of early-stage breast cancer (bca) to primary care follow-up, it is important to address known knowledge and practice gaps among primary care providers (pcps). In the present qualitative descriptive study, we examined the practice context that influences implementation of existing clinical practice guidelines for providing such care. The purpose was to determine the challenges, strengths, and opportunities related to implementing comprehensive evidence-based bca survivorship care guidelines by pcps in southeastern Ontario.

Methods Semi-structured interviews were conducted with 19 pcps: 10 physicians and 9 nurse practitioners.

Results Thematic analysis revealed 6 themes within the broad categories of knowledge, attitudes, and resources. Participants highlighted 3 major challenges related to providing bca survivorship care: inconsistent educational preparation, provider anxieties, and primary care burden. They also described 3 major strengths or opportunities to facilitate implementation of survivorship care guidelines: tools and technology, empowering survivors, and optimizing nursing roles.

Conclusions We identified several important challenges to implementation of comprehensive evidence-based survivorship care for bca survivors, as well as several strengths and opportunities that could be built upon to address those challenges. Findings from our research could inform targeted knowledge translation interventions to provide support and education for pcps and bca survivors.

Key Words Breast cancer, evidence-based guidelines, clinical practice guidelines, survivorship care, primary care, qualitative research, knowledge translation

BACKGROUND

Canadian cancer centres, including those in Ontario, are discharging stable survivors of early-stage breast cancer (bca) earlier to primary care follow-up1. The U.S. Institute of Medicine report, From Cancer Patient to Cancer Survivor: Lost in Transition, outlined these four essential components of survivorship care: prevention, surveillance, intervention, and coordination2. Although research suggests that primary care providers (pcps) routinely implement American Society of Clinical Oncology–recommended surveillance tests3, bca survivors report that many health care needs are not being met4. Our research team synthesized existing clinical practice guidelines (cpgs) for bca survivorship care that are relevant to primary care5. We also identified self-reported gaps in pcp knowledge and implementation of other components of survivorship care that require further study6.

The present study was conducted within a broader knowledge translation program of research that aims to improve outcomes for bca survivors. In Ontario, where the population of nurse practitioners (nps) conducting primary health care is growing and many pcps are practicing in team-based models such as family health teams, the strategies that would be the most effective to promote evidence-based survivorship care remain unclear. The behaviours of health care providers are influenced by their knowledge and attitudes, as well as by external barriers and facilitators such as patient factors, guideline factors, and environmental factors7. Thus, enhancing translation of evidence-based guidelines to primary care requires an understanding of the practice context. The purpose
of the present study was to determine challenges and opportunities related to implementing evidence-based breast cancer survivorship care by PCPs.

METHODS

The Consolidated Criteria for Reporting Qualitative Research guided reporting of the study methods and results. A more detailed description is found in the primary author’s dissertation.

Study Design

A qualitative descriptive method was used to explore the perceptions by PCPs of the challenges, strengths, and opportunities related to providing effective evidence-based breast cancer survivorship care, and to inform recommendations for knowledge translation strategies. The goal of qualitative descriptive studies is to provide comprehensive summaries of events or descriptions of phenomena. Thus, qualitative description is pragmatic and applicable to answering questions of relevance to health professionals and policymakers.

Setting and Participants

Participants were recruited from the South East Local Health Integration Network in Ontario, which serves an estimated population of 500,451. The estimated 2017 incidence of female breast cancer in the region is 155.4 per 100,000 women, which is higher than the provincial estimate of 146.4 per 100,000 women. Locally, the first cohort of early-discharge breast cancer survivors (n = 144) were discharged from the regional cancer centre between January 2015 and July 2016 (Luctkar-Flude M, Langley H, Tyerman J. Exploring the perspectives of early-discharge breast cancer survivors following the transition to primary care follow-up. Presented at the 2016 CANO/AICIO Annual Conference; Calgary, AB; 20–23 October 2016).

A combination of purposive and snowball sampling resulted in the recruitment of 19 PCPs, who were contacted by e-mail or telephone after they had indicated interest in a related survey distributed to primary care physicians (MDs) and NPs across the region. All survey participants were invited to participate in an interview, and all who agreed were interviewed. After 14–15 interviews had been completed, data saturation was felt to have been obtained because of recurrence of themes and lack of new findings. The study received ethics approval, and informed consent was obtained from all study participants.

