

Informing and Supporting the New Clinical Nurse Specialist Prescriber

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ABSTRACT

Advanced practice registered nurses (APRNs) in the United States are trained to diagnose and treat disease and illness, hence, to prescribe. Of the APRN roles, the clinical nurse specialist (CNS) is the least likely to prescribe. Prescribing is one of many advanced care interventions performed by CNSs, but the statutes regarding prescriptive authority are constantly changing. The purpose of this article is to inform and support the new CNS prescriber. The article reviews CNS prescribing, credentialing and privileging, safety

strategies, and educational considerations that influence CNS prescribing and offers current recommendations for new CNS prescribers. Clinical nurse specialist prescribing can enhance the patient care experience and fill unmet prescriptive needs for patients. Overall, more reports on the outcomes of CNS prescribing are urgently needed, specifically, publications on CNS prescribing in acute care, where most CNSs practice.

Key words: advanced practice nursing, credentialing, nurse clinicians, patient care, prescriptions

Clinical nurse specialists (CNSs) are advanced practice registered nurses (APRNs) who are prepared at the master's or doctoral level.^{1,2} Advanced practice registered nurses in the United States are trained to diagnose and treat disease and illness,³ hence, to prescribe. In other countries, CNSs must complete additional education and practice requirements beyond the master's level to prescribe.¹ However, prescribing is not reserved solely for APRNs; generalist nurses prescribe in many other countries.¹ For the purposes of this article, I use the following definition of *prescribing*: an "iterative process involving information gathering, clinical decision making, communication, and evaluation which results in the initiation, continuation, or cessation of a medicine."^{4(p7)} Overall, prescribing is a complex process.

Despite legislative changes in many states that allow CNSs to practice at full scope,^{2,5,6} the CNS is the least likely of the APRNs to prescribe.^{7,8} Unlike other APRNs who use

prescribing as a primary tool in patient care, for the CNS, prescribing is but one tool of many advanced care interventions.² Great strides in legislation have given CNSs prescribing privileges or authority in 39 of 50 states (78%) in the United States.⁹ In addition, the US Department of Veterans Affairs (VA) granted full prescriptive authority to CNSs in 2016.¹⁰ Thus, CNSs are authorized to prescribe in any state when working in the VA system. Still, the number of CNS prescribers remains low.^{7,8} In the 2020 census of 2475 CNSs in the United States, 24.4% answered *yes* when asked if they were authorized to prescribe⁷ compared with 24.6% of the 3370 respondents to the 2014 census.⁸

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Being a prescriber is 1 attribute that distinguishes the CNS level of clinical expertise from other non-APRN master's-level roles in nursing, such as nurse educator or clinical nurse leader.¹¹

Clinical nurse specialists are clinical experts, leaders, and scholars whose work impacts the interrelated spheres of patients, nursing practice, organizations or systems,² and scholarship.¹² The role is versatile and CNSs lead in meeting organizational needs such as achieving Magnet Recognition status,² completing successful Joint Commission visits,¹³ coordinating support and care for patients with cancer,¹⁴ improving nurse-sensitive outcomes,^{15,16} and crafting pillars of optimal pain management strategies in response to the opioid crisis.¹⁷ As change agents, CNSs design evidence-based interventions to meet patient, nurse, and organizational needs.² Finally, it is the CNS who ensures population health among the most vulnerable patients and families.¹²

Yet, CNSs are “invisible champions”¹⁸ whose role is often misunderstood and underutilized.¹⁹ This lack of recognition is a frustrating aspect of being a CNS.²⁰ One must ask, Would prescribing enhance the visibility of the CNS role?

Medications are a primary tool for treatment of disease. Moreover, proposals to allow non-APRN registered nurses (RNs) to start prescribing are underway in the United States²¹ and Canada²² to meet patient need. Considering that 85% of adults aged 60 years or older used 1 or more prescription drugs in the past 30 days²³ and that older adults are the fastest-growing patient population, the demand for more prescribers for chronic illnesses is both certain and global. The CNS is competent to function independently using prescriptive authority to care for patients with chronic illnesses.²⁴ In 1 study of CNS perceptions of work patterns, 11 of 12 CNSs who worked in acute care settings desired a role in prescribing to fill gaps in care.²⁰ Clinical nurse specialists felt they could help patients to function better at home if they could prescribe to meet patients' needs at discharge. Gaps in care include the unmet needs of patients for medications and nonpharmaceutical agents.

The purpose of this article is to inform and support the new CNS prescriber as more states unfold prescriptive authority for CNSs. I review the literature on CNS prescribing,

credentialing and privileging, safety strategies, and educational considerations that influence CNS prescribing and offer current directions in CNS prescribing.

