



Development of Phase-Specific Breast Cancer Survivorship Care Plans

Lauren Boehm,¹ Tracey Weisberg,² Nadine Linendoll,^{1,3} A. Circe Damon,²
John K. Erban,^{1,3} Susan K. Parsons^{1,3,4}

Abstract

Survivorship care plans (SCPs) have the potential to be powerful tools in providing individualized, comprehensive survivorship care over time, particularly if these documents are used in a dynamic fashion and updated throughout the survivorship course. We propose the addition of the phase-specific SCP at key care junctures to capture time-specific risks and updates, as well as to prepare for transitions of care. We detail the development and integration of the phase-specific SCP into the electronic medical record and clinical work flow at two, diverse practice settings.

Introduction: Phase-specific survivorship care plans (SCPs) have the potential to be powerful tools in providing individualized, comprehensive survivorship care, particularly in terms of care coordination and transition, if used as dynamic documents. **Materials and Methods:** We designed an initial follow-up care plan (FCP) to be used at the conclusion of curative therapy, as well as distinct, phase-specific FCPs for periodic use at 5-year and 10-year time points in the survivorship course. These FCPs incorporate the 4 essential components of survivorship care outlined by the Institute of Medicine: prevention, surveillance, intervention for consequences of cancer treatment, and coordination among health care providers. **Results:** Phase-specific SCPs were designed by a multidisciplinary team with expertise in breast health, survivorship, and cancer care delivery across diverse practice settings. The FCPs were formulated to align with national guidelines and emergent, peer-reviewed literature, and reflect evolving recommendations regarding the duration of adjuvant hormone therapy. The SCPs were pilot-tested and successfully integrated into the existing work flow of the electronic medical records at each practice site. **Conclusion:** Phase-specific SCPs were developed to incorporate new knowledge about evolving treatment recommendations, screening guidelines, and updated genetic information to encourage timely discussions relevant to the specific stage of survivorship.

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¹Tufts University School of Medicine, Boston, MA

²New England Cancer Specialists, Scarborough, ME

³Tufts Medical Center Cancer Center, Boston, MA

⁴Institute for Clinical Research and Health Policy Studies, Tufts Medical Center, Boston, MA

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Address for correspondence: Susan K. Parsons, MD, MRP, Tufts Medical Center, 800 Washington St, #345, Boston, MA 02111

Fax: 617-636-6280; E-mail contact: sparsons@tuftsmedicalcenter.org

Introduction

With more than 3 million breast cancer survivors in the United States, survivorship care is an important public health concern.¹ Breast cancer presents a unique health care challenge because recurrence risk can extend decades past initial treatment. The additional use of adjuvant hormone therapy for patients with hormone receptor-positive (ie, estrogen receptor-positive and/or progesterone receptor-positive) breast cancer has provided recurrence risk reduction after therapy completion.^{2,3} However, the ideal length of adjuvant therapy remains the subject of investigation and is patient-specific.⁴

In 2006, the Institute of Medicine (IOM), currently known as the National Academy of Medicine, published the report "From Cancer Patient to Cancer Survivor: Lost in Transition" that highlighted challenges faced by survivors upon the conclusion of curative

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treatment.⁵ The IOM identified 4 essential components of survivorship care: (1) prevention of new and recurrent cancers and other late effects; (2) surveillance for cancer spread, recurrence, or late effects; (3) intervention for consequences of cancer treatment; and (4) coordination among health care providers.⁵

Subsequently, the IOM recommended a survivorship care plan (SCP) be delivered to the patient at the end of curative treatment. The SCP includes a treatment summary (TS) and follow-up care plan (FCP). The TS is a concise record of therapy received across all modalities (eg, surgery, neoadjuvant and adjuvant chemotherapy, radiation therapy, hormone therapy). The FCP summarizes health risks arising from treatment and serves as a tool to facilitate communication between the oncology care team, the patient, and the primary care physician (PCP), particularly during the transitions of care.