Data Collection and Analysis

Semi-structured interviews were based on an interview guide developed and informally pilot-tested with 1 NP and 1 MD. All participants were reminded of the context for the interviews. Additional prompts and probing questions were improvised at the discretion of the interviewer. Interview recordings were transcribed verbatim by the primary researcher. Interviews were conducted by the primary author (MLF), and the second author (AA) reviewed all aspects of the data analysis. Data analysis was guided by the principles and steps of qualitative data analysis described by Creswell and by the phases of thematic analysis described by Braun and Clarke. Coding procedures used a pragmatic, blended approach that was both deductive and inductive, and a variety of activities were undertaken to maintain study rigour—specifically, peer review, member checking, and triangulation. Table II provides a detailed description of the analysis plan and procedures.

RESULTS

Interviews were conducted with 10 MDs and 9 NPs (Table III) similar in age and practice type, with most being women. Compared with the NPs, the MDs had significantly more primary care experience (mean: 21.8 ± 13.0 years vs. 6.1 ± 4.7 years). Interview duration ranged from 10 minutes to 47 minutes (mean: 24.9 ± 9.5 min).

Preliminary analysis resulted in 38 subthemes mapped to categories of knowledge, attitudes, resources, and other. Final analysis revealed 6 overarching themes (Table IV) representing 3 major barriers and 3 major strengths or opportunities related to implementing breast cancer survivorship care. In keeping with the pragmatic nature of the inquiry, recommendations emerging from data were aligned with each theme.

Inconsistent Educational Preparation

Analysis highlighted the diversity of PCP knowledge and experience, the challenges in keeping up to date with guidelines, and the diversity of learning needs and preferences. All PCPs emphasized that they had no formal education about survivorship care and that ongoing education was “hit and miss.” Most described knowledge gaps, lack of experience, challenges related to “knowing the system,” and “learning on the job.”

I’ve learned along the way by just doing; learn as you go, not because of specific education.
— MD 10

I think I learned the most about survivorship from patients, really—on the job learning.
— NP 4

The PCPs described how the volume of information contributed to a feeling of being “overwhelmed” by “keeping up to date” on a variety of primary care topics. Perceived lack of relevance was also seen as a barrier to using CPGs. Some providers, mostly NPs with access to university library databases, described comfort in accessing guidelines and conducting literature searches to answer clinical questions. The MDs and NPs both wanted more information and education about survivorship CPGs.

So many time constraints.... It’s a tough job in primary care because GPs need to know a little about everything.... It’s overwhelming to look for guidelines, there are so many.
— MD 7

In terms of accessing guidelines and educational updates, it was clear that one size does not fit all. Providers preferred a wide range of education formats such as...
webinars, workplace lunch-and-learns, and continuing medical education events. Barriers to attending continuing medical education events included time and costs, particularly for rural practitioners. Many relied on Google searches; others used subscription services such as UpToDate (Wolters Kluwer Health, Waltham, MA, U.S.A.), which summarize research evidence. Others relied on colleagues and specialists for clinical information. Overall, a desire was expressed for “short and sweet” guidelines and centralized resources for “one-stop shopping.”

I feel like getting it both ways, e-mail and mail... Something published on some card stock, laminated, with the protocol for follow-up... Something to refer to for the first little while, until we get used to it.

— MD 10

Team-based education, short, over lunch.... We’re all learning the same content at the same time.... Even a video we can watch ourselves.

— NP 2

**Provider Anxieties**

Providers were divided in their confidence with providing survivorship care. Many described such care as falling within their “comfort zone,” but they were mainly individuals who had prior experience with cancer survivors. Others expressed anxiety about their lack of expertise and felt that such care would be easier for experts. Many described “feeling like a beginner” or simply said “tell me what to do.”

Maybe physician anxieties.... There are a lot of things that I think can get dealt with pretty easily by someone who has expertise and is doing this all day long.

— MD 4

Not very confident. I don’t know where to start. To be honest, I’d have to go online and search for cancer surveillance guidelines.

