

# Roles of the Clinical Nurse Specialist and Nurse Practitioner in Survivorship Care

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## Abstract

Providing survivorship care for the over 20 million cancer survivors expected in the United States by 2020 will be a health-care challenge. The anticipated deficit in health-care providers will demand that follow-up care of this population be directed toward oncology advanced practice nurses (APNs), who are expertly trained to provide this care. Different disciplines working together can meet the broad range of physical and psychosocial issues facing cancer survivors and their caregivers throughout the survivors' lifetime. Models for the provision of survivorship care include both academic and community settings and may be provided as part of a shared care model, with primary care physicians, oncologists, specialists, and advanced practice clinicians (nurse practitioners [NPs], clinical nurse specialists [CNSs], and/or physician assistants) coordinating and collaborating to provide the needed follow-up care, as well as pediatric-focused programs, disease-specific programs, and comprehensive survivor programs, usually within a large academic setting. This article will describe two different approaches by APNs providing survivorship care. The role of the CNS is discussed from the administrative perspective, describing efforts from an initial concept based on an individual system and subsequent plans to roll out survivorship care to seven other settings. The NP's role is described as part of a large academic LIVESTRONG™ Center of Excellence program. With this examination of two different perspectives for the provision of survivorship care, the multiple roles of APNs and other health-care professionals among many models of care will ignite ideas for survivorship applications and promote the unique positions that NPs and CNSs share.

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Survivorship care is defined by the Institute of Medicine (IOM) in the report, *From Cancer Patient to Cancer Survivor: Lost in Transition* (Hewitt, Greenfield, & Stovall, 2006), which describes a survivor as someone who has been diagnosed with cancer and

covers the time from diagnosis to death. This definition also encompasses families and caregivers. The essential components of survivorship care include:

- detection and prevention of recurrent and new cancers, and other late effects

- surveillance for cancer spread, recurrence, or second cancers; assessment of medical and psychosocial late effects
- interventions to manage the consequences of cancer and its treatment for cancer survivors and their caregivers; and concerns related to employment, insurance, and disability
- coordination between specialists and primary care providers

Models for the provision of survivorship care include both academic and community settings and may be provided as part of a shared care model, including a variety of clinicians (Oeffinger & McCabe, 2006). One mechanism that promotes communication of patient-focused information with other care providers entails the development and implementation of a treatment summary and survivorship care plan (Hewitt, Greenfield, & Stovall, 2006).

When reviewing the literature on survivorship care, one may find the terms advanced practice registered nurses (APRNs) and advanced practice nurses (APNs). These terms are often used interchangeably. For the purpose of this paper, the term APRN will be defined as the umbrella term that covers all four types of advanced practice roles: clinical nurse specialist (CNS), nurse practitioner (NP), nurse midwife, and nurse anesthetist. The term APN will be used to refer only to the CNS and the NP. APRNs are registered nurses with advanced educational preparation and training. Physician assistants (PAs) are also midlevel practitioners providing survivorship care to oncology patients in particular settings. Their practice may run parallel to APNs in the survivorship care role, but they are integrated into programs from a different perspective (Buswell, Ponte, & Shulman, 2009). This article will describe two APNs and their survivorship care practices.

As patient advocates, APNs in oncology are specifically educated in areas of health provision and uniquely qualified to provide the level of care necessary to meet the recommended components of care for a survivorship program (Salsberg & Erikson, 2007). The number of cancer survivors in the United States today has escalated to over 12 million; this necessitates a well-coordinated, cost-effective approach to the management of postcancer health-care needs—care best deliv-

ered by the APN in the majority of this population. The advanced level of educational preparation completed by the APN provides the knowledge required to work collaboratively with multiple specialties, to ensure that cancer survivors receive the quality of care necessary to meet their many needs. Recognition of the roles of the CNS and NP and how they vary yet both contribute to survivorship care will help other health-care professionals understand the expertise these practitioners have to offer.

