


Overcoming Obstacles in Transitions of Cancer Survivor Care

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The past several decades have witnessed a dramatic revolution in the approach to cancer survivorship care. In 2005, the Institute of Medicine's (IOM's) report *From Cancer Patient to Cancer Survivor: Lost in Transition* highlighted growing concerns that the unique needs of the cancer survivor population, at that time comprising more than 10 million individuals in the United States, were understudied by our research community and underrecognized by the care delivery system (1). Subsequently, there has been global recognition that the experience of having had cancer has become a chronic condition for many survivors who are living for years and sometimes decades with the combined consequences of the disease and its treatment. As therapeutic advances today continue to transform those afflicted with cancer into those living with cancer or a history of cancer, the population of cancer survivors continues to grow, with 26.1 million cancer survivors projected to be living in the United States alone in 2040 (2). Attending to the medical demands of this burgeoning population requires addressing the clinical needs of people living after cancer diagnosis and treatment, adjusting care to meet evolving needs over time, and training a sufficiently sized and trained workforce to provide that care.

Although the needs of individual patients are distinct, the IOM report stated that high-quality survivorship care should have 4 elements: 1) prevention of cancer recurrence, development of new cancers, and other late effects; 2) ongoing assessments for cancer recurrence or progression and the development of new malignancies; 3) identification of and intervention for psychosocial and physical late effects; and 4) multidisciplinary coordination between specialists and primary care clinicians (1,3,4). In this issue of the Journal, Mariotto and colleagues (5) explore how the existing workforce of multidisciplinary clinicians who provide cancer survivorship care have been deployed over the past 2 decades, including subspecialty physicians, nurse practitioners, and physician assistants using Surveillance, Epidemiology, and End Results–Medicare registries. Their findings underscore the broad spectrum of clinicians who engage in supporting the diverse needs that arise after a cancer diagnosis as well as the complexity of the health-care systems in which that care is delivered. Additionally, the attention to understanding care from diagnosis through over a

decade of follow-up, including initial cancer care, early and late follow-up, and end-of-life care for some, includes the entirety of the cancer survivorship continuum as emphasized by the recently updated Commission on Cancer (CoC) standard 4.8 and endorsed by American Society of Clinical Oncology (6,7).

Until recently, the CoC standard 3.3 had required providing survivorship care plans (SCPs) to all patients who had completed curative intent therapy (8). The purpose of these plans was to aid communication between the oncology team, the patient, and other clinicians involved in the care of cancer survivors, including primary care physicians, nurse practitioners, and physician assistants, as well as subspecialty care providers. In addition to defining the cancer-directed treatments delivered, SCPs detail information about long-term and late effects that may occur and screening recommendations for late recurrence and second malignancies. However, there have been multiple barriers to the implementation of SCP delivery consistently in clinical practice, and consequently the benefit to patients is uncertain beyond short-term knowledge gained (9,10). The updated CoC standard 4.8 moves away from this approach to emphasize the delivery of survivorship services over time rather than predominantly emphasizing SCPs at the completion of disease-directed intensive initial therapy (6,7). This standard requires programs to offer at least 3 survivorship supportive services each year and encourages the development of additional services over time. The guidance also emphasizes ensuring the expertise of a multidisciplinary team that delivers physical rehabilitation, nutrition, psychological care, and sexual health services, as well as educational events, financial counseling, and specialty support from cardiology, fertility, endocrinology, pulmonology, and others. The shift in emphasis enforces the importance of considering the cancer survivorship workforce as a broad and diverse one, engaging as needed over years after an initial cancer diagnosis. Indeed, as disease-directed treatments evolve, available therapeutic options expand, and expected survival for different malignancies improves over time, cancer survivorship care approaches must also evolve and expand the understanding of cancer survivors' needs through dedicated clinical support and research efforts.

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Mariotto and colleagues (5) project that the number of cancer survivors seeking care with medical oncology will grow substantially in the coming years, increasing 24% by 2030 and 42% by 2040. Meeting the needs of these survivors in the future will require thinking broadly about the array of clinicians who can successfully provide support in the primary care and oncologic workforces, in particular. Additionally, the finding that 20% of long-term cancer survivors continue to follow up with medical oncologists more than 10 years after diagnosis deserves careful investigation. Continued follow-up with medical oncologists occurs for number of reasons beyond potential misclassification, especially among individuals with diseases such as breast and prostate cancer, where late recurrence is common and not usually associated with death within 1 year. These reasons include limitations in availability of other clinicians including primary care physicians, lack of knowledge or comfort in providing follow-up care by nononcology providers, and patients' concerns for late complications or recurrence (11,12). Efforts to educate clinicians, including nurse practitioners and physician assistants, outside the oncology workforce will be critical in building the teams required to address the expected growing needs of the cancer survivor community and transition individuals from oncology clinics to primary care when appropriate.

The approach to delivering high-quality survivorship care continues to evolve just as the disease-directed therapies we use to treat cancer change with time. This means we need to continue to define the needs of cancer survivors as individuals, build programs and systems that include support services in physical rehabilitation, psychological support, and nutrition, as well as recognizing and minimizing the impact of financial toxicity. It also includes engaging expert clinicians in cardiology, pulmonology, endocrinology, nephrology, and sexual health and creating systems that facilitate patient flow to these experts in a risk-stratified manner that identifies needs and facilitates additional care as appropriate (13). Equally important is implementing automated systems that identify and trigger transition of patients with low risk of recurrence, late and long-term effects, and psychologic sequelae to appropriately transfer their care to nononcologists without relying on individual oncologists to initiate the process (13). Delivering high-quality survivorship care requires planning, collaboration, and training the next generation of providers, including physicians, nurses, nurse practitioners, physician assistants, and others who will be called on to support cancer survivors as the population continues to grow in the coming decades. Novel strategies that streamline transitions, normalize and systematize the process, and support patients mentally and physically may enable us to bridge the gaps identified in this study and succeed in matching cancer survivor needs with "right-sized" care delivery.

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