## Core Competencies for Bone Marrow Transplantation Nurse Practitioners

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The role of the bone marrow transplantation nurse practitioner (BMT NP) has been implemented in most major academic transplantation centers; however, little literature supports the scope of practice and core competencies in this setting. With an increasing shortage of oncologists, opportunities exist for BMT NPs to become leaders in the clinical management of BMT recipients. This article reviews the literature and current professional guidelines to develop core professional and clinical competencies for BMT NPs.

Hematopoietic stem cell transplantation, referred to as bone marrow transplantation (BMT) in this article, has become an accepted treatment modality for various hematologic malignancies. Transplantation recipients require intensive attention before, during, and after the procedure by a team of healthcare providers. BMT recipients rarely return to their primary care providers soon after transplantation because of treatmentrelated complications. Although people tend to return to survivorship clinics and their primary care providers after their first year post-transplantation, the majority of their care is received from the transplantation team. The American Society for Blood and Marrow Transplantation has anticipated a shortage of transplantation oncologists in coming years because more than 50% will be older than age 50 by 2020, and an additional 1,264 new oncologists will be needed to fill the anticipated shortage (Gajewski et al., 2009). The deficit in physician coverage creates an excellent opportunity for nurse practitioners to become partners, as well as leaders, in the clinical management of BMT recipients.

## An Opportunity for Nurse Practitioners

Nurse practitioners (NPs) provide a holistic approach to health care that may improve outcomes for BMT recipients. The impact and value of oncology NPs related to quality, cost-effectiveness, competency, and patient satisfaction are

well documented (Bishop, 2009; Bryant-Lukosius et al., 2007). With the growing shortage of transplantation oncologists, NPs can maintain and even increase patient caseloads. Utilizing BMT NPs will likely result in improved patient outcomes because their approach enhances coordination of care across settings (Bishop, 2009; Gajewski et al., 2009; Griffith, 1999; Léger & Nevill, 2004).

Because of their medical complexity, transplantation recipients are not managed independently by NPs, but rather within a close, collaborative relationship with a team of healthcare providers (Griffith, 1999). Despite the current role of the BMT NP in most major academic transplantation centers, limited evidence in the literature supports a standard scope of practice for this specialty. In a survey of Canadian oncology NPs, more than a third of respondents reported that their roles as advanced practice nurses were not clearly defined (Bryant-Lukosius et al., 2007). Two U.S. professional nursing organizations, the American Association of Critical-Care Nurses ([AACN], 2006) and the Oncology Nursing Society ([ONS], 2007), have published scope of practice, standards of care, and competencies for NPs in their specialty areas. However, specific scopes of practice, standards of care, and competencies have not been developed for BMT NPs. With the growing need for healthcare providers, scope of practice and core competencies must be defined for NPs caring for BMT recipients across settings.

## Methods

A literature search was conducted using PubMed and MEDLINE® with the following search terms: bone marrow transplant, acute care nurse practitioners, nurse practitioners, allogeneic transplant, practice guidelines, role, and scope of practice. This search yielded one applicable publication (Griffith, 1999). A second search was performed adding the terms management and care of, and excluding the terms role and scope of practice. In addition, publications by the AACN and ONS were reviewed for practice guidelines, standards of care, and competencies.

This article synthesizes core competencies for BMT NPs from the literature and professional organizations. Because BMT NPs practice in outpatient settings, intensive care units, and acute, subacute, and ambulatory settings, the literature

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