— NP 9

Providers were divided in their attitudes. Many felt that survivorship care was not their responsibility and described a fear of patients “falling through the cracks” if follow-up care were missed and a fear of legal consequences if a cancer recurrence were to be missed. Others suggested that PCPs were ideally positioned to assume such care because of their ongoing relationships with patients.

My fear is having people fall through the cracks.... We need to clearly know what medically–legally...
### TABLE II  Qualitative thematic analysis plan and procedures: a pragmatic blended approach

| Step | Plan | Procedures |
|------|------|------------|
| 1. Prepare data | Transcribe interviews and arrange data by type or information source | Interviews transcribed and verified |
|  | | Brief memo written after each interview |
| 2. Read data | Read and reread transcripts | Prolonged engagement with data, noting ideas, questions, major themes and initiation of audit trail by collecting all descriptive and analytic notes into a single electronic file |
|  | Obtain a general sense of the data | Data partitioned into three main categories of factors identified in the literature: knowledge, attitudes, and resources |
|  | Record general thoughts about data | Theory-driven subcategories identified for each category |
|  | | Subcategories further partitioned into “challenges” and “strengths” |
| 3. Organize data using a deductive approach | Themes/codes are generated from theory or prior research findings, or both | Data partitioned into three main categories of factors identified in the literature: knowledge, attitudes, and resources |
|  | Develop a provisional list of codes from the conceptual framework | Theory-driven subcategories identified for each category |
|  | | Subcategories further partitioned into “challenges” and “strengths” |
| 4. Conduct initial coding using an inductive approach | Code meaningful chunks of data with descriptive labels that emerge during data collection/analysis | Chunks of data coded using primarily descriptive and in vivo coding to develop an initial list of data-driven codes |
|  | Generate notes/memos to capture analytic thoughts as they occur | Recoded subset of interviews several months apart to ensure consistency of coding by primary author |
|  | | Analytic memos recorded in the audit trail |
| 5. Generate a code list | After reviewing several interviews, list all topic codes and combine similar codes to eliminate repetition | Preliminary codes mapped to a priori categories and subcategories |
|  | Define elements/parameters of each code as needed | Codes and categories displayed on a data display matrix |
|  | | Similar codes combined to create a code list (subthemes) using emerging, process, and theoretical coding |
|  | | Codes grouped to suggest preliminary themes |
| 6. Continue coding using a blended approach | Use combination of predetermined and emerging codes and see if new codes and categories emerge | Transcripts coded and recoded using code list |
|  | Revise codes and recode data as needed | Some similar codes combined, some new codes emerged |
| 7. Establish intercoder agreement | Compare codes independently derived or coded using code list by different researchers | Subset of transcripts coded by a group of nurse practitioner colleagues revealed very similar codes and emerging themes |
|  | Discuss and come to a consensus | Subset of transcripts coded by a PhD nurse with qualitative research experience demonstrated high agreement/consistency |
| 8. Generate themes | Reduce list of codes by grouping topics meaningfully related | Analytic codes (subthemes) grouped into more general, higher-level themes and themes relabelled with more descriptive labels emerging from data |
|  | Use most descriptive labels for themes | |
| 9. Collate data | Collate coded data relevant to each theme and organize data including codes into a matrix or network display | Coded data entered into “collated data” table with the headings category, subcategory, themes, supporting data (challenges, strengths, and opportunities) |
| 10. Interrelate themes | Review how themes work in relation to coded extracts and full dataset | Relationships between themes in different categories and subcategories examined, because there was some overlap across them |
|  | Examine relationship between themes, and collapse/expand as needed | Subcategories and themes moved and merged to reduce the total number and any redundancy |
| 11. Interpret meaning of themes | Write detailed analysis of each theme and how it relates to the research question | Interview data mapped to one or more themes in a table |
|  | Can use visuals, figures, or tables as adjuncts to discussions | Themes described and interpreted as challenges, strengths, and opportunities related to implementing survivorship guidelines |
|  | Select data extracts that best exemplify each theme | In keeping with pragmatic nature of inquiry, recommendations emerging from data were aligned with each theme |
|  | | Key sample quotes selected and summarized in a table |
we’ll be held responsible for ... to ensure they don’t get lost in our 1700 patient mix.
— MD 5

Primary Care Burden
Many participants, particularly MDs with large caseloads, were concerned about the workload effect of survivorship care being “downloaded.” They were concerned about the increased burden on administrative staff if additional infrastructure or funding was not provided. Technologies such as electronic medical records (EMRs) require time and personnel to manage them. Unreliability of technology in rural settings and a need to update or migrate to new systems were also described.