Literature Search

I conducted a comprehensive literature search using the terms *clinical nurse specialist*, *CNS*, *prescribing*, and *prescriptive authority*. Using the Cochrane Library, Cumulative Index for Nursing and Allied Health Literature (CINAHL), and PubMed databases, I discovered 43 abstracts in English. I excluded editorials, opinion pieces, conference proceedings, books, and publications on prescribers who were not specifically titled a clinical nurse specialist or CNS. I also excluded reports with the term *specialist nurse*, which is used in some countries to describe a generalist nurse with more advanced training.¹ I considered case reports, studies, and systematic reviews on CNS prescribing. Nine reports met the inclusion criteria: 8 journal publications and 1 dissertation.

Of the 9 reports, 1 was from New Zealand, 2 were from the United States, and 6 were from the United Kingdom. A limitation in reports from the United Kingdom is that the CNS title is not protected by statute.²⁵ However, I included these articles because the CNS profession continues to work toward global consistency in educational preparation, licensure, certification, and role components.¹ The United States is still pursuing this level of consistency across states.^{3,9} The year of publication ranged from 2000 to 2020. Five reports were published between 2015 and 2020. The reports were of 2 types: (1) those on individual CNS prescribers (4 reports) and (2) those on groups of CNSs (5 reports). To provide perspective on CNS prescribing, I briefly summarize each report here.

Individual Clinical Nurse Specialist Prescribers

In the first report, a CNS in London designed a clinic to deliver chemotherapy to patients with neuroendocrine tumors, a rare disorder requiring special services.²⁶ The clinic was designed to improve the patient experience and streamline care to reduce wait times. The oncology team chose the CNS because of her experience and leadership in other nurse-managed clinics as well as her knowledge of chemotherapy and her skills in

advanced assessment, prescribing, and communication. The CNS used protocols for the chemotherapeutic regimens she prescribed and had full access to the oncology team if issues arose. In a 3-month survey of 15 patients, 93% of the patients ($n=14$) answered *no* when asked if they would have rather seen a doctor. Anecdotally, patients felt the CNS was competent in answering all their questions and appreciated how she included them in the decision-making process. The oncologists surveyed ($N=5$) agreed that the CNS performed appropriate physical examinations, made correct diagnostic decisions, and prescribed safely and appropriately. This CNS's work has become a template for other clinics in the United Kingdom.

The second report described a CNS in London who prescribes for patients with trigeminal neuralgia (TN).²⁷ Trigeminal neuralgia is a rare, complex diagnosis complicated by exacerbations of severe pain that limit eating, talking, or touching of the face. The CNS designed a telephone-based consultation service for patients to receive additional support beyond their appointments with the TN physician. In a 6-month audit, the CNS had completed 240 patient consultations. The CNS made changes to medications and educated patients on ways to better manage their pain and cope with their condition. Pain management was addressed in 50% of consultations. Among 44 patients surveyed, 83% ($n=36$) rated the CNS telephone service from "good" to "outstanding" and 72% ($n=31$) felt more confident managing their pain after talking to the CNS. Finally, 67% ($n=29$) indicated that the CNS kept them from having to see another health care provider. Overall, these patients preferred the telephone service over in-person appointments but also recommended that an email service be available to patients when their pain is exacerbated by talking.

The third report described a palliative care CNS in England. Palliative care patients often experience rapid changes in condition, particularly at the end of life. This CNS designed a weekend-prescriber home care service for symptom management.²⁸ A 6-month audit of prescribing activities showed 65 patient consultations and 130 medications prescribed. The physicians were surveyed to assess their perceptions of the CNS's weekend service. The physicians ($N=9$) found the service to be "very helpful," found the actions taken by the CNS to be "appropriate," and approved of the CNS

to continue to care for their patients on weekends. Anecdotally, physicians commented that family members found the visits by the CNS to be helpful, that patients felt supported, and that the physicians received fewer reports of anxiety. Anecdotally, these providers felt the service likely prevented urgent care visits and hospitalizations. Moreover, patients could remain at home and receive the care they needed.

The last individual report was from a CNS in England who specializes in acute decompensated heart failure (HF).²⁹ Older patients with HF are a complex patient population. The practice was in a rural hospital for mostly older adults. This CNS acquired unspecified additional education to be a prescriber and obtained mentorship hours with a cardiologist to develop a portfolio of qualifications to qualify as a prescriber. If a patient had a confirmed diagnosis of left ventricular systolic dysfunction, the CNS met with the patient and family to discuss the diagnosis and plan of care and to obtain permission to assume the role of primary care provider. The CNS cared for patients with new diagnoses and those at the end of life. She reportedly used guidelines for the management of patients with HF published by the National Institute for Health and Care Excellence (NICE). Anecdotally, the CNS used the words *welcomed* and *valued* with regard to physician, nurse, and patient perceptions of her work. In the CNS's opinion, the nurses appreciated her including them in decision-making and educating them about HF. She also felt her prescribing activities led to timelier care, fewer unnecessary tests, and reduced length of stay.