## Definition of the Clinical Nurse Specialist

The CNS is the “oldest” of the four APRN roles (CNS, NP, nurse midwife, and nurse anesthetist). Although the first CNS graduate program is known to have been started by Hildegard Peplau at Rutgers University in 1954, the CNS role actually has a history that dates back to the work of Florence Nightingale (Fulton & Wickline, 2008). The American Nurses Association (ANA) previously defined the CNS as an RN that completed graduate level nursing education at the master’s or doctoral level (as a CNS) with clinical expertise in the care of a specialty population focus (ANA, 2004).

More recently, a newer definition was described by the APRN Joint Dialogue Group (JDG). In 2008, the *Consensus Model for APRN Regulation: Licensure, Accreditation, Certification & Education* was released. The APRN JDG proposed that all APRNs be licensed as independent practitioners for practice in one of the four APRN roles within at least one of the six population-identified foci (family/individual, adult-gerontology, neonatal, pediatrics, women’s health, and psychiatric-mental health). They may further specialize (in oncology, for example) but may not be licensed solely in that specialty. The APRN JDG further indicates that the CNS is responsible and accountable for diagnosis and treatment of health/illness states, disease management, health promotion, and prevention of illness and risk behaviors among individuals, families, groups, and communities (Group & Committee, 2008).

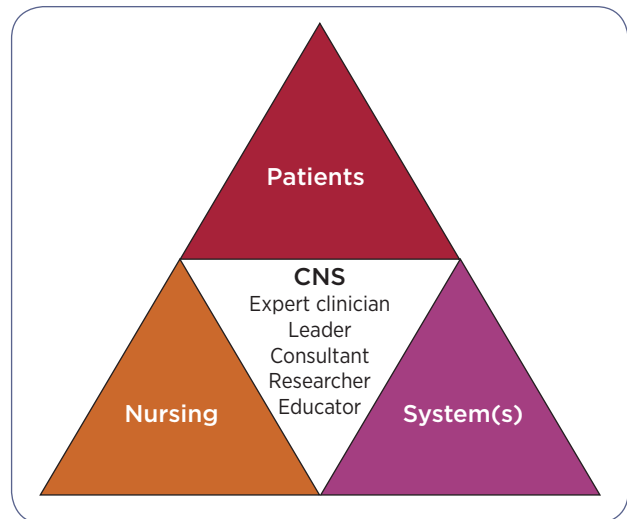
Graduate education provides the CNS with the foundation to carry out five role functions across three domains of influence, as depicted in Figure 1.

As a result, clinical nurse specialists are uniquely qualified to manage the complexities of our health-care delivery system (Stanik-Hutt & Cagle, 2002). The CNS can increase access to care through implementation of nurse-managed health-care centers. In a recently released video by the National Association of Clinical Nurse Specialists, entitled “CNS: Your Clinical Innovation Expert,” Vollman (2009) states, “As coaches to patients with chronic illness, we promote a more heightened sense of self-care, thereby decreasing hospitalization and out-of-control health-care costs.” More specifically, because the oncology CNS specializes in the care of cancer patients and possesses the knowledge and experience to function in the five CNS roles, this specialist functions well in the management of survivor programs and the provision of care at cancer survivor clinics.

### CNS AS CLINICAL INNOVATOR FOR A HOSPITAL SYSTEM SURVIVOR PROGRAM

Memorial Hermann (MH) is the largest not-for-profit health-care system in Texas and serves the greater Houston community through 11 hospitals, 7 of which have American College of Surgeons (ACS)-accredited cancer programs. The ACS requires accredited cancer programs to offer survivor support services, and each of the seven MH facilities offers a variety of services such as classes on various cancer topics, cancer screenings, and cancer support groups. Collectively, MH clinicians diagnosed more than 8,000 new cancer cases in 2008, and clearly, a well-coordinated focus on cancer survivorship is needed within the MH system.