The IOM delineated the 13 essential elements that should be included in a cancer care plan, one of which is a survivorship plan.⁶ However, as Mayer et al⁷ noted in a recent review, the influence of timing and frequency on SCP delivery has not been fully explored, suggesting that one “dose” of a SCP upon treatment completion might not be sufficient to provide an enduring and beneficial survivorship effect. Instead, more frequent application of these SCPs could be more useful in establishing a longer-lasting benefit.

Rationale

We propose phase-specific SCPs as a model for breast cancer survivorship care planning. Separate FCPs have been designed for the initial survivorship visit upon completion of curative therapy and distinct visits at 5 and 10 years after curative therapy. The phase-specific FCPs represent a pause at key care junctures in the survivorship course to remind the care team and the patient to discuss certain topics, such as updated family history, new or emerging genetic information, risks associated with prolonged exposure to hormone therapy, and updated guidelines, such as those regarding the duration of hormone therapy. We set those key care junctures at year 5 and 10 of survivorship, on the basis of updated recommendations for the duration of hormone therapy and our clinical practice. The main significance of the 5-year FCP is a “midway through hormone therapy” check-in, allowing for a period of latency for potential late effects of treatment to arise, as well as potential challenges with adherence to ongoing hormone therapy. The 10-year FCP is considered a “conclusion of hormone therapy” check-in. We propose that the 10-year time point is one at which the provider can discuss discontinuation of hormone therapy and prepare the patient for transition of care back to the PCP. Importantly, the timing of check-ins is patient-specific and can be modified. For instance, should a patient finish hormone therapy after 7 years, the 10-year FCP could be delivered at this visit.

Care Plan Development

Breast cancer-specific SCPs were designed by a development team comprised of breast cancer oncologists, survivorship oncologists, and nurse practitioners (NPs) from survivorship programs at Tufts Medical Center (Tufts MC), an academic medical center in Boston, Massachusetts, and New England Cancer Specialists (NECS), a community-based oncology practice in Maine. The

collaboration brought together expertise in breast health, survivorship, and cancer care delivery.

Treatment Summary

We began the creation of our phase-specific SCP by modifying the breast cancer-specific template for the TS, available through the American Society of Clinical Oncology (ASCO).⁸ Other templates are publicly available, but we found that the ASCO model best fit our overall approach to survivorship care planning. Throughout the iterative design process, we consulted with stakeholders in the breast health clinical care team, including breast cancer oncologist, NPs, breast health nurses, and a breast surgeon, regarding content, format, and guideline congruence.

With questions regarding the optimal presentation of care plan information and lack of a standardized format, we created original templates for the initial and phase-specific FCPs, tabulating the document according to exposure and linking that exposure to risk, planned surveillance, frequency of testing, and provider responsible.⁹ We wrote the FCPs in accordance with current National Comprehensive Cancer Network (NCCN) breast cancer and survivorship guidelines, most recently updated in January 2019.¹⁰ The FCPs were devised to reflect the 4 essential elements of survivorship care, as outlined by the IOM.⁵

Initial FCP

The initial FCP is designed for the first survivorship visit after the completion of curative therapy. Using the templated document, the provider selects the appropriate treatment exposures (eg, surgery, radiation therapy, chemotherapy, biological therapy, hormone therapy) with the corresponding follow-up tests for potential late effects that are relevant for each patient. For example, if the patient did not receive radiation therapy, consideration of radiation-related late effects would not be included in the FCP. Further, if a patient received trastuzumab as part of the treatment regimen, the FCP would include risk of cardiomyopathy and delineate guideline recommendations for echocardiogram at recommended intervals during and after the completion of therapy.¹¹ In this way, each test is on the basis of the direct exposure (eg, chemotherapy, hormone therapy) and subsequent risk to the patient according to that treatment modality.

The initial FCP also introduces strategies to reduce risk and optimize wellness. Evidence suggests that an active lifestyle, healthy diet, limited alcohol intake, and maintaining an ideal body weight (body mass index of 20-25) might lead to better breast cancer outcomes.¹⁰ In an impact study by Hill-Kayser and colleagues, more than half of SCP users reported that they planned to make a lifestyle change (eg, increased exercise) in response to the SCP.¹² Many of these strategies are within the patient’s control, as signified by the shared responsibility between patient and providers on the FCP. A sample of the initial FCP for a patient treated with partial mastectomy, chemotherapy, radiation therapy, and adjuvant hormone therapy is shown in [Figure 1](#).