We’ve got EMRs, but without some structure, things may not get done. Someone has to go into the program deliberately, run lists, set up appointments, call people.
— MD 3

Although many providers regarded BCC survivors as similar to non-cancer patients, others perceived that they “bring more to a visit” in terms of their “cancer mindset” and higher levels of anxiety and uncertainty, and that they require more time, more frequent visits, and more reassurance.

Usually, these patients have more complaints, and they’re hard to manage. It takes a bit longer. It’s not easy things, either, where there’s a quick fix. It often involves counselling and support.
— MD 10

The primary care burden was further challenged by inconsistent access to specialists and resources. Most MDs described oncologists as approachable; however, NPs reported lack of access or prolonged wait times for supportive resources such as diagnostic imaging, lymphedema specialists, cancer psychiatrists, and community support groups. Time, costs, transportation, and illiteracy were

| TABLE II | Continued |
|---|---|---|
| Step | Plan | Procedures |
| 12. Peer review or debriefing | Test and defend emergent hypotheses to peers to confirm plausibility | Data analysis, emerging themes, and analytic audit trail reviewed by an experienced qualitative researcher and by thesis supervisor |
| 13. Member checking | Have study participants review analysis and resulting themes for accuracy/validity | Of the 19 interview participants, 6 responded to request for feedback on the analysis and resulting themes (3 physicians and 3 nurse practitioners) |
| 14. Triangulation | Compare results with those obtained using other methods to produce comprehensive understanding | Emerging themes were compared with themes derived from qualitative survey results (data-methods triangulation) |
| 15. Produce report | Write up final discussion/conclusions, and compare findings with literature, prior research findings, or theories | Resulting themes discussed in relation to prior research findings |

TABLE III Characteristics of the 19 interview participants

| Characteristic | Value |
|---|---|
| Profession (n) | |
| Family physician | 10 |
| Primary health care nurse practitioner | 9 |
| Sex | |
| Women | 15 |
| Men | 4 |
| Age (years) | 50.2±10.8 |
| Range | 34–75 |
| Primary care experience (years) | 14.3±12.6 |
| Range | 1–46 |
| Practice location (n) | |
| Large urban (≥100,000) | 6 |
| Small urban (10,000–99,999) | 4 |
| Town (3,000–9,999) | 5 |
| Rural (<3000) | 4 |
| Practice type (n) | |
| Family health team | 11 |
| Family health organization | 5 |
| Community health centre | 1 |
| Nurse-led clinic | 1 |
| Solo physician | 1 |
cited as barriers for rural patients accessing resources; however, home visits and volunteer drivers were available in most settings to support care delivery.

I certainly wouldn’t hesitate to call an oncologist to get advice.... They’re happy to answer family doctor’s questions.... I know I’ve got somebody at my back if I don’t know what’s going on.

— MD 2

We don’t have all the resources needed.... There is no specialist or physiotherapy to treat