With participation in a National Cancer Institute–funded project, Survivorship Education for Quality Cancer Care, the CNS began a more systematic approach to survivorship care across the MH Healthcare System (Grant, Economou, Ferrell, & Bhatia, 2007). The MH survivor program is based on the *Quality-of-Life Model Applied to Cancer Survivors* (Ferrell & Grant, 2004). The model comprises four primary elements: physical well-being, psychological well-being, social well-being, and spiritual well-being. In formalizing the MH system cancer survivor program, several key developmental action items were influenced by the CNS. These action items were accomplished through application of the five CNS role functions and are listed in Table 1.



**Figure 1.** Role of the clinical nurse specialist (CNS) functions across three domains of influence. Courtesy A.S. Deutsch, 2010.

### MODELS OF SURVIVORSHIP CARE DELIVERY

Several models for delivering survivorship care are described in the literature, including academic/oncology-based care, community-based care, and shared care (Hewitt, Greenfield, & Stovall, 2006; Landier, 2009). Although multiple team members may be involved, Landier (2009) indicates that one health-care professional should be identified as the coordinator of care. The CNS can be responsible and accountable for diagnosis and treatment of illness, disease management, health promotion, and prevention of illness and risk behaviors among individuals, families, groups, and communities.

Each health-care facility must select a method for survivorship care delivery for the model of care to be implemented. Landier (2009) describes three types of delivery systems: consultative (one-time comprehensive visit or multiple visits), ongoing, or integrated. With the consultative delivery system, the patient is seen and a treatment summary or care plan is provided with recommendations for follow-up. The patient is then transitioned back to the primary care physician or oncologist’s care. The ongoing delivery system is an academically based program for survivors. This care may be nurse-led or delivered by a multidisciplinary health-care team.

The integrated delivery system means the care is embedded within the primary oncology team. The care may be either ongoing or transitioned to the primary care physician when the

**Table 1. Memorial Hermann (MH) cancer survivor program action items with associated roles of the clinical nurse specialist (2008–2010)**

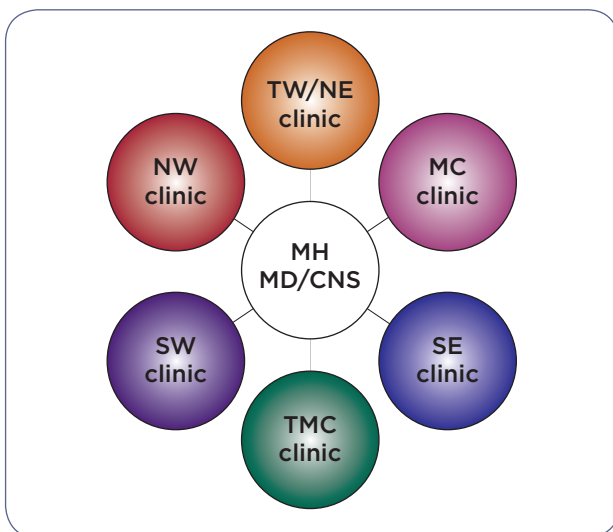
Action item	Clinical nurse specialist role
Educate system leadership, physicians, and oncology health-care team members about survivorship on 7 campuses	Educator
Develop/facilitate system survivor task force to define survivorship for MH and to delineate components for MH survivor program (membership: physicians, oncology nurse navigators, social worker, cancer survivors, and marketing representative)	Leader, educator, expert clinician
Assist in planning/implementation of annual MH Cancer Survivors' Day Celebration and Resource Fair	Consultant, leader, expert clinician
Implement formal MH Tobacco Cessation Program; collaboration with American Cancer Society (FreshStart®) across MH system	Leader, educator, expert clinician, researcher
Facilitate development of oncology nurse navigators across system	Researcher, consultant, leader, educator
Coplan/cofacilitate implementation of quarterly cancer survivors' educational forum; collaboration with CanCare®	Consultant, expert clinician, leader, educator
Develop and implement cancer survivor clinic (see proposed model in Figure 3), to pilot at one campus initially	Researcher, educator, expert clinician, leader, consultant

oncology treatment team deems it appropriate. Follow-up care might include managing the patient's health-care needs related to the cancer or its treatment. Survivorship care can range from symptom management to the provision of interventions related to job loss or intimacy. The appropriate expertise makes an APN well-suited to providing care for these delivery models.