Phase-Specific FCPs

The concept of the phase-specific approach was developed in response to evolving breast cancer care recommendations, such as the prolonged duration of hormone therapy. With increased

Figure 1 Sample Initial Follow-up Care Plan

Patient Name (MRN 0000000 DOB 01/01/0000)

Initial Survivorship Care Plan

Health History: Stage IIB (T2 N1a M0) left breast invasive ductal carcinoma {ER+/PR+/HER2-}
 Treatment: {Left partial mastectomy}, chemotherapy {dose dense doxorubicin 240 mg/m², cyclophosphamide 2400 mg/m², paclitaxel 700 mg/m²}, radiation therapy (RT) {45.05 Gy to the left whole breast, supraclavicular and axillary lymph nodes}, hormone therapy {anastrozole}

Organ System	Test	Indication	Time Interval	Last Completed/ Plan	Responsibility
Breast	Smoking cessation Healthy diet Exercise	Risk reduction strategies	Daily routine	11/3/18	All
	Local therapy follow up (partial mastectomy)	Issues related to pain, lymphedema, body image	Every visit	11/3/18	Oncologist/ Breast surgeon
	Mammogram	Breast cancer surveillance screening	Annually; first due 6-12 months after radiation	10/18/18	Oncologist
	Physical exam		Every visit	11/3/18	Oncologist
Cardiovascular	ECHO	Risk of cardiac pathology (anthracycline, chest radiation, vascular disease, RT)	Within 1 year of completion of curative therapy, then as clinically indicated	2/12/19 EF 55%	Survivorship Refer to cardiology as needed
	EKG	Risk of cardiac dysfunction (anthracycline)	As clinically indicated	2/12/19 NSR	
	Body Mass Index	Risk of obesity and vascular disease, HTN (anthracycline), modifiable cardiac factors	Annually	11/3/18	
	Blood Pressure		Annually	BMI 25, 128/84	
	HbA1c or fasting glucose		Every 5 years	Not scheduled 6/19	
	Lipid profile		Annually		
Pulmonary	Pulmonary function tests	Risk of pulmonary pneumonitis or fibrosis (RT)	Baseline, then as clinically indicated	Overdue	Survivorship
Endocrine	TSH & thyroid exam	Chest radiation (field included thyroid gland)	Annually	Next scheduled 3/16/19	PCP
	DEXA scan	Evaluate bone mineral density (aromatase inhibitor)	Baseline, then periodically	Next scheduled 3/16/19	Survivorship (PCP)
Cognitive	Cognitive function screening	Risk of cognitive dysfunction (cancer diagnosis and treatment)	Baseline, then as clinically indicated	11/3/18	Survivorship (PCP)
Dermatologic	Skin exam	Risk of second cancer (RT)	Annually	1/6/18	Dermatologist
Cancer Screening	CT scan (lung)	Age-based, risk-based screening	As clinically indicated	Not due	Survivorship
	Colonoscopy (colorectal)				

Abbreviations: BMI = body mass index; BP = blood pressure; CT = computed tomography; DEXA = dual-energy x-ray absorptiometry; ECHO = echocardiogram; EF = ejection fraction; EKG = electrocardiogram; GYN = gynecologic; HbA1c = glycosylated hemoglobin; HTN = hypertension; NSR = normal sinus rhythm; PCP = primary care physician; PFTs = pulmonary function tests; TSH = thyroid stimulating hormone.

exposure to hormone therapy over time, the phase-specific approach lends itself to timely assessment of potential late effects, with the opportunity to intervene should a problem arise, such as emerging genitourinary symptoms¹³⁻¹⁵ or ophthalmologic risk.¹⁶

The 5-year and 10-year FCPs differ from the initial FCP by emphasis. For example, for the patient who has just finished curative therapy and is beginning hormone therapy, the focus might be on interventions for complications discovered through baseline