### TABLE IV
Primary care provider perceptions of providing breast cancer survivorship care

| Themes, by category | Subthemes | Potential knowledge translation strategies |
|---------------------|-----------|------------------------------------------|
| **Perceived challenges** |           |                                          |
| Inconsistent education preparation | No formal education | Include survivorship education in undergraduate and postgraduate education programs |
| | On-the-job learning | Provide continuing education to current primary care providers |
| | Overwhelming to keep up-to-date | |
| | Diversity of learning needs and preferences | |
| Provider anxieties | Fear of patients falling through the cracks | Provide support to primary care providers as they assume responsibility for survivorship care |
| | Fear of missing diagnosis | Evaluate the transition to primary care follow-up from the perspective of primary care providers |
| | Fear of legal consequences | |
| | Comfort zone | |
| | Feeling like a beginner | |
| Primary care burden | Shifting burden to primary care |Develop electronic medical record templates and processes to facilitate tracking breast cancer survivors and to implement recommended guidelines |
| | Not my responsibility | Provide primary care providers and breast cancer survivors with clear information about the resources and specialists available to support provision of survivorship care and also about how to access them |
| | Breast cancer survivors bring more to a visit | |
| | Primary care workload | |
| | Administration support workload | |
| | Infrastructure and funding | |
| | Access inequities | |
| **Perceived strengths and opportunities** |           |                                          |
| Tools and technology | Keeping track of breast cancer survivors | Develop electronic medical record templates and processes to facilitate tracking breast cancer survivors and to implement recommended guidelines |
| | Electronic health records | Develop tools, protocols, and care plans to embed guidelines into routine practices |
| | Communication tools | |
| | Protocols and survivorship care plans | |
| Empowering survivors | Patient responsibility | Educate survivors about primary care role in survivorship care |
| | Survivor expectations for follow-up | Educate survivors about survivorship guidelines and provide them with a copy of the survivorship care plan |
| | Positive attitudes and behaviours | Develop self-management support programs for survivors |
| | Providing survivorship care plans | Educate primary care providers about providing self-management support |
| Optimizing nursing roles | Nurse practitioner role frustration and scope of practice | Provide education to nurse practitioners, registered nurses, and registered practical nurses to support their practicing to full scope of practice in providing comprehensive breast cancer survivorship care |
| | Nurse navigator role | Expand existing registered nurse roles to support provision of comprehensive survivorship care in primary care |
| | Nursing chronic disease management role | |
| | Nurse practitioner role benefits | |
lymphedema.... There’s only one cancer psychiatrist, [and] so patients are waiting for care they need—care I can’t give or don’t have time to give.

— MD 7

Tools and Technology
Participants described how technology could support the tracking of survivors and could facilitate implementation of cpgs. Guidelines could be built into emrs with fillable templates that cue practitioners to provide and document care.

We can build templates in our emr which correspond to guidelines ... and fill in the blanks specific to each patient.... I just have to type over them.

— MD 10

Although many providers were satisfied with communication from the cancer centre, many described feeling “out of the loop” once a referral was made, and they expressed a desire for “post-therapy protocols,” “patient-specific survivorship care plans,” and tools to enhance communication and embed cpgs into routine practice.

A care plan or outline of specific screening and interventions for each patient would be helpful.... Something simple and easy to follow ... specific to my patient.

— MD 7

Pediatric oncology is very different... We had better post-therapy protocols.... In the adult world, there seems to be more variability depending on the practitioner organizing it.

— NP 8

Empowering Survivors
Providers saw survivors on a continuum from those lacking responsibility or “not very good advocates” to those who were well-informed and engaged in their own care. Providers believed that patients expected them to be “up to date” and to play an intermediary role with oncology. Some providers reported that patients preferred to be seen in primary care for follow-up; others believed that patients lacked confidence in their pcp’s when it came to cancer. Many providers were interested in empowering survivors to share responsibility or to coordinate their own care, and suggested that guidelines or care plans be provided to patients and providers alike.

Some of it has to be cooperation. The patient has to have some responsibility to ensure follow-up happens appropriately ... not to sit back if they don’t hear back from my office in 6 months.

— MD 10

Having something like a care plan shared with the patient, like we have for asthma, where the patient’s in charge ... engagement of the client in their own care to give them more of a sense of control.... With cancer, you can feel pretty not in charge.... Empower patients to take this on.

— NP 7

Optimizing Nursing Roles
Team practices offer opportunities for collaboration and for access to specialty services and expertise such as pharmacists and dieticians; however, many nps described further opportunities to optimize survivorship care if nps were able to practice to their full scope of practice. They described “role frustration” related to restrictions on prescribing and diagnostics that led to delays in care delivery. Others perceived “role confusion” related to the np scope of practice and “lack of respect” for the np role.

Pain management.... We can’t prescribe controlled substances. Another issue is diagnostics.... If we’re worried about a recurrence, we can’t order ct or mri ... getting them done in a timely fashion.

