



The NP and CNS:

Advanced Practice Nurse Roles



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The nurse practitioner (NP) and clinical nurse specialist (CNS) are the advanced practice nurses (APNs) primarily working in the field of oncology. Use of the term APN does not imply a blending of the CNS and NP roles; both roles are distinct, although some knowledge and skills overlap.¹ Both roles can coordinate patient care, assist patients from diagnosis to survivorship, and navigate the patient through the complex healthcare process. The difference in how these professionals perform these duties, and at what point in the care continuum, is dependent on the individual, the role, the job they are fulfilling, and the cancer program. In a literature review of nurse practitioners and clinical nurse specialists, the emphasis on collaboration versus autonomy can help differentiate the scope of practice between the two. Generally, a CNS exhibits more intradisciplinary and interdisciplinary consultative and collaborative skills in practice, whereas an NP concentrates on developing unit- or service-based professional autonomy in a collaborative practice relationship with physicians.²

The Oncology Nurse Practitioner

Since the 1990s the role of the oncology nurse practitioner has greatly evolved. Currently, nurse practitioners can be found in both the physician practice and hospital setting, working in collaboration with physicians to care for complex cancer patients. NPs provide assessment, diagnosis, and treatment recommendations to patients with an oncology diagnosis. Within their daily practice NPs have the ability to autonomously assess and evaluate a subset of cancer patients by taking com-

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prehensive histories; providing physical examinations and other health assessment and screening activities; and diagnosing, treating, and managing the problems of the patient's cancer or treatment-induced side effects.

The scope of practice for nurse practitioners continues to evolve in response to changing social and economic healthcare necessities. As licensed independent clinicians, NPs practice both autonomously and in collaboration with physicians. Depending on the state, nurse practitioners can either practice independently or under a collaborative practice agreement with a supervising physician. The same applies for prescribing medications. Thirty-one states allow NPs to independently diagnose and treat patients without physician involvement.

Nurse practitioners are regulated according to the services they perform and the patient population they serve. The specialty practice of oncology is in addition to the formal NP education and national NP certification. Oncology NPs require additional education with oncology clinical practicum exposure. Oncology certification is through the Oncology Nursing Society with an Advanced Oncology Certified Nurse Practitioner (AOCNP) certification.

The Oncology Clinical Nurse Specialist

The 2008 APRN Consensus Model (nursingworld.org/consensusmodel) defines the clinical nurse specialist role as a clinician who continually improves patient outcomes and nursing care by using evidence and practice to mentor and empower nurses to alleviate patient distress, facilitate ethical decision-making, and respond to diversity. A CNS is intent on elevating the level of knowledge and practice. With direct care as the foundation of the CNS role and with many of these clinicians embedded in cancer programs and departments, clinical nurse specialists often identify opportunities for improvement or programmatic growth. Further, clinical nurse specialists have an interest in research, so these clinicians often update institutional standards of care and then help their fellow nurses to adhere.³

CNS vs. NP

Because advanced practice nurse is an umbrella term, the NP and CNS credential are sometimes mistaken for one another and/or used interchangeably. It can be challenging to understand the differentiators as these two roles share many core competencies.^{4,5}

In oncology, clinical nurse specialists may be responsible for strategic growth, development, and programmatic evolution. While oncology NPs may be more clinic- or practice-based, focusing their efforts on the health evaluation and management of a specific set of patients.

Because clinical nurse specialists are embedded in the system with multiple overlapping collaborations across departments, these clinicians initiate and lead projects in response to the opportunities they identify for quality improvement or cost efficiencies. Often NPs spend the bulk of their time in a clinic or office setting and their predominant responsibility is direct patient care, which leaves less time for influencing care in other settings or through other role components.

The NP & CNS Role in Oncology

The complexity of a cancer diagnosis creates opportunities for APNs to be involved in multiple settings throughout the continuum of patient care. APNs can be geographically-focused on an inpatient unit, outpatient clinic, or office setting, or be program-based. Unit or clinic-based positions include the more traditional jobs

of evaluating a specific patient population. In our experience, aligning APNs with the programmatic goals of cancer programs maximizes the skills of these clinicians. The APN span of influence tends to cross multiple settings in close alignment with the oncology patients' disease continuum. Catania and colleagues describe the broader span of influence clinical nurse specialists have when they focus on a population across the continuum.⁶ Programs can be disease-specific or service-based, such as palliative care, genetics, urgent care, symptom management/late effects, survivorship, case management, quality/accreditation, and navigation.⁶

Outcomes Associated with Advanced Practice

The bulk of outcomes research has focused on the NP role due to the defined direct-care outpatient model seen in cancer programs. Although there is limited oncology-specific research, in primary care and subspecialties, NP clinical outcomes have shown equivalency when matched to physicians practicing in the same settings. The care service provided by NPs can range from assessment and symptom management to follow-up and survivorship. A few areas stand out when looking at the impact of NPs on outcomes of care: cost effectiveness and the nurse practitioners' impact on patients, communities, and practices.