### CNS AS CLINICAL INNOVATOR FOR HOSPITAL-BASED SURVIVOR CLINIC

The development of a cancer survivor clinic within the MH system began when the CNS initially presented information on survivorship to the seven Cancer Service Line Leaders and the CEO of the northern region and system coordinator for oncology. The presentation included an overview of cancer survivorship including consequences of cancer and cancer treatment, the ongoing need for health promotion in the survivor population, the IOM's 2006 report on cancer survivorship, the importance of treatment summaries and survivorship care plans, the benefits of having a survivor clinic, a proposed model of delivery (Figure 2), and the survivor care process (Figure 3).

Although the goal is to roll out the survivorship model to the entire health-care system, a pilot program is planned at one campus initially. A traveling survivor clinic MD/CNS concept was presented. The role of the CNS would be to assist in the planning and implementation of the survivorship program with gradual clinical responsibilities transitioning to an oncology nurse navigator (ONN). The CNS met with the cancer service line leader from the "pilot" facility and developed a strategic business plan. At present, the strategic planning process is underway for fiscal year 2010/2011, with a formal proposal to system executives forthcoming.

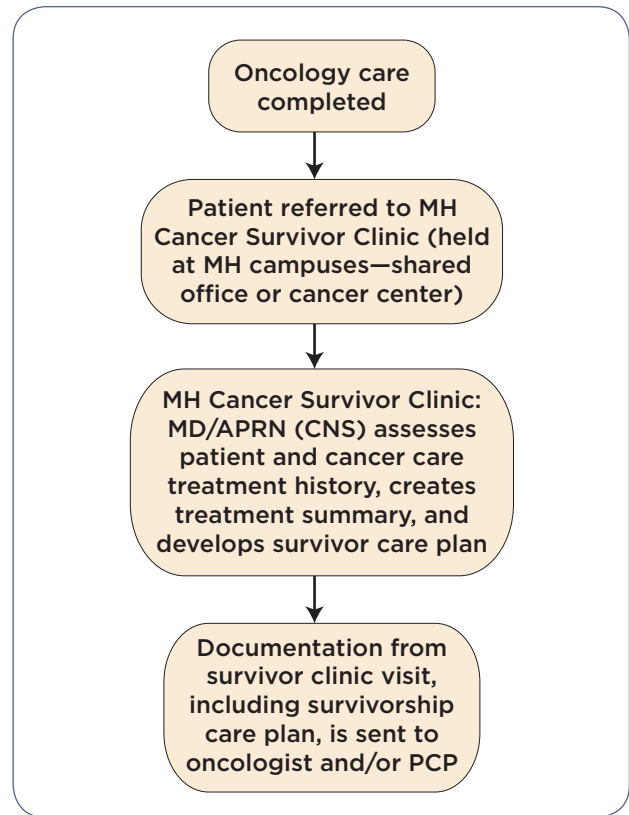


**Figure 2.** Proposed Memorial Hermann (MH) cancer survivor clinic model. CNS = clinical nurse specialist; TMC = Texas Medical Center; TW = The Woodlands Hospital; MC = Memorial City

The survivor care process for the community clinics would be managed through a consultative one-time comprehensive visit. Referrals could come from the treating oncologist at the conclusion of acute treatment or from any other treating physician. Patients could also self-refer with the requirement that a copy of the survivorship care plan be sent to a physician of their choice for ongoing care and follow-up. At the conclusion of the visit, the patient, oncologist, and primary care physician would receive copies of the treatment summary and survivor care plan (Figure 3). For the academic center, an ongoing survivor care process was proposed as the method of care delivery. These centers have access to many different specialists and therefore can transition the patient from acute care clinics to follow-up clinics and back, depending on the needs of the survivor.