— NP 3

Sometimes specialists want to hear from the physician as opposed to the NP.... 90% of the time, I’ll get a letter back from the specialist directed to the physician, with no mention of my name. That’s a barrier.... The NP is out of the communication equation... It’s part of the role frustration.

— NP 9

Much support was expressed for optimizing nurse (rn) roles to include aspects of survivorship care. Many commented positively on the nurse navigator role in bca assessment and suggested expanding it to include survivorship. Others suggested that survivorship care be part of the primary care nurse role, because those providers are already involved in chronic disease management. However, barriers to that change included time, funding, and the comfort level of nurses taking on this additional role.

We’re going to be getting additional nursing support, and that could be a role as part of chronic disease management they could be doing.

— MD 3

The breast assessment RN navigator, she’s been great. I don’t know whether it’s reasonable to use her to do survivorship follow-up as well ... or could there be two parts to her role?

— NP 8

Some providers questioned the relevance of some guideline recommendations (such as screening for fatigue) or felt that their role in survivorship care was diagnostic follow-up or surveillance for recurrent cancer. Some felt that psychosocial concerns were not well-addressed, whereas others described providing comprehensive care, including prevention. The NP role was seen as a facilitator to providing “holistic care” because of a focus on health promotion and longer scheduled visits, affording time for screening and counselling.

Some of these guidelines I don’t do.... Asking about sexual function.... What can be done about it anyway?

— MD 8
A breast cancer patient comes to see me, and I’m looking at the entire picture…. Cancer is only one aspect of their health.
— NP 3

DISCUSSION

Our study identified 3 major challenges and 3 major strengths and opportunities, providing insight into the multilevel factors influencing implementation of bca survivorship care. The practices (behaviours) of pcp s can be seen to be influenced by internal factors (knowledge and attitudes) and external factors (resources) available at the individual, practice, and system levels. Several findings are consistent with known barriers and facilitators; others added to our knowledge of bca survivorship care in the primary care setting. In keeping with the pragmatic nature of our inquiry, potential knowledge translation strategies were derived from the study participants themselves, as well as from the researcher’s suggestions.

The challenges described by our study participants are well documented in the literature: inconsistent educational preparation, primary care burden, and provider anxieties. Survivorship care has not generally been integrated into health professional curricula, confirming the need for updating professional school curricula and continuing medical education for pcp s. Although many have embraced survivorship care, others find this new role burdensome and express anxiety related to their limited knowledge, education, and experience. In the context of competing demands and relatively small caseloads of cancer survivors, pcp s might not have opportunities sufficient to develop expertise and confidence in providing survivorship care. Experience is a key factor promoting comfort: primary care md s who follow more bca survivors in their practice report higher confidence in managing follow-up for those patients. Fear of missing a cancer recurrence might draw pcp s away from care perceived as less urgent, such as prevention activities. That fear is not unreasonable, given that diagnosis in primary care is recognized by the World Health Organization to be an area at high-risk for errors. Thus, pcp s desire support and clear direction from oncologists about expectations for follow-up and potential problems.

The pcp s in our study also reported as barriers a lack of time and funding, and workload burden for themselves and their staff. Overwhelmingly, our participants desired access to reliable, succinct Canadian guidelines housed in one place. They suggested that team-based education could ensure that all team members are aware of cp s and could facilitate discussion about how teams might implement recommendations. Other studies have highlighted the importance of targeting the whole primary care team with guideline implementation strategies and have demonstrated positive change in attitudes and practices. The pcp s in our study, particularly those in rural areas, reported inequities in accessing specialists and supportive care services. The np s in our study were more likely to report challenges in accessing oncologists; the md s felt that access was good. Compared with their colleagues in smaller cities, md s in a larger urban Canadian city reported limited contact with oncologists. In Canada, access for bca survivors to specialized services, such as lymphedema therapists and rehabilitation, is limited by a need for more certified therapists and lack of funding. Addressing access inequities would facilitate full implementation of guideline recommendations by pcp s. As well, knowledge translation interventions could better connect pcp s and bca survivors to existing resources.

