

# Survivorship Care for Adult Recipients of Hematopoietic Cell Transplantations

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Survivors of hematopoietic cell transplantation have undergone aggressive treatments and experience significant life-altering events. Survivorship care plans can address such issues.

An individual is considered a cancer survivor from the time of diagnosis, through the balance of his or her life. This definition includes family members, friends, and caregivers, underscoring that many lives are potentially impacted by the cancer experience (Hewitt, Greenfield, & Stovall, 2006). More than 12 million cancer survivors live in the United States. Of those, 900,000 have a personal history of leukemia, Hodgkin lymphoma, non-Hodgkin lymphoma (NHL), or myeloma, and many are diagnosed as adults (Jemal et al., 2009). A number of adult patients with cancer survived because of aggressive treatment, including hematopoietic cell transplantation (HCT) (Rizzo et al., 2006).

Successes from improved cancer treatments such as HCT have necessitated a paradigm shift that addresses the totality of survivorship care. The transition from active treatment to post-treatment is crucial in preventing and detecting later complications and establishing long-term health. Many of the late effects of cancer treatment are modifiable with a proactive, systematic plan of prevention and surveillance based on several factors, including treatment, genetic predisposition, comorbid health conditions, and health behaviors (Oeffinger & McCabe, 2006). Survivors of HCT may experience significant life-altering side effects because of the prolonged and extensive nature of their treatments. This article discusses the unique aspects related to short- and long-term surveillance of adult

survivors who have received HCT and key points to consider when creating a survivorship care plan after HCT.

## Survivorship Care

Cancer survivorship involves a spectrum of medical and nonmedical issues, including the short- and long-term consequences of treatment, psychosocial sequelae, and the risk of cancer recurrence or a second primary cancer (Stull, Snyder, & Demark-Wahnefried, 2007). Health maintenance and healthful lifestyle behaviors are essential to maximize health outcomes (Demark-Wahnefried & Jones, 2008). Additionally, coordination of care between oncology and primary health-care providers is necessary to convey accurate information and ensure continuity of care. An integrated medical report such as a survivorship care plan provides a vehicle to document and communicate the treatment summary and surveillance plan with all members of the healthcare team and the cancer survivor.

For an adult survivor of HCT, a survivorship care plan requires collaboration among multiple disciplines as the survivor navigates from acute inpatient care to subacute outpatient care and, finally, to long-term chronic care. The treat-

ment summary documents the clinical course of acute treatment and follow-up checkpoints to detect side effects during the subacute phase. Survivors with a history of HCT are followed closely by the transplantation team during the acute and subacute phases of transplantation but often return to a community medical oncologist or primary care provider for long-term follow-up. Prevention or detection of early complications with appropriate interventions decreases overall disability and the burden of long-term side effects.

## Subacute Survivorship Care Planning

After HCT, subacute survivorship is defined as the six-month period that begins at the end of active treatment. During this period, survivorship care provides an opportunity to address acute issues with potential complications (see Table 1) including graft-versus-host disease (GVHD), viral and bacterial infections, oral or mucosal complications, liver dysfunction, muscle weakness, pulmonary disorders, avascular necrosis, endocrine deficiencies, and other organ dysfunctions (Center for International Blood and Marrow Transplant Research [CIBMTR], 2006; Rizzo et al.,

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