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Figure 2 Sample 5-Year Follow-up Care Plan

Patient Name (MRN 0000000 DOB 01/01/0000)

5 Year Survivorship Care Plan

Health History: Stage IIB (T2 N1a M0) left breast invasive ductal carcinoma {ER+/PR+/HER2-}
Treatment: {Left partial mastectomy}, chemotherapy {dose dense doxorubicin 240 mg/m², cyclophosphamide 2400 mg/m², paclitaxel 700 mg/m²}, radiation therapy (RT) {45.05 Gy to the left whole breast, supraclavicular and axillary lymph nodes}, hormone therapy {anastrozole}

Organ System/ Exposure Risk	Test	Indication	Time Interval	Last Completed/ Plan	Responsibility
Breast	Long-term follow-up (partial mastectomy)	Issues related to pain, lymphedema, body image	Every visit	11/18/23	Oncologist
	Mammogram	Breast cancer surveillance screening	Annually	11/18/23	Oncologist
Endocrine	DEXA scan	Risk of bone mineral density loss (aromatase inhibitor)	Baseline, then periodically	3/18/23	Survivorship (PCP)
	Vitamin and calcium optimization	Optimize bone health	As clinically indicated	10/12/23	Survivorship (PCP)
	Thyroid eval (exam, TSH)	Chest radiation (field included thyroid gland)	Annually	10/12/23	PCP
GYN	Gynecologic assessment (Pap/pelvic exam)	Risk of vaginal dryness, vaginal symptoms, abnormal genital components, sexual dysfunction (aromatase inhibitor)	As clinically indicated	8/11/22 Patient to schedule	Gynecologist (PCP)
Chemotherapy toxicity	ECHO	Risk of cardiomyopathy (anthracycline, RT)	As clinically indicated	2/14/19 EF 55%	CO (S)
	EKG	Risk of cardiac dysfunction (anthracycline)	As clinically indicated	2/14/19 NSR	CO (S)
	BMI Blood pressure	Risk of metabolic and vascular issues, HTN (anthracycline), modifiable cardiac risk factors	Every visit	10/12/23	PCP
	Fasting lipid panel HbA1c		Annually	6/22/23	PCP
Chest radiation toxicity	PFTs	Risk of pulmonary pneumonitis or fibrosis (RT)	As clinically indicated	6/19	PCP
Risk reduction	Healthy & active lifestyle	Smoking cessation	Every visit	3/18/23	Survivorship (PCP)
		Healthy diet & exercise		3/18/23	Survivorship (PCP)
		Depression & anxiety screening		3/18/23	Survivorship (PCP)
		Sleep assessment		3/18/23	Survivorship (PCP)
		Pain assessment		3/18/23	Survivorship (PCP)
		Cognition Assessment		3/18/23	Survivorship (PCP)
Social	Social determinants of health screening	Assess for food insecurity, housing instability, personal safety	Every visit	3/18/23	Survivorship (PCP)
Cancer screening	Colonoscopy (colorectal)	Age-based, risk-based guidelines	As clinically indicated based on risk	Schedule in 2024	PCP
	Total body skin exam	Risk of second cancer (chest radiation)	Annually	6/22/23	Dermatologist

Abbreviations: BMI = body mass index; BP = blood pressure; CO = cardio-oncology; CT = computed tomography; DEXA = dual-energy x-ray absorptiometry; ECHO = echocardiogram; EF = ejection fraction; EKG = electrocardiogram; GYN = gynecologic; HbA1c = glycosylated hemoglobin; HTN = hypertension; NSR = normal sinus rhythm; PCP = primary care physician; PFTs = pulmonary function tests; TSH = thyroid stimulating hormone; UTI = urinary tract infection.

survivorship testing, such as the use of bisphosphonates for osteoporosis, whereas later on, the focus might shift to the management of symptoms and their potential effect on adherence.¹⁷ The phase-specific FCPs also provide the opportunity to discuss topics such as updated genetic testing and emerging family history.