In the consultative process, the CNS/ONN “survivorship specialist” would require the CNS to initiate the role and then gradually transition the role to the campus ONN within 3 months. Activities would include preparation of an initial draft of the treatment care summary, medical recommendations for each patient seen, and provision of MD assistance during the half-day clinic under the consultative model. In addition, the CNS/ONN would be responsible for facilitating all referrals to and appointments with other MH physicians and health-care providers and/or outside physicians and providers the patient may see as part of the survivorship care plan.

While the MH cancer survivor clinic is in the developmental phase, it will be one component of the much larger system survivor program. Development of this program is planned for all seven of the current facilities associated with the MH system and requires the clinical expertise as well as the administrative background of the APN. These skills are unique to the APN and allow health-care-related programs to be developed with the scientific clinical needs of the oncology patient, combined with administrative oversight experience. In her online video, Vollman (2009) additionally clarifies the CNS education and preparation for this role, noting that clinical nurse specialists are “big picture thinkers whose one-of-a-kind skill set makes them qualified to lead efforts that will improve care for patients with chronic illness, from the bedside to the boardroom.”

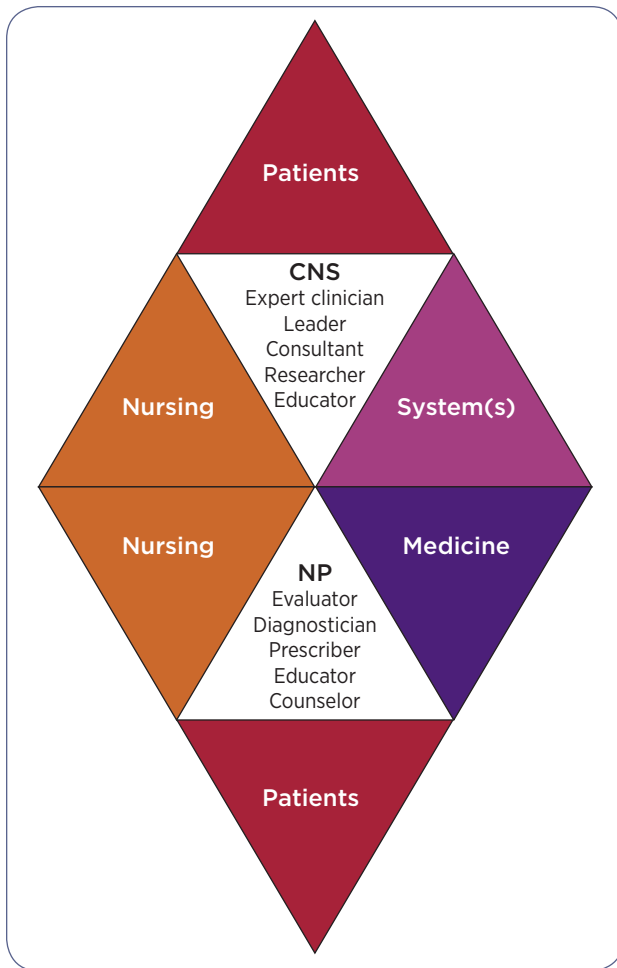


**Figure 3.** Example of consultative process during oncology survivor care at Memorial Hermann (MH) Healthcare System. MD = physician; APRN = advanced practice registered nurse; CNS = clinical nurse specialist; PCP = primary care physician.

### Definition of the Nurse Practitioner

Although the actual scope of practice may vary from state to state, the nurse practitioner is an APN who is licensed to provide health care independently, held to the same legal and ethical standards of care as physicians, with a commitment to giving personalized, quality health care to all (California Association of Nurse Practitioners, 2001). An NP has the education and expertise to diagnose, treat, and manage care for patients in both the acute and ambulatory settings (American Academy of Nurse Practitioners, 2007). NP education has evolved since the first program was introduced at the University of Colorado in 1965, and now nearly all programs nationwide are at the master’s level (Pulcini & Wagner, 2002). Although some have argued for NPs to follow a medical model, NP education is based on its own set of domains and core competencies.

