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ABSTRACT

Patients with complex and chronic illnesses and those who have significant needs related to care coordination and transitions of care are dependent on access to healthcare providers who are skilled at meeting the distinct needs of these populations and are current in the latest evidence-based practices and guidelines. Clinical nurse specialists (CNSs) are uniquely qualified to care for patients with complex illnesses as well as having the skills to optimize care for entire populations with complex needs. The absence of consistent legislative advanced practice registered nurse recognition of CNSs prevents health care systems from optimal use of this advanced practice registered nurse role to improve and provide safe and quality care for these patients. Additional barriers in optimal utilization of CNSs include lack of consistency: in title protection and licensing from state to state; ensuring patient access through identification and tracking of CNS numbers across the United States in order to determine workforce and educational program requirements; and ensuring appropriate reimbursement for care provided by CNSs. Therefore, it is the position of the American Academy of Nursing that addressing public and private sector regulatory, legislative, and policy concerns related to CNSs is essential to achieving optimal population health outcomes across the nation.

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Background

The United States (U.S.) health care system struggles to improve the health of its citizens due to many issues, some of which include challenges in ongoing holistic management of patients and populations with complex and chronic illness, lack of care coordination, as well as a lack of attention to transitions of care (Tracy & O’Grady, 2018). Improving population health is dependent on both modifying the individual effects of social determinants of health as well as changing the structural barriers at system levels that impede population health (Canales, Dreydahl, & Kniepp, 2019; Storfjell, Winslow, & Saunders, 2017). These upstream barriers at national and state levels prevent CNSs from improving the health of populations. Advanced practice registered nurses (APRNs) are and will continue to be in positions that are key to identifying care need patterns and gaps in resources in the environments
where patients with complex health conditions live and work (Storfjell et al., 2017).

Clinical nurse specialists are APRNs who are uniquely prepared to address health care delivery issues at micro, meso and macro levels: individual patient care within the context of their environment; advancing nursing care through use of evidence with nurses; and leading change at the systems and population levels (National Association of Clinical Nurse Specialists (NACNS), 2019a). Clinical nurse specialists use the latest scientific evidence in conjunction with health behavior pattern recognition to improve the quality and safety of care for all populations across the care continuum (Hansen, Kollauf, Saunders, & Santiago-Rotchford, 2019). To safeguard the future health of the nation, CNSs are key champions of wellness and safety of not only vulnerable and complex populations, but also of individual specific patient populations across all health stages and the entire continuum of clinical and community settings (Baldwin, Black & Hammond, 2014; Coen & Curry, 2016; Fels, et al., 2015; Negley, Cordes, Evenson & Schad, 2016). When supported to practice to the full extent of their education and commensurate licensure determined by each state, CNSs lead important system wide innovations (NACNS, 2016; NACNS, 2019a; Tracy & O’Grady, 2018).

There are barriers, however, in optimal utilization of CNSs that can be addressed at a policy level to ensure consistency in title protection and licensing from state to state, to identify and track numbers of CNSs across the U.S. in order to determine workforce and educational program requirements, and to secure reimbursement for CNS care that improves population health outcomes (NACNS, 2017; NACNS, 2019a; Tracy & O’Grady, 2018). In addition, even in states that have legislation that recognizes full CNS scope of practice and the CMS Final Rule 2012 that allows “other practitioners (e.g., advanced practice registered nurses, physician assistants, pharmacists) to perform functions within their scope of practice” (U.S. Department of Health and Human Services, 2012, p. 29034), APRNs are still frequently confined by individual hospital/institution and medical staff privileging rules and preferences that legally restrict their practice (Altman, et. al., 2016).