Strengths and opportunities identified by our study participants could be built upon to address the challenges of providing survivorship care in the primary care setting. Tools and technology were seen as important facilitators to address the primary care burden. Facilitators cited in the literature include integrated emrs, computerized reminders, protocols, and dedicated funding and personnel. Electronic chart sharing by organizations and having protocols and reminders built into emrs are opportunities to improve care delivery. Recent bca survivorship cp s for primary care could be incorporated into such protocols. Patient-specific survivorship care plans detailing treatments, follow-up care, and resources were proposed as a communication tool provided by oncologists to keep pcp s and patients in the loop and to improve guideline adherence. Survivorship care plans to enhance posttreatment transition care are endorsed by the American Society for Clinical Oncology and the Canadian Partnership Against Cancer. Survivors and pcp s have reported high levels of satisfaction with survivorship care plans. However, evidence shows few, if any, measurable patient outcome benefits, whereas time, resources, costs, and incompatibilities are significant barriers.

Recognition of the effects of fragmented survivorship care has resulted in efforts to empower cancer survivors and to engage them in self-management, similar to the approach used in other chronic conditions. Chronic disease self-management programs have been associated with improvements in psychological health status, self-efficacy, and selected health behaviors. Cancer survivors report that many topics concerning the physical and psychosocial effects of cancer and health promotion are not addressed in follow-up. Thus, tools and interventions that empower survivors to take an active role in their own care might ensure that those issues are addressed. Physicians in another Canadian study believed that patients should be active partners or leaders in follow-up care, and a number reported incorporating self-management strategies with their patients. Innovative tools that support self-management include e-health interventions such as Web-based programs or mobile apps. Work in other chronic disease fields can provide a basis for designing e-health strategies for cancer survivors.

Facilitating np s in practicing to full scope could enhance their ability to provide comprehensive survivorship care in a timely manner. Although provincial legislation allows np s to order diagnostic tests such as computed tomography and to prescribe controlled medications, those provisions will take effect only once relevant regulations are amended and approved by government. Similarly, allowing primary care np s to practice to full scope could also contribute to comprehensive survivorship care. Although primary care np s were not included in our sample, many of our study participants—md s and np s alike—felt that np s...
in their practice settings could provide certain aspects of survivorship care such as screening and health promotion. Psychosocial and health behaviour assessment and counselling could be delegated to RNs or allied health professionals. Regionally, breast assessment nurse navigators already coordinate pre-treatment assessment, diagnosis, and referral activities for women with bca, and primary care RNs are involved in chronic disease management activities for conditions such as diabetes and hypertension. Currently, most Canadian cancer navigation programs concentrate on the diagnostic or treatment phase; however, community nurse navigators could facilitate transition to survivorship, promote self-management, and enhance supportive care. The “lead physician” model introduced in Manitoba could be appropriate for team-based practices such as family health teams in Ontario, with teams nominating an MD, NP, RN, or other health professional to become “clinician lead” for survivorship care. Nurses acting as primary care cancer leaders has been trialled in the United States and the United Kingdom, with positive effects on knowledge and practices.

Because of ongoing and late effects from treatment, cancer can be viewed as a chronic disease. Effective chronic disease management includes prevention of disease progression, complications, and comorbidities, aligning with U.S. Institute of Medicine’s recommendations for cancer survivors. Research has demonstrated that enhanced roles for RNs and NPs contribute to effective chronic disease management and improved patient outcomes. Thus, it might be effective to delegate aspects of survivorship care to trained primary care RNs. A cross-sectional survey of Ontario primary care nurses determined that chronic disease management was not uniform across practices and that there was potential to optimize that role and to improve chronic disease management. The involvement of primary care RNs in cancer survivorship care in Ontario is limited, but involves care coordination, system navigation, emotional support, and facilitation of access to community resources. Expanding the role of primary care RNs in cancer survivorship represent a promising opportunity deserving of further attention. With appropriate education and tools, primary care RNs could provide efficient, effective, and comprehensive survivorship care in collaboration with primary care MDs and NPs.

Addressing barriers to implementation and building on identified strengths and opportunities could ultimately improve the quality of bca survivorship care.

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CONFLICT OF INTEREST DISCLOSURES
We have read and understood Current Oncology’s policy on disclosing conflicts of interest, and we declare that we have none.

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