Groups of Clinical Nurse Specialist Prescribers

The first report of CNS groups summarized the insights of the physician mentors ($N=6$) of a group of CNSs from New Zealand who were working toward prescribing practices.³⁰ The group included 20 nurses who had been working as CNSs in a specialty area and who were considered to be advanced clinicians. All CNSs were master's-level prepared and all had completed an advanced pharmacology course. Their physician mentors were interviewed and narrative data analyzed. A major theme reported by this author was the ability of the CNSs to forecast diagnostic possibilities in patients and make appropriate medication choices. The physicians compared the CNSs

to junior-level physicians (both of whom are new prescribers). The physicians characterized the junior-level physicians as, in their opinion, more advanced diagnosticians but lacking in clinical experience. The physicians described the CNSs as knowledgeable, patient-centered, evidence-based, and collegial. Finally, it was the opinion of the physician mentors that CNSs benefit from starting with smaller formularies until they gain greater competency in prescribing.

The next 2 reports described groups of CNS prescribers in the United States.^{31,32} One report discussed CNS prescribers 10 years after the granting of prescriptive authority in Oregon in 2005.³¹ Oregon was one of the first states to obtain prescriptive authority for CNSs. All 40 CNSs in Oregon who had licensure as a CNS and prescriptive authority as indicated through the Oregon State Board of Nursing were invited to participate in the study. Twenty-three CNSs agreed to participate. The majority of the participants specialized in psychiatric mental health ($n = 9$), followed by adult health ($n = 3$), and “other” ($n = 3$), which the participants referred to as “oncology” or “wound/ostomy.” Two participants had specialties in pediatrics. Because none of the participants identified themselves as being in “acute care,” it can be assumed that all participants worked in outpatient care settings. The Oregon CNSs ($N = 23$) completed additional education in prescribing and mentorship because at that time, no curricular recommendations for prescribing were in place. All CNSs reported feeling well-prepared for their prescribing roles. They most frequently prescribed psychiatric medications, diabetic supplies, and durable medical equipment and least frequently prescribed perinatal, gynecologic, or urologic medications. They regarded prescribing as an enhancement to their practices. They felt autonomous and empowered because they could better get patients the care they needed. “Better” meant providing holistic care, care coordination, and timelier access to medications. As 1 CNS was reported saying, “Prescriptive authority (for CNSs) reduces the time it takes to get treatment initiated. When one has to ‘chase up’ a prescriber to give an order for something he/she really was not involved with—it has given me the ability to help people directly.”^{31(p165)} CNSs also highlighted “vigilance” as a theme to their practice as they focused on safe prescribing practices:

“It is a privilege I take very seriously.”^{31(p163)} However, some CNSs experienced role confusion from other providers and did not feel fully supported in their prescribing roles.

The other report from the United States focused on a group of CNSs working in a psychiatric health setting.³² The researchers surveyed 31 dyads consisting of a psychiatric mental health CNS and a psychiatrist for their perceptions of collaboration and activities associated with CNS and physician prescribing. Nearly all CNSs prescribed for adult populations in outpatient care settings. Most of the CNS prescribers had 3 or fewer years of experience in prescribing. The data showed that the dyads agreed about the importance of being clinically competent and collaborative. Of highest importance to CNSs regarding prescribing was their autonomy. For psychiatrists, it was “sharing the work.” The benefits of being a prescriber as perceived by the CNSs were increased knowledge of medications, professional growth, increased job satisfaction, and the direct management of adverse medication effects in patients. When the dyads rated general activities associated with the prescriber role, they agreed that CNSs assumed a far greater number of activities related to prescribing. These activities were care coordination, follow-up care, patient and family education, assessment of resources, evaluating for symptom relief, and assessment for medication compliance. All 31 dyads agreed that they had a good working relationship with their prescribing partner.