Clinical Nurse Specialists must be able to practice to the level of their educational preparation to optimize their role in achieving positive population health outcomes. The Consensus Model for APRN Regulation outlines the proposed regulatory requirements for APRN licensure, accreditation, certification, and education and serves as the architecture for states to standardize title, licensure and full practice for APRNs, including CNSs (APRN Joint Dialogue Group, 2008; Tracy & O’Grady, 2018). When CNSs practice to the full extent of their education and demonstrated competence, the result is high-quality, cost effective patient care with positive outcomes (Kilpatrick et al., 2014; Moore & McQuestion, 2012; Newhouse, et al., 2011). Conversely, when legislation regarding the practice of CNSs is inconsistent with the Consensus Model or nonexistent, barriers to CNS practice are evident. When assessing health outcome measures, those states with the most restrictive APRN practice are those that tended to perform worse on the Commonwealth Fund State Health Rankings (Radley, McCarthy, & Hayes, 2017). Storfjell and colleagues stress the imperative that APRNs need to be prepared to manage care for patients and their families with complex chronic conditions, including mental health, within their environmental setting (Storfjell et al., 2017). As an example, mental health CNSs (an area of high patient need) encounter practice restrictions, worsening access for patients with mental illness to receive the care they need (National Council of State Boards of Nursing (NCSBN), 2018). Especially problematic are those restrictions that may dissuade new CNSs to enter practice including limited or no prescriptive authority, mandatory collaboration and/or supervision, and limited or no third-party reimbursement (NCSBN, 2018).

The adoption of the Consensus Model by all states to include updated CNS title protection and licensing legislation also supports the enactment of the National Council of State Boards of Nursing’s proposed APRN Compact (NCSBN, 2015). This would standardize the educational preparation and role for the CNS as a specialty graduate level-prepared role. The APRN Compact would allow APRNs to hold “one multisite license with a privilege to practice in other Compact states” (NCSBN, 2015). Patients with complex conditions frequently require specialized care provided in specialized medical centers, which may be far from home and may be located in another state. Having all states conform to the APRN Compact will improve access to care for patients in rural areas and those requiring more complicated care needs by providing options to be cared for by CNSs who live in nearby states or via telehealth (e.g., tele-mental health). It is imperative that CNSs have legislative APRN recognition in order to continue providing their unique skills regardless of where the patient lives or receives care. Legislation at the state level that provides CNS title protection and full practice authority is the first step in supporting optimal care for patients by CNSs, regardless of their location, ensuring access to care for all patients, and allowing all states to participate in the APRN Compact (NCSBN, 2018).

In the Bureau of Labor Statistics Occupational Outlook Handbook, CNSs are currently embedded within the general RN category (U.S. Department of Labor, 2018a; U.S. Department of Labor, 2018b). To ensure an adequate workforce of licensed CNSs, the U.S. government, schools of nursing, health care organizations and regulatory agencies require an accurate CNS census in order to match workforce supply with the demand from complex population needs. The ideal and immediate response to address quantifying the CNS workforce is for the Bureau of Labor Statistics to categorize CNSs as defined by legislative and regulatory standards - as
APRNs. This provides one source for tracking and monitoring the number of CNSs nationally and would provide consistency with other APRN roles.

The Federal Trade Commission (FTC) has been vocal in urging state legislators to avoid enacting restrictions related to APRN scope of practice that go beyond those needed for evidence-supported patient safety concerns (Federal Trade Commission, 2014). The FTC has stated that such undue restrictions could result in impairment of healthcare professionals and institutions to create new health care models and deny consumers the benefits of competition. Conversely, when APRNs can practice without unnecessary restrictions, they more efficiently meet consumer health care needs and preferences and optimize the use of new technologies (Federal Trade Commission, 2014).

Responses and Policy Options

Among public health organizations there is wide spread support, as well as scientific evidence, that CNSs are prepared to practice with specific patient populations in and across the entire continuum of clinical and community settings to the full extent of their education and demonstrated competence (Institute of Medicine, 2011; NACNS, 2016; NACNS, 2017; NACNS, 2019a). The United States Congress has introduced the Title VIII Nursing Workforce Development Act of 2019 (H.R. 728) to reauthorize the federal nursing programs under Title VIII. The House passed the legislation in October 2019 and while awaiting action in the Senate, was ultimately incorporated into the Coronavirus Aid, Relief and Economic Security Act (CARES Act) (H.R. 748) which was signed into law in March, 2020. The reauthorization of this updated legislation recognizes all four types of APRNs including the role of CNSs. This legislation also supports CNS educational programs through significant nursing grants (Congress.gov, 2020). Additionally, government agencies have begun to fully consider full practice authority of APRNs when evaluating ways to improve patient care. This includes the Veteran’s Administration (VA) which has crafted clinical guidelines to allow CNSs full practice authority to perform their unique APRN role through consistent title protection and licensing from state to state in the VA regardless of the state in which the individual VA hospital or facility is located (U.S. Department of Veterans Affairs, 2017; NACNS, 2019b). The Centers for Medicare and Medicaid Services (CMS) is also considering this issue as it has previously solicited additional input and recommendations regarding the elimination of specific Medicare regulations that require more stringent supervision than existing state scope of practice laws, or that limit nurses and other health professionals from practicing to the full extent of their education and competence. Late last year, the White House released an Executive Order on “Protecting and Improving Medicare for our Nation’s Seniors.” Section 5 of this Executive Order directs the Secretary of the Department of Health and Human Services to propose reforms to the Medicare program to enable providers to spend more time with patients by including a “comprehensive review of regulatory policies that create disparities in reimbursement between physicians and non-physician practitioners and proposing a regulation that would, to the extent allowed by law, ensure that items and services provided by clinicians, including physicians, physician assistants, and nurse practitioners, are appropriately reimbursed in accordance with the work performed rather than the clinician’s occupation” (Executive Order, 2019).