Nurse practitioners who specialize in oncol-



**Figure 4.** Role functions of the clinical nurse specialist (CNS) and nurse practitioner (NP) across three domains of influence. Courtesy D. Economou, 2010.

ogy are also guided by oncology nurse practitioner competencies developed by the Oncology Nursing Society (ONS, 2007; U.S. Department of Health and Human Services [HHS], 2002). All NPs are trained in physical assessment, pharmacology, and pathophysiology, but they are also indoctrinated in nursing theories that take into account the client as a complex individual who is to be viewed as more than just a diagnosis (Polit & Tatano Beck, 2004). The NP provides a holistic view to survivorship care and is an ideal choice in the oncology office to provide survivorship care (Figure 4).

#### NP AS CLINICAL PROVIDER IN AN ACADEMICALLY BASED SURVIVORSHIP CLINIC

Examples of NPs successfully providing survivorship care in larger cancer centers—includ-

ing Memorial Sloan-Kettering Cancer Center and the University of Michigan Comprehensive Cancer Center (Hewitt, Greenfield, & Stovall, 2006)—have been documented. Additionally, many pediatric cancer survivors are followed for several years after their treatment in clinics staffed by NPs (Pediatric Oncology Resource Center, 2009).

The UCLA-LIVESTRONG™ Survivorship Center of Excellence was established in 2006 to provide care to survivors of both adult and pediatric onset cancers, regardless of where or when they were treated. Patients are referred to the clinics in a variety of ways, including direct referrals from primary care or oncology, patient self-referral, or systematic referrals through the UCLA Managed Care Medical Group. In the Pediatric Long-Term Follow-up Clinic, the NP works with pediatric survivors and their families to provide counseling on late effects, ordering necessary screening exams and lab work based on their individual treatment exposures as outlined in the Children's Oncology Group Long-Term Follow-up Guidelines (Children's Oncology Group, 2006). In the adult setting, the NP's work starts prior to the patient's visit, with the generation of a cancer treatment summary using treatment records incorporating the patient's surgery, chemotherapy, and radiation therapy. This information is often gathered from providers outside the UCLA System.

During clinic visits, patients are seen first by a staff member (psychologist or licensed clinical social worker) from the Simms/Mann UCLA Center for Integrative Oncology to address any psychosocial concerns, which is a critical component of survivorship care. Following this, the physicians and the NP provide medical and wellness counseling and education specialized to the needs of cancer survivors. The NP provides various services during the consult, all of which fall within the scope of practice outlined by the State of California and the domains of NP practice. As the UCLA program is based on a consultative and shared care model, the NP may order diagnostic and laboratory tests at the visit, or make recommendations for testing that will be ordered by the patient's primary care physician.

The NP also emphasizes the importance of good nutrition and routine physical activity, and personalizes the discussion using the Rapid Eating Assessment for Patients (REAP) Question-

naire developed by the Institute for Community Health Promotion at Brown University (Gans et al., 2003). At the conclusion of the visit, the NP collaborates with the physicians to develop a survivorship care plan based on their findings. The plan is mailed to patients and his/her providers, and it becomes a permanent part of the UCLA medical record. Following the visit, the NP serves as a point of contact for survivors with questions about symptom management or to assist with obtaining referrals to specialists (Table 2).