The final 2 reports discussed groups of CNSs in the United Kingdom who specialized in palliative care.^{33,34} The first report examined the perceptions of 6 palliative care CNSs.³³ All 6 CNSs were independent prescribers with 2 to 10 years of prescribing experience. The main themes reported in this study were “helping patients in times of crises,” “being available when others are not (on weekends),” “gaining satisfaction from being able to provide holistic care,” “knowledge to prescribe the right medicines at the right time,” and “increased knowledge of pharmacology.”³³ Helping patients in crises was the most important aspect of prescribing for these CNSs. The added skill of prescribing deepened their understanding of the effects of medications on their patients, and the CNSs felt they knew their patients better (ie, “What’s really going on with my patients”).^{33(p128)} These CNS prescribers felt their roles had been

transformed: “I can’t imagine how anyone could do our jobs without being a prescriber now.”^{29,33(p128)} A barrier perceived by these CNSs was worry about making a mistake. They compensated by repetitively checking their orders. A second barrier was time. Clinical nurse specialists countered this barrier with the time it would have taken to get a prescription from another provider. Further, the article suggested that CNSs should be the prescriber when CNS assessments become the basis for physician prescribing. Last, CNSs felt that a limited formulary to prescribe from was beneficial.

The final report summarized an audit of the prescribing patterns of 3 palliative care CNS prescribers.³⁴ The CNSs recorded data on 493 consultations for 186 patients over 3 months. Half of the consultations resulted in a change in medication, whereas 85% (n=209) resulted in a new medication prescription. Nine percent (n=23) of consultations resulted in titration of medications, and in 6% of the consultations (n=15), medications were discontinued. The most commonly prescribed medications were analgesic agents, followed by antipsychotic, laxative, antiemetic, and antisecretory medications. Anecdotally, the CNSs considered themselves well prepared to prescribe. They expressed feeling confident, knowing their boundaries, and seeking physician consultation if necessary (in 2 instances during the 3-month period). There were no prescribing errors, and no issues were reported by patients or other health care providers.³⁴

Summary of Reports on Clinical Nurse Specialist Prescribing

All the reports described CNS prescribers filling gaps in care. The CNS prescribers met the definition of prescribing, ie, gathering patient information, making clinical decisions, communicating with other health care providers, and evaluating patient responses.⁴ The patient groups for whom the CNSs cared can be classified as complex; in other words, the CNSs optimized care for complex patients.⁶ These CNS prescribers felt prepared, confident, and autonomous when prescribing. Prescribing helped them know their patients better. They often met patients’ needs for medications when other providers did not (by telephone and through weekend services), thus improving access to care. The majority of reports were from CNSs specializing in palliative care.

Clinical nurse specialist prescribing fits well with the goals of palliative care: “CNSs treat symptoms, functional problems, and complications of disease treatment.”^{2(p12)} The CNSs felt supported by the physicians they worked with. Some perceived barriers, such as worrying over making a mistake, role confusion from others, and more time associated with prescribing.

A limitation of the reports is that the educational preparation or practices of CNSs as well as the legal and regulatory requirements for prescribing globally are inconsistent. In the United States, CNS education and practice follows a set framework that is not used in other countries.² Since the majority of reports in this review were from countries outside the United States, caution is needed when translating these findings to CNS prescribing in the United States. Overall, more reports on the outcomes of CNS prescribing are urgently needed, specifically, publications on CNS prescribing in acute care where the majority of CNSs practice.

Credentialing and Privileging of Clinical Nurse Specialists

Clinical nurse specialists must undergo credentialing and privileging to become prescribers.³⁵ Although the 2 processes are distinct, CNSs usually complete them simultaneously. Generally speaking, graduating from an accredited CNS master’s or doctoral program, passing a national board certification examination, and securing professional licensure meet basic credentialing criteria. An applicant might need additional documentation to support competency in prescribing.

Privileging, or the scope of one’s prescribing practice, is of 4 types: independent, delegated, collaborative, or protocol-driven.³⁵ The reviewed reports included examples of each. For example, the CNS who specialized in HF care was an independent provider,²⁹ another CNS administered chemotherapy that was protocol-driven,²⁶ and all examples were either delegated or collaborative practices with physicians.^{27,28,30-34} Physician mentorship and supervision were described in 4 of the 9 reports—3 from the United Kingdom^{26,27,30} and 1 from the United States.³² “Physician collaboration” is a requirement for CNSs to participate in the Medicare program in the United States³⁵ and is distinct from “physician supervision.”

Table: Strategies Aligned With Clinical Nurse Specialist Competencies to Mitigate Medication Errors

Strategies ³⁷	Clinical Nurse Specialist Competencies ²
Listen to patients Take time to care Establish trust	P1 Uses relationship-building communication to promote health and wellness, healing, self-care, and peaceful end-of-life. P8 Uses advanced communication skills in complex situations and difficult conversations.
Assess for problems related to learning Use teach-back method or Ask Me 3	P7 Designs and employs educational strategies that consider readiness to learn, individual preferences, and social determinants of health.
Use principles of informed consent, mutuality, and patient choice	P.13 Facilitates patient/family understanding of risks, benefits, and outcomes of proposed health care regimens to promote informed, shared decision-making. P.16 Advocates for patient’s preferences and rights. O.14 Advocates for ethical principles in protecting the dignity, uniqueness, and safety of all.