In addition to appropriate assessment of potential late effects from treatment, quality survivorship care includes assessment of psychosocial late effects that can dramatically affect a survivor's health and well-being.¹⁰ The phase-specific FCPs include screening

for depression and anxiety, assessment of sleep quality, pain, and cognition, along with an appraisal of social support and personal safety. Because of the prevalence of poverty in our catchment areas, we also include periodic screening for social determinants of health, such as food insecurity, housing instability, and financial toxicity (see samples of 5- and 10-year FCPs in Figures 2 and 3).

The templated, phase-specific FCPs were designed to optimize communication among the care team. The FCPs were written to ensure that all members of the care team would be aware of the

Figure 3 Sample 10-Year Follow-up Care Plan

Patient Name (MRN 0000000 DOB 01/01/0000)		10 Year Survivorship Care Plan			
Health History: Stage IIB (T2 N1a M0) left breast invasive ductal carcinoma {ER+/PR+/HER2-}					
Treatment: {Left partial mastectomy}, chemotherapy {dose dense doxorubicin 240 mg/m ² , cyclophosphamide 2400 mg/m ² , paclitaxel 700 mg/m ² }, radiation therapy (RT) {45.05Gy to the left whole breast, supraclavicular and axillary lymph nodes}, hormone therapy {anastrozole}					
Organ System/ Exposure Risk	Test	Indication	Time Interval	Last Completed/ Plan	Responsibility
Breast Health	Breast exam	Breast cancer surveillance screening	Annually	11/16/27	PCP
Cardiovascular	BMI, blood pressure, fasting lipid panel, HbA1c	Risk of metabolic and vascular issues, HTN (anthracycline), modifiable cardiac risk factors	Every visit	12/03/27	PCP
	ECHO	Risk of cardiomyopathy (anthracycline)	As clinically indicated, should new symptoms arise	2/12/19 EF 55% 2/12/19 NSR	PCP
Endocrine	DEXA scan	Monitor for osteoporosis (aromatase inhibitor)	Baseline, then periodically	3/18/26 showed osteopenia, repeat in 1 year	Refer to endocrinologist
	Vitamin D and calcium optimization Gynecologic assessment	Optimize bone health Possibility of vaginal dryness, vaginal atrophy, UTI, sexual dysfunction (aromatase inhibitor)	As clinically indicated	12/03/27 Patient to schedule	Gynecologist (PCP)
Risk reduction	Healthy & active lifestyle	Smoking cessation, healthy diet, exercise	Every visit	12/03/27	PCP
Social	Social determinants of health screening	Anxiety & depression screening	Every visit	12/03/27	PCP
		Assess for food insecurity, housing instability, personal safety	Every visit	12/03/27	PCP
Cancer screening	Colonoscopy	Age-based, risk-based guidelines	As clinically indicated, based on risk	12/24	
	Survivorship	Risk of second cancer (RT)	Annually	Patient to schedule	Dermatologist
Genetics	Update family history	Systemic risk based upon genetic predisposition and tumor subtype	Every visit	12/03/27	PCP, refer if new information arises
Future plan	Transfer of care to primary care team, if appropriate, with breast health program available should a concern arise				

Abbreviations: BMI = body mass index; DEXA = dual-energy x-ray absorptiometry; ECHO = echocardiogram; EF = ejection fraction; EKG = electrocardiogram; HbA1c = glycosylated hemoglobin; HTN = hypertension; NSR = normal sinus rhythm; PCP = primary care physician; TSH = thyroid stimulating hormone; UTI = urinary tract infection.

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follow-up care needed and provide delineation of responsibility, which becomes particularly important in the 10-year FCP: a point of care transition from oncology team to primary care. Studies have shown that PCPs find SCPs useful in their management of cancer survivors.^{18,19} Importantly, the PCP is actively included throughout the survivorship course as well, engendering trust among the care team and enhancing the ultimate transition of care from clinical breast health team to primary care.