**NP AS CLINICAL PROVIDER IN A COMMUNITY-BASED ONCOLOGY PRACTICE**

Survivorship care is not as well established in the community setting. It is likely that many currently practicing NPs already provide long-term follow-up care for patients, a common practice among community practice oncologists and more so than in other specialties (Ganz, 2009). This long-term follow-up includes monitoring for recurrence through physical exams, imaging, and lab work, and evaluation for late effects of treatment or long-term side effects (Ganz, 2009). By defining this practice as survivorship care, the NP in the community can empower the patient with a better understanding and plan for what lies ahead. As in the academic setting, survivorship care should start in the form of a written treatment summary and care plan, which can be presented during an office visit and can also be used as an opportunity for counseling about late effects, preventive practices, and general wellness education. This care falls under the domain of the NP (Hewitt, 2006; HHS, 2002).

Although reimbursement for these visits is beyond the scope of this paper, the IOM recommended that the time spent providing and explaining a survivorship care plan should be reimbursed by third-party payers (Hewitt, 2006). NPs can bill for services rendered and should be able to bill for survivorship visits spent reviewing the treatment summary and care plan at a rate higher

**Table 2. Examples of nurse practitioner roles in survivorship care**

Nurse practitioner role	Application in survivorship setting
Management of patient health/illness status	Diagnosing hypothyroidism following radiation treatment
Nurse practitioner-patient relationship	Reviewing a treatment summary and care plan with patient and family
Teaching-coaching	Educating a patient about the reduction in recurrence of breast cancer provided by endocrine therapy
Professional role	Presenting on survivorship at professional conferences such as the Oncology Nursing Society Congress
Managing and negotiating health-care delivery systems	Prescribing generic medications for patients when possible to lower copay burdens; developing a network of referrals for specialty care
Monitoring and ensuring the quality of health-care practice	Collaborating with supervising physician to provide evidence-based practice through the use of national guidelines for long-term surveillance
Cultural competence	Providing translated educational materials for patients and families for whom English is a second language

Note: D. Economou, 2010. Adapted from A. Edgington, 2010.

than that of a regular follow-up visit because of the extensive counseling that is documented in the final note (Buppert, 2005; Maluso-Bolton, 2006).

In a study done at Dana-Farber Cancer Institute, investigators evaluated three different care models. If an NP or PA saw the patient, even if a physician was involved, the NP or PA could document the visit, acknowledge the physician’s presence, but bill technical fees for the service (Bushwell, Reid Ponte, & Shulman, 2009).

**Conclusion**

Health-care providers now recognize the significant positive impact of survivorship care for patients with cancer. By virtue of their knowledge and expertise, APNs can contribute to improved patient outcomes by providing survivorship care. This can be accomplished through their ability to provide focused and cost-effective follow-up care, including patient education to prevent late effects of treatments as well as reduce the intensity of long-term side effects. The APN’s roles are organized within the domains of care depicted in Figure 4. The collaboration of advanced practitioners varies depending on the model of care. It

is essential that we optimize the roles of the APN to achieve the quality of care and efficiency needed to manage the growing demands in oncology.