Additionally, a requirement for most credentialing and privileging processes is the need for some assurance that standards of care are being used.³⁶ For example, the CNS prescriber for patients with HF reported using guidelines from NICE.²⁹ Overall, credentialing and privileging processes assure the public that the provider is qualified to prescribe and delineates the scope of the prescribing practice.

Safety Strategies in Clinical Nurse Specialist Prescribing

New CNS prescribers may worry about making a prescribing error.^{31,33} With approximately 60 steps involved in the process of getting medications to patients,³⁷ human error is inevitable and medical error is a leading cause of death in the United States.³⁸ In 2017, the World Health Organization launched a 5-year global campaign to reduce errors by 50%.³⁹ Strategies to reduce medication errors are consistent with the CNS competencies of practice as identified in the Table. Application of CNS competencies can mitigate risk for prescribing error. Additionally, minimizing distractions and multitasking while engaging in the prescribing process is important for any prescriber.⁴⁰ This is especially important for the CNS prescriber who additionally functions in the nursing and organization/systems spheres of impact.

Educational Considerations to Prepare Clinical Nurse Specialist Prescribers

State laws on CNS titling and prescribing are inconsistent, which makes it difficult for

the profession to prepare CNSs to prescribe.⁴¹ One suggestion for preparing CNSs is to model CNS programs after nurse practitioner programs with boosted clinical hour requirements in prescribing.^{31,42} In the United States, current recommendations for APRN students include the completion of advanced courses in pathophysiology, physical assessment, and pharmacology (ie, the “3 Ps”).³ In 2019, the National Association of Clinical Nurse Specialists updated its practice document on the prescribing competency to read, “Prescribes medications, therapeutics, diagnostic studies, equipment, and procedures to manage the health issues of patient.”^{2(p26)} Yet, the way in which CNS students are prepared to prescribe varies across academic programs owing to differences in how CNS prescribing is implemented by states. For example, students in a CNS program in a state that grants full prescriptive authority, and thus who learn under CNS preceptors who prescribe, will likely have a different learning experience than students in a state that does not grant prescriptive authority to CNSs.

When the CNSs in Oregon launched their prescribing practice, they crafted a tool to document prescribing competency.³¹ Similarly, I designed a prescriber competency tool for use by CNS students in 1 CNS program (see the Figure). Unfortunately, few CNS prescribers exist to act as preceptors, so other mentors (eg, physicians, nurse practitioners) are needed to determine competency. Ideally, CNSs should determine competency for CNS students. Regardless, the tool shown in the Figure incorporates CNS competencies to assist in the development of the CNS student prescriber.

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Patient: _____ Age: _____ Sex: _____
 Primary Diagnosis: _____
 Comorbidities: _____
 Social Determinants of Health (financial stability, insurance coverage, access to care, support): _____

Directions: Prescribing mentor will: 1) check the box when the activity is completed by the CNS student mentee, 2) determine level of prescriber competency, and 3) sign at the bottom.

Preprescribing Competencies	Prescribing Competencies	Postprescribing Competencies
Uses expert and relationship-building communication ^a <input type="checkbox"/>	Uses principles of advanced pharmacology <input type="checkbox"/>	Monitors patient response and drug effectiveness ^a <input type="checkbox"/>
Conducts comprehensive or focused assessment ^a <input type="checkbox"/>	Uses principles of advanced physiology <input type="checkbox"/>	Documents patient responses <input type="checkbox"/>
Evaluates current medication list ^a <input type="checkbox"/>	Calculates drug dosages <input type="checkbox"/>	Analyzes ethical impact of intervention ^a <input type="checkbox"/>
Evaluates relevant laboratory results/diagnostics ^a <input type="checkbox"/>	Prescribes appropriate drug therapies ^a <input type="checkbox"/>	Cultivates safe practice environment ^a <input type="checkbox"/>
Synthesizes assessment findings ^a <input type="checkbox"/>	Prescribes legibly using safe and legal parameters <input type="checkbox"/>	Evaluates for system-level change ^a <input type="checkbox"/>
Formulates differential diagnosis ^a <input type="checkbox"/>	Provides additional patient education if needed ^a <input type="checkbox"/>	Demonstrates stewardship of resources ^a <input type="checkbox"/>
Considers nonpharmacologic approach(es) ^a <input type="checkbox"/>	Collaborates with other providers as necessary ^a <input type="checkbox"/>	Self-reflection on prescribing practices ^a <input type="checkbox"/>
Explains medications, side effects, when, and who to call if a problem ^a <input type="checkbox"/>	Classes of medications prescribed:	Notes:

In your opinion, what was the student's level of competency as a CNS prescriber?