Integration Into the Electronic Medical Record

The initial and phase-specific SCPs were designed to be compatible with the existing work flow at both sites and integrated into the electronic medical record (EMR). The TS template was first uploaded into the EMR at each site (OncoEMR at NECS and Mosaik and Soarian) at Tufts MC and key fields were enabled to be autopopulated with information previously entered into the EMR (eg, date of diagnosis, stage, hormone receptor status, all delivered treatment from the medication administration record). We worked iteratively with the clinical director of our EMR, Information Technology (IT) technicians, and the development team to ensure that we were autofilling the correct fields and avoiding duplicative work. Ultimately, with the updated autofill feature and refinement of the TS, the time intensity to generate each TS decreased to 15 to 30 minutes.

We used a similar, iterative approach to the upload of our phase-specific FCPs in the EMR at both sites. We created an FCP for each time point that includes all possible exposures (eg, anthracycline, trastuzumab, hormone therapy) and subsequently indicated testing; a copy of this fully-expanded template is available upon request. The provider can then select the specific treatment modalities for each patient and populate the FCP with relevant risks. When the templates for each time point (initial, 5-year, 10-year) were finalized, we found that the time intensity to create an FCP took 30 minutes to an hour, shortened from our initial time requirement of nearly 2 hours.

After each visit, a copy of the SCP is given to the patient, sent to all providers, and embedded into the EMR as part of the visit note. At NECS, the SCP is pushed to the patient portal, whereas at Tufts MC, the SCP is securely transmitted to the patient.

Integration Into Clinical Practice

Our approach to survivorship care planning was largely adapted from the successful implementation of SCPs in our adolescent and young adult (AYA) cancer survivorship program at Tufts MC. In 2014, we rolled out SCPs in a tabulated format similar to the one described in this report. We rely on published guidelines from the Children's Oncology Group and NCCN (AYA and survivorship), and routinely update the indications in our FCPs according to guidelines changes. In the AYA clinic, we have received favorable feedback about the SCPs from patients, family caregivers, other specialists/subspecialists, and PCPs.

The challenge that arose was how to scale our approach to large clinical programs and provide busy clinical staff with appropriate tools to do the work. We also had to convince the other clinical programs of the potential value of the SCP, above and beyond what they were already doing for patient care. The level of

experience and feedback we could cite from patients and other stakeholders enabled us to ultimately achieve institutional buy-in. The key lessons we learned in the process of adapting our AYA model to breast cancer (and other disease-based oncology programs) were the need to engage and re-engage clinical stakeholders and work closely with our IT counterparts to streamline the process.

In our current practice, the survivorship team prepares the SCP, saving it in the EMR. The documents are then routed to the primary breast cancer care team for review and sign-off. A designated member of the breast health program then presents the SCP to the patient during the clinic visit with documentation in the EMR. Of note, the AYA team did not want to usurp the role of the primary oncology team in the delivery of the SCPs. Over time, with continued training and support from survivorship specialists, we anticipate that the preparation of the SCPs will shift to the primary clinical team. Implementation at other sites might vary depending on team composition.

Discussion

Despite the intuitive benefit to patients and the care team, the acceptance and uptake of SCPs has lagged, largely because of implementation challenges and lack of direct evidence of effect.^{7,9,20,21} Nevertheless, the development and delivery of SCPs are required by accrediting institutions and reimbursement programs. For instance, in 2015, the American College of Surgeon's Commission on Cancer mandated SCPs for patients with stage I, II, or III treated with curative intent and with treatment modalities beyond surgery alone.^{22,23} The Center for Medicare and Medicaid Innovation designed the Oncology Care Model (OCM), a payment model with the goal of improving outcomes and quality care while reducing spending. As one of the practice redesign activities, the OCM requires sites to document a care plan as outlined by the IOM.²⁴

One of the interesting aspects of the OCM is that the oncologist is responsible, financially and medically, for the patient during active cancer care, which includes hormone therapy. Thus, it is incumbent on the oncologist to ensure that the responsibilities for testing and follow-up are clearly delineated, as described on the FCPs. For instance, if the PCP and oncologist both order a dual-energy x-ray absorptiometry (DEXA) scan around the same time, only 1 of the scans would be reimbursed.