CNS outcomes research proves more challenging due to the broad range of needs the role has fulfilled—often impacting cancer programs indirectly. Anecdotally, direct impact has been observed in quality improvements, cost savings, and staff improvements. Studies of CNS interventions have found that clinical nurse specialists have greater impact noted during times of patient vulnerability, for example, in the early weeks after diagnosis and in the early weeks and months after a cancer-related hospitalization.⁷ In other words, the value of care is best observed when these clinicians provide expert care, advice, support, coaching, and reinforcement as patients are first diagnosed and when they begin their recovery process.

Cost Effectiveness

A 2014 study looked at nurse-led telephone and on-demand follow-up of breast cancer patients over five years.⁸ While patient outcomes were comparable to physicians, nurse-led interventions demonstrated cost effectiveness.⁸ The cost per person, per year of follow-up was \$490 for physicians and \$385 for nurse practitioners, with no statistically significant difference in patient satisfaction.⁸

Another study looked at nurse-led follow-up versus conventional physician follow-up, randomizing patients who had undergone treatment for lung cancer.⁹ In the nurse-led arm, NPs provided monthly follow-up and, as needed, contact by telephone or in the clinic.⁹ The European Organization for Research and Treatment of Cancer's quality-of-life questionnaire was used to assess patients at baseline, 3 months, 6 months, and 12 months. At

3 months, the nurse-led group reported less severe dyspnea (difficult or labored breathing), with 78 percent of patients reporting a preference for the nurse-led care.⁹ At 12 months, this same group reported better scores for emotional functioning and less peripheral neuropathy.⁹ In addition, 40 percent more patients in the nurse-led follow-up died at home.⁹ There were no differences in survival; cost was not calculated.⁸ Knowing that cancer-related costs rise during the end of life, one can extrapolate the potential cost savings from this intervention had these been monitored.¹⁰

In 2014 Roots and McDonald evaluated nurse practitioner impact in a rural, collaborative, primary care practice with a general practitioner.¹¹ Subspecialty medical populations included mental health, HIV, addiction concerns, frail elderly, heart failure, diabetes, and reproductive healthcare needs. Care was provided both in the practice setting and in the community. The outcomes noted were:¹¹

- Decreased use of the emergency department (ER)
- Reduced ER-directed admissions
- More time spent with each patient, resulting in improved patient engagement
- Fewer unnecessary appointments
- Decompression in the schedule so that return appointments decreased from 6 weeks to 3 days for routine appointments
- Total caseload growth between 400 to 800 per practitioner
- Staff reported improvement in communication, collaboration, and satisfaction with their job.

According to a productivity assessment at the University of Michigan Hospitals, NP activities improved efficiency in the practice, patient care, and physician satisfaction.⁷ NP activities included assisting with rounds, patient education, progress notes, medical records review, discharge summaries, patient documentation, orders maintenance, medication reconciliation, and consultations.¹² The study authors thought that NP productivity and revenue were grossly underscored by physicians billing for activities that might have been provided by or influenced by the NP and/or billed “incident to” the physician.⁷

CNS case management has been associated with shorter hospitalizations and reduced readmissions in the elderly population, in a prostatectomy patient group, transitional care models, and hematologic malignancies.¹²⁻¹⁵

Patient & Physician Satisfaction

A 2014 study analyzed 2006 to 2011 Medicare and Medicaid data of patient health outcomes by state, along with the 2012 United Health Foundation report.¹⁶ Of significant note was the decrease in avoidable hospitalization rates and improved health outcomes in states with unrestricted NP practice.¹⁶ The study also correlated unrestricted NP practice with the lower readmission rates within 30 days of discharge from rehabil-

itation and the lower annual hospitalization rates for nursing home patients.¹⁶

A systematic review of 37 studies of advanced practice nurse outcomes from 1990 to 2008 revealed nurse practitioner care being equivalent to physician care in patient satisfaction, self-reported patient perception of health, patient functional status outcomes, patient glucose control, levels of blood pressure control, rates of emergency department visits, rates of hospitalizations, length of stay, and mortality rates.¹⁷

Challenges to the APN Role

While the literature supports the numerous benefits APNs can bring to a cancer program, challenges to the successful integration of APNs into the practice setting have been identified in nursing literature and must be addressed in order for APNs to reach their full utilization and potential. These barriers include a lack of clarity and/or ambiguity regarding the APN role and a lack of awareness and support from healthcare professionals and the general public.^{18,19}