- Far above average
- Above average
- Average
- Below average

Signature of Prescribing Mentor: _____

Date: _____

Figure: CNS prescriber competency tool. ^aCNS competency of practice. ² CNS indicates clinical nurse specialist.

This tool is a starting point to assist educators in meeting the prescribing competency. Repetitive completion of the tool during clinical practicums might serve as evidence for new graduate CNSs when undergoing credentialing and privileging. The tool's validity is currently being researched in a state where CNSs have prescriptive authority.

Recommendations for New Clinical Nurse Specialist Prescribers

Clinical nurse specialists need to know and follow their state's statutes^{2,3,5,40} and clarify the

need for prescribing in the CNS role. Because most CNSs practice in acute care settings, a careful analysis of gaps in care that could be filled by CNS prescribers should be undertaken. If possible, CNSs should pursue the credentialing and privileging process, because credentialing promotes full scope of practice⁴³ and is a step toward launching a prescribing practice. Clinical nurse specialists may need additional education in pharmacology or mentorship, both of which were identified as needs in some of the reports. Mentorship should be provided by CNS prescribers if possible. Mastery of the competency of

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prescribing in one's specialty is important if legally appropriate.²

Second, CNSs who have achieved credentialing and privileging might identify gaps in care to guide their prescribing practice. Conducting a population-based assessment within one's own specialty will assist in this process.² For example, the CNS specializing in palliative care initiated the weekend-prescriber home care service to better meet patients' needs for symptom control when other providers were not accessible.²⁸ Considering that CNSs are the nurse's APRN, asking nurses where gaps in care occur might help to uncover where CNS prescribing could be useful, efficient, and cost-effective.

Third, CNSs should consider the use of small formularies from which to prescribe, as suggested in 2 of the reports reviewed.^{30,33} Smaller formularies might allow for a more seamless transition into a prescribing role. The mentors of the New Zealand CNSs suggested this approach in the early phases of one's prescribing practice.³⁰ Maintaining a small formulary would also mitigate the time devoted to prescribing so that the traditional roles of the CNS are retained.

Fourth, CNSs should monitor outcomes related to prescribing. There is a lack of literature on outcomes of CNS prescribing, and more documentation and sharing of practices is needed. More publications would help support other CNSs who are new to prescribing. Only 4 of the reports reviewed here included outcome data.^{26-28,34} With only one-fourth of CNSs in the United States reporting on their eligibility to prescribe and uncertainty in how many are actually prescribing,⁹ CNS prescribers should publish. Until CNSs document their roles as prescribers in their most common work setting (acute care), the ways in which CNS prescribers are distinct from other advanced practice providers will not be clearly articulated. Clinical nurse specialists, by education, are not primary care providers; thus CNS prescribing to facilitate nursing practice should not be confused with the nurse practitioner role.

Last, new CNS prescribers may need support. Some CNSs did not feel supported in their prescribing practices.³¹ Role confusion is likely when CNSs start prescribing.⁴² Credentialing and privileging processes alone might be challenging for the new CNS prescriber and for those evaluating qualifications of CNSs

(when most CNSs are nonprescribers).^{9,10} Nurse prescribers in the United Kingdom used peer groups as a support strategy,⁴³ a strategy that might be of value in the United States. Supporting new CNS prescribers to grow in this role will afford future CNS students the opportunity to be mentored by CNS prescribers.

Conclusion

Clinical nurse specialists are clinical experts, leaders, and scholars,² but transparency of the role is needed.^{18,19} The act of prescribing would help others to readily witness the level of clinical expertise of a CNS. New CNSs should embrace a prescribing role and be supported in the process. More support might be needed given the fewer numbers of actual CNS prescribers.^{7,8,20} The profession clearly promotes full scope of practice^{2,6,24} but lacks publications on outcomes related to CNS prescribing. The reports available show that CNSs fill gaps in care by using prescribing to meet the needs of vulnerable and complex patient populations. CNS academic programs should provide ample opportunities for CNS graduates to achieve competency in prescribing and work toward consistency in achieving this goal. Peer support could be helpful for new CNS prescribers⁴⁴ navigating credentialing and privileging processes in settings where CNS prescribing is not mainstream. Clinical nurse specialist prescribing is of value to patient care and professional growth. Prescribing is one tool that CNSs might use to be *visible* champions.