Like many other institutions, ours have grappled with the challenge of designing and delivering the SCP as a dynamic document in its most ideal form, while balancing the reality of busy clinical work flows. For the past 4 years, we have worked with clinical and institutional leaders to explain the "why" of survivorship care planning to achieve buy-in, and through the initiatives described in this report, the "how" of getting the SCPs completed in a timely and high-quality manner. As outlined previously, our clinical practice is to update the initial care plan at every clinic visit and use the phase-specific FCPs at the 5-year and 10-year time points to discuss key, and somewhat distinct, issues, such as emerging knowledge of treatment, changes in risk (ie, emerging family history or prolonged exposure to hormone therapy), and proposed transitions of care. We believe that this approach is congruent with the original goal of the IOM report on quality survivorship care.⁵

Over time, we have addressed the challenges of how to: (1) create an initial SCP that is timely, comprehensive, and comprehensible to the patient and providers; (2) update the SCP at each visit with information that is helpful to the patient and all members of the care team; and (3) visit/revisit specific topics at key care junctures, as summarized previously.

The principal limitation of our study is that we have not yet formally evaluated the effect of the phase-specific SCPs in a prospective, randomized design. Similarly, we do not know if the implementation and effectiveness of the SCPs vary according to practice setting—academic practice versus community setting. As argued by Jacobsen et al²⁰ in their recent systematic review, such studies are essential in addressing how and where SCPs can be practice-changing and effective in improving outcomes—proximal and distal—that are of significance to patients and providers.

The strength of this report rests in the effective collaboration between an academic medical center and a community-based oncology practice. The collaboration has led to the development of phase-specific SCPs formulated for implementation across different practice settings with a combined patient population of nearly 2000 breast cancer survivors. We have found it useful to work at sites that are quite different in size and organization. Integration of the SCPs into 2 different EMRs required the format to be user-friendly and easily adaptable. As such, we showed that it is feasible to successfully incorporate these SCPs into the existing work flows of diverse practice settings.

Conclusion

We developed and implemented a tool that has the ability to further individualize breast cancer survivorship care without an interruption to preexisting practice models. The phase-specific SCP allows for a tailored approach to survivorship care delivery, with the focus of making the SCP a dynamic document. We modified our templates over time, as we learn more from our patients regarding the delivery and communication of care plans and adapt to the evolving functionality of the EMR.

The steps we used have been used successfully in other disease-specific programs within our cancer center. Our goal in sharing our approach is to assist others in streamlining survivorship care planning in their own programs.

Survivorship can be a nebulous time period for breast cancer survivors, one filled with nearly inevitable change. Building on the principles of cancer care planning, our phase-specific SCPs provide an opportunity for improved, comprehensive survivorship care with a focus on patient-centered outcomes.

Clinical Practice Points

- Survivorship care plans have the potential to be instrumental in patient-centered survivorship care delivery. However, there is little evidence to suggest an outcomes benefit with the traditional model of SCPs. It stands to reason that a single, generic SCP delivered upon conclusion of curative therapy would be inadequate to achieve the theoretical goal of the SCP, as set out by the IOM. Further, implementation challenges have impeded the broad-based adoption of the SCP in practice. We outline a process for creation of a SCP that we have successfully

implemented in 2 distinct clinical settings that might serve as a guide to others.

- We further refined the SCP process with a phase-specific approach, layering specifically designed 5-year and 10-year FCPs on top of the traditional model, thereby marking specific time points at which to address timely and relevant topics in the survivorship course. In this way, the patient and provider jointly acknowledge that the individual has entered a different phase of survivorship and that health care concerns might dramatically differ from those at the end of curative treatment. The FCPs are designed in such a way that emphasizes salient information and can guide the clinic conversation. This strategy allows for an open channel of communication, particularly at transitions of care.
- The practicality of the SCP is a crucial aspect of its viability in clinical practice. We have shown the feasibility of integrating the phase-specific SCPs into multiple EMRs with a priority on efficiency through autopopulated text and a streamlined design. As a result, the phase-specific SCP can be implemented into existing work flows.

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Disclosure

The authors have stated that they have no conflicts of interest.

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