Lack of clarity and/or ambiguity. As previously stated, although the NP and CNS roles often overlap, considerable variability exists related to the time each role spends on various activities.⁵ For example, the role of the CNS is known to focus on professional development, leadership within the organization, and research and education, while the NP devotes more time to providing direct patient care and less time engaging in other non-clinical activities. Another key difference is the fact that the NP has legislated authority to engage in expanded clinical tasks typically associated with physicians. This includes the ability to autonomously order and interpret diagnostic tests, diagnose, prescribe medication, and perform specific procedures. Confusion surrounding these differences has caused challenges when it comes to integrating the two roles into practice, as healthcare officials—and healthcare consumers—can have unrealistic expectations about each role.¹⁸

APN job titles may differ greatly based on practice setting, which also contributes to a lack of clarity surrounding the role. In a 2010 study, Donald and colleagues point out that “no two CNS or NP roles are alike.”¹⁸ For example, depending on the practice setting, the CNS can be referred to by a variety of titles, including nurse educator, nurse leader, and nurse clinician.¹⁸ Compounding the challenge are the differences seen between APNs within the same institution. While the APRN Consensus Model is designed to provide clarity and consistency, others have found that using a one-size-fits-all title only served to blur the roles further and increase misunderstanding.¹⁸ It remains to be seen how the APRN Consensus Model will play out.

Role ambiguity can make it difficult for key stakeholders at a cancer program to have a clear understanding of the objectives, scope of practice, and responsibilities of the APN role. When

stakeholders have conflicting ideas about what the APN role entails, it can put APNs at risk for experiencing role conflict and job overload. If those key stakeholders are responsible for making funding decisions, they may choose to support a more well-established position instead of hiring or adding an APN. The CNS role, in particular, is at risk for funding cuts because the direct impact on patient care is not as easy to see when compared to the role of the NP.^{5,18}

Lack of awareness and support. It is well documented that the general public lacks awareness about the value of the APN role, the services APNs offer, and what to expect from APNs. In turn, this lack of awareness can lead to a lack of acceptance and support for the APN role.²⁰ Indeed, the public tends to be more familiar with physicians diagnosing problems and making decisions about medical treatment, and the idea that nurses will be overseeing care is difficult for some to accept.²¹ For example, a 2005 study examined factors surrounding parents' willingness to allow their children to receive care from an NP in the emergency clinic setting.²² The authors concluded that for the public to feel comfortable with and embrace the role of the NP, they must first comprehend and understand the scope of the role.²² If the public understands the benefits and services APNs offer, they are more likely to advocate for and/or demand access to care provided by APNs.


Physicians also struggle to understand the full scope of the APN role, and a lack of knowledge about the role has been identified in the literature as a significant barrier to successful collaboration between APNs and physicians. Among the misconceptions physicians may hold is the belief that APNs lack the education and training required to provide safe, quality care.²³ Physician support for APNs is less likely when physicians are unclear about what the APN role entails. In addition, APNs and physicians perform many of the same activities, and if the physician does not have a clear understanding of the APN role, conflict and communication break downs can result.²⁴

Legal restrictions. Lastly, variation in licensure, practice laws, and prescriptive authority also create barriers to successful integration of the APN role within a cancer program.^{19,23} Only about one-third of the United States has full APN practice authority licensure and practice laws.²³ Restrictive practice laws are especially problematic in the oncology setting where APNs must address complex symptoms that often require the use of prescription medication and/or autonomous clinical decision making and expanded authority. This wide variety in legal restrictions, such as prescriptive authority and insurance, can make it difficult for APNs to provide continuous, coordinated care across all settings.²⁵

Making the Business Case

As the U.S. healthcare system evolves, cost efficiencies are often recognized through staff reduction. Return on investment (ROI)

is associated predominantly with high-revenue producing treatment options, such as surgery and radiation. Conducting an ROI purely on the number of patients billed to an APN is incomplete, not taking into account other non-billable activities these clinicians perform so that physicians are free to conduct other clinics, see more patients, etc. For a cancer program to fully capture the revenue generated from APNs, it must take into account referral growth based on physician and patient satisfaction, reduced readmissions, and increased patient retention.

During a four-year time period in which the authors worked together in a multi-hospital health system in Richmond, Va., we created a leadership infrastructure comprised of eight APNs, sales, marketing, and decision-support staff in order to design and align with health system programmatic growth strategies. As a group, we were responsible for driving the business plan across the healthcare system's service area and through departments in which we had formal authority. Annual strategic planning resulted in more than 15 programmatic growth strategies at each hospital, leveraging the access points and physician partners in the network that the team developed. As leaders of the various programs, these APNs engaged and influenced physician specialists and department leaders across a 75-mile network, significantly contributing to the 21 percent growth experienced in the oncology service line over four years. 

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