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REFERENCES

1. International Council of Nurses. Guidelines on advanced practice nursing 2020. Accessed May 8, 2021. <https://www.icn.ch/news/icn-launches-new-advanced-practice-nursing-guidelines-and-calls-increased-recognition-and>
2. National Association of Clinical Nurse Specialists. *Statement on Clinical Nurse Specialist Practice and Education*. 3rd ed. National Association of Clinical Nurse Specialists; 2019.
3. APRN Consensus Work Group & National Council of State Boards of Nursing APRN Advisory Committee. Consensus model for APRN regulation: Licensure, accreditation, certification & education. 2008. Accessed May 8, 2021. https://www.ncsbn.org/Consensus_Model_for_APRN_Regulation_July_2008.pdf
4. Weeks G, George J, Maclure K, Stewart D. Non-medical prescribing versus medical prescribing for acute and chronic disease management in primary and secondary

- care (review). *Cochrane Database Syst Rev.* 2016. 2017(11). Accessed September 24, 2021. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6464275/pdf/CD011227.pdf>
5. Institute of Medicine. *The Future of Nursing: Leading Change, Advancing Health*. National Academies Press; 2010.
 6. Tracy MF, Oerther S, Arslanian-Engoren C, et al. Improving the care and health of populations through optimal use of clinical nurse specialists. *Nurs Outlook.* 2020;68(4):523-527. doi:10.1016/j.outlook.2020.06.004
 7. National Association of Clinical Nurse Specialists. The role of the CNS: findings from the 2020 census. Accessed May 8, 2021. <https://nacns.org/wp-content/uploads/2021/03/NACNS-2020-Census-Infographic-FINAL.pdf>
 8. National Association of Clinical Nurse Specialist. Key findings from the 2014 clinical nurse specialists census. Accessed May 8, 2021. <https://nacns.org/professional-resources/practice-and-cns-role/cns-census>
 9. National Council of State Boards of Nursing. APRN consensus implementation status. 1-25-21. Accessed May 8, 2021. <https://www.ncsbn.org/5397.htm>
 10. US Department of Veterans Affairs. VA grants full practice authority to advanced practice registered nurses. Accessed May 8, 2021. <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2847>
 11. Mohr LD, Coke LA. Distinguishing the clinical nurse specialist from other graduate nursing roles. *Clin Nurse Spec.* 2018;32(3):139. doi:10.1097/nur.0000000000000373
 12. Jokiniemi K, Suutarla A, Meretoja R, et al. Career pathway from registered nurse to advanced practice nurse. *Int J Nurs Pract.* 2019;26(1). doi:10.1111/ijn.12777
 13. Ulit MJ, Eriksen M, Warrior S, et al. Role of the clinical nurse specialist in supporting a healthy work environment. *AACN Adv Crit Care.* 2020;31(1):80-85. doi:10.4037/aacnacc2020968
 14. Report of the Independent Cancer Taskforce. Achieving world class cancer outcomes: a strategy for England 2015-2020. Accessed May 8, 2021. <https://www.iccp-portal.org/system/files/plans/Strategy%20-Final.pdf>
 15. Brooks E. From shadow to change agent: revitalization of the clinical nurse specialist role. *Nurs Forum (Hillsdale).* 2020;55(2):297-300. doi:10.1111/nuf.12429
 16. Mayo AM, Ray MM, Chamblee TB, Urden LD, Moody R. The advanced practice clinical nurse specialist. *Nurs Adm Q.* 2017;41(1):70-76. doi:10.1097/NAQ.0000000000000201
 17. Klaess C, Urton M, Whitehead P, Rosier P, Burnie J, Michel M. Pain management pillars for the clinical nurse specialist: summary of national association of clinical nurse specialists opioid pain management task force. *Clin Nurse Spec.* 2019;33(3):136-145. doi:10.1097/NUR.0000000000000449
 18. Bruwer L, Little K. Development of a clinical nurse specialist internship for master's graduate students to improve role transition. *Clin Nurse Spec.* 2020;34(4):178-181. doi:10.1097/NUR.0000000000000528
 19. Sturdivant T, Butler C. The clinical nurse specialist: under the magnifying glass. Updated 2018. Accessed September 24, 2021. <https://alabamanurses.org/2018/08/cns>
 20. Saunders MM. Clinical nurse specialists' perceptions of work patterns, outcomes, desires, and emerging trends. *J Nurs Adm.* 2015;45(4):212-7. doi:10.1097/NNA.0000000000000187
 21. Kooienga S, Wilkinson J. RN prescribing: an expanded role for nursing. *Nurs Forum (Hillsdale).* 2017;52(1):3-11. doi:10.1111/nuf.12159