## REFERENCES

- American Academy of Nurse Practitioners (AANP). (2007). The Scope of Practice for Nurse Practitioners. Retrieved February 21, 2010, from <http://www.aanp.org/AANPC-MS2/Publications/PositionStatementsPapers/>
- American Nurses Association. (2004). *Nursing: Scope and Standards of Practice*. Washington, D.C.: American Nurses Association.
- Buppert, C. (2005). Capturing reimbursement for advanced practice nurse services in acute and critical care: Legal and business considerations. *AACN Clinical Issues*, 16(1), 23–35. doi: 00044067-200501000-00004 [pii]
- Bushwell, L., Reid Ponte, P., & Shulman, L. N. (2009). Provider practice models in ambulatory oncology practice: Analysis of productivity, revenue, and provider and patient satisfaction. *Journal of Oncology Practice*, 5, 188–192. doi: 24.4.203.236
- California Association of Nurse Practitioners (CANP). (2001). Nurse practitioner fact sheet. Retrieved February 13, 2010, from [www.canpweb.org](http://www.canpweb.org)
- Children's Oncology Group. (2006). Long-term follow-up guidelines for survivors of childhood, adolescent, and young adult cancers. Version 2.0. Retrieved December 2007 from [www-survivorshipguidelines.org](http://www-survivorshipguidelines.org)
- Ferrell, B., & Grant, M. (Eds.). (2004). *Quality-of-Life Model Applied to Cancer Survivors*. Washington, D.C.: National Academies Press.
- Fulton, J. S., & Wickline, M. M. (Eds.). (2008). *So, You Want to Be an Oncology Clinical Nurse Specialist?!* Pittsburgh: Oncology Nursing Society.
- Gans, K. M., Ross, E., Barner, C. W., Wylie-Rosett, J., McMurray, J., & Eaton, C. (2003). REAP and WAVE: New tools to rapidly assess/discuss nutrition with patients. *J Nutr*, 133(2), 556S–562S.
- Ganz, P. A. (2009). Survivorship: Adult cancer survivors. *Primary Care*, 36(4), 721–741. PII: S0095-4543(09)00077-3. doi: 10.1016/j.pop.2009.08.001
- Grant, M., Economou, D., Ferrell, B., & Bhatia, S. (2007). Preparing professional staff to care for cancer survivors. *Journal of Cancer Survivorship*, 1, 98–106. doi: 10.1007/s11764-007-0008-z
- APRN Consensus Work Group & the National Council of State Boards of Nursing APRN Advisory Committee. (2008). Consensus model for APRN regulation: Licensure, accreditation, certification & education. In *APRN Joint Dialogue Group Report*, July 7, 2008.
- Hewitt, M., Greenfield, S., & Stovall, E. (Eds.). (2006). *From Cancer Patient to Cancer Survivor: Lost in Transition*. Washington, D.C.: The National Academies Press.
- Landier, W. (2009). Survivorship care: Essential components and models of delivery. *Oncology Nurse Education*, 23, 46–53.
- Maluso-Bolton, T. (2006). Integrating advanced practice clinicians into your oncology practice. *Journal of Oncology Practice*, 2, 289–293.
- Oeffinger, K. C., & McCabe, M. S. (2006). Models for delivering survivorship care. *Journal of Clinical Oncology*, 24, 5117–5124.
- Oncology Nursing Society (ONS). (2007). Oncology nurse practitioner competencies. Retrieved June 2, 2010, from [http://www.ons.org/media/ons/docs/publications/npcompentencies\[sic\].pdf](http://www.ons.org/media/ons/docs/publications/npcompentencies[sic].pdf)
- Pediatric Oncology Resource Center. (2009). Survivors—follow up clinics, 2009. Retrieved June 2, 2010, from <http://www.acor.org/ped-onc/treatment/surclinics.html>
- Polit, D., & Tatano Beck, C. (2004). *Nursing Research: Appraising Evidence for Nursing Practice* (7th ed.). Philadelphia: Lippincott, Williams & Wilkins.
- Salsberg, E., & Erikson, C. (2007). The changing physician workforce landscape: Implications for physical medicine and rehabilitation. *American Journal of Physical Medicine & Rehabilitation*, 86, 838–844.
- Stanik-Hutt, J., & Cagle, S. J. (2002). Advanced practice roles: CNS or NP? What's in a name? *AACN News*, 19, 7–8.
- United States Department of Health and Human Services (HHS). (2002). Nurse practitioner primary care competencies in specialty areas: Adult, family, gerontological, pediatric and women's health. Retrieved June 2, 2010, from [http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?\\_nfpb=true&\\_&ERICExtSearch\\_SearchValue\\_0=ED471273&ERICExtSearch\\_SearchType\\_0=no&accno=ED471273](http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED471273&ERICExtSearch_SearchType_0=no&accno=ED471273)
- Vollman, K. (2009). CNS: Your clinical innovation expert. Retrieved June 2, 2010, from <http://www.NaCNS.org/NACNSVideoAbouttheCNS/tabid/157/Default.aspx>