 22. Canadian Nurses Association. Framework for registered nurse prescribing in Canada. 2015. Accessed May 8, 2021. https://www.cna-aiic.ca/~media/cna/page-content/pdf-en/cna-rn-prescribing-framework_e.pdf?la=en
 23. Martin CB, Hales CM, Gu Q, Ogden CL. Prescription drug use in the United States, 2015-2016. 2019. Accessed February 26, 2021. <https://www.cdc.gov/nchs/products/databriefs/db334.htm>
 24. Hansen MP, Saunders MM, Kollauff CR, Santiago-Rotchford R. Clinical nurse specialists: leaders in managing patients with chronic conditions. *Nurse Econ.* 2019;37(2):103-109.
 25. Cannaby A, Carter V, Rolland P, Finn A, Owen J. The scope and variance of clinical nurse specialist job descriptions. *Br J Nurs.* 2020;29(11):606-611. doi:10.12968/bjon.2020.29.11.606
 26. Hand P. Non-medical prescribing of systemic anticancer therapy in a multidisciplinary team oncology clinic. *Br J Nurs.* 2019;28(11):715-720.
 27. Ghai A, Mohamad TY, Hussain M, Hayes E, Zakrzewska J. The role of a clinical nurse specialist in managing patients with trigeminal neuralgia. *Br J Pain.* 2020;14(3):180-187.
 28. Webb WA, Gibson V. Evaluating the impact of nurse independent prescribing in a weekend clinical nurse specialist service. *Int J Palliat.* 2011;17(11):537-543. doi:10.12968/ijpn.2011.17.11.537
 29. Davies J. Independent prescribing for heart failure patients. *B J Cardiac Nurs.* 2012;7(1):32-33.
 30. Lim A. *Nurses as Emergent Prescribers in New Zealand: A Descriptive Comparative Study Using a Multiple Case Approach*. Dissertation. University of Auckland; 2012.
 31. Klein T. Clinical nurse specialist prescriber characteristics and challenges in Oregon. *Clin Nurse Spec.* 2015; 29(3):156-165. doi:10.1097/NUR.0000000000000125
 32. Kaas MJ, Dehn D, Dahl D, Frank K, Markley J, Hebert P. A view of prescriptive practice collaboration: perspectives of psychiatric-mental health clinical nurse specialists and psychiatrists. *Arch Psychiatr Nurs.* 2000;14(5): 222-234. doi:10.1053/apnu.2000.9813
 33. Latham K, Nyatanga B. Community palliative care clinical nurse specialists as independent prescribers: part 2. *Br J Community Nurs.* 2018;23(3):126-133.
 34. Hall S, Thompson J, Phair T, Davies AN. Clinical nurse specialist prescribing in a cancer centre supportive and palliative care team. *BMJ Support Palliat Care.* 2020;10(1):111-113. doi:10.1136/bmjspcare-2019-001867
 35. Medicare Learning Network of the U.S. Department of Health & Human Services. Advanced practice registered nurses, anesthesiologist assistants, and physician assistants. 2020. Accessed July 27, 2021. <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/Medicare-Information-for-APRNs-AAAs-PAs-Booklet-ICN-901623.pdf>
 36. Delville C, Innerarity S, Joiner-Rogers G. Starting collaborative practice with physicians or clinics: what you should know. In: Duffy M, Dresser S, Fulton JS, eds. *Clinical Nurse Specialist Toolkit: A Guide for the New Clinical Nurse Specialist*. Springer Publishing Company; 2016:227-236.
 37. White CS. Advanced practice prescribing: issues and strategies in preventing medication error. *J Nurs Law.* 2011;14(3):120-127. doi:10.1891/1073-7472.14.3.4.120
 38. Makary MA, Daniel M. Medical error—the third leading cause of death in the US. *BMJ.* 2016;353:i2139. doi:10.1136/bmj.i2139
 39. World Health Organization. Medication without harm. Updated 2018. Accessed May 8, 2021. <https://www.who.int/patientsafety/medication-safety/en/>
 40. O'Malley PA. PRxscribing now and then and beyond: update for the clinical nurse specialist. *Clin Nurse Spec.* 2014;28(2):89-91. doi:10.1097/NUR.0000000000000038
 41. Thurman P. Clinical nurse specialist regulation. *AACN Adv Crit Care.* 2015;26(1):58-63.
 42. Ray MM. Achieving prescriptive authority for clinical nurse specialists. *Adv Emerg Nurs J.* 2013;35(1):1-2. doi:10.1097/TME.0b013e31827fcbfc
 43. Sendelbach S. Navigating the privileging and credentialing process. In: Duffy M, Dresser S, Fulton JS, eds. *Clinical Nurse Specialist Toolkit: A Guide for the New Clinical Nurse Specialist*. Springer; 2016:211-225.
 44. Embry N. Nurse prescribing: benefits and limitations for the clinical nurse specialist in multiple sclerosis. *B J Neuroscience Nurs.* 2007;3(6):253-260.