Among state responses to reduce statutory and regulatory barriers for CNS practice, CNSs currently practice independently in 28 states (NACNS, 2018) and can prescribe independently in only 19, including the District of Columbia (NCSBN, 2019). Fifteen states require CNSs to have collaborative practice agreements or be supervised by physicians in order to prescribe, while CNSs have no authority to prescribe in 16 states (NCSBN, 2019).

Clinical nurse specialists were included in legislation giving them (with nurse anesthetists and nurse midwives) prescriptive authority for use of buprenorphine through medication-assisted treatment programs (Congress.gov, 2018). While nurse practitioners and physician assistants were given lasting prescriptive authority in this same legislation, the three additional APRN groups were given prescribing authority for 5 years. It is important that this prescribing authority be expanded to lasting authority for consistency with nurse practitioner APRN practice.

State legislatures are slowly and individually amending legislation regarding the definition of ‘provider.’ These legislative changes broaden language to terms such as ‘healthcare professionals’, allowing for inclusion of APRNs. Even slower to occur are amendments that require elimination of payment differentials between physicians and APRNs (Phillips, 2016; Phillips, 2017; Phillips, 2018).

While these are some examples that demonstrate initial progress in addressing inconsistencies and non-evidence based restrictions to CNS practice, changes have been gradual and challenging to put into place and significant inconsistencies and barriers remain.

The Academy’s Position

The American Academy of Nursing has a long history of championing policies and practices that improve the health of populations and the delivery of healthcare. In 2014, the Academy advocated for policy changes to support the role of acute and critical care APRNs as providers of high quality, cost-effective and safe patient care (American Academy of Nursing, 2014). Consistent with this position is the support of the Academy for the removal of barriers that inhibit the optimal utilization of CNSs, who as APRNs, are
uniquely prepared to lead transformational and innovative process and quality improvement changes across the care continuum to improve outcomes and reform healthcare, particularly for those patients with the most complex and chronic needs.

Recommendations

1. For states that have not already done so, state policymakers should pass legislation that defines clinical nurse specialists as advanced practice nurses and provides title protection and full, nonsupervised scope of practice.
2. Federal agencies should eliminate regulations that require more stringent supervision than existing state scope of practice laws, or that limit CNSs from practicing to the full extent of their education and competence.
3. The U.S. Department of Labor, Bureau of Labor Statistics should remove the CNS role from the general RN census category in the Occupational Outlook Handbook and realign the CNS into the APRN category.
4. Reimbursement should be consistent among and expanded for all APRNs, including CNSs, across all federal agencies.

REFERENCES

Altman, S. H., Butler, A. S., & Shern, L. (Eds.). (2016). Committee for Assessing Progress on Implementing the Recommendations of the Institute of Medicine Report. The Future of Nursing: Leading Change, Advancing Health; Institute of Medicine; National Academies of Science, Engineering, and Medicine.Washington, D.C.: National Academies Press. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK350160.

American Academy of Nursing. (2014). American Academy of Nursing: Improving health and health care systems with advanced practice registered nurse practice in acute and critical care settings. Nursing Outlook, 62(50), 366–370.

APRN Joint Dialogue Group. (2008). Consensus model for APRN regulation: Licensure, accreditation, certification, & education. Retrieved from https://www.ncsbn.org/Con sensus_Model_Report.pdf.

Baldwin, K. M., Black, D., & Hammond, S. (2014). Developing a rural transitional care community case management program using clinical nurse specialists. Clinical Nurse Specialist, 28(3), 147–155.

Canales, M. K., Drevdahl, D. J., & Kneipp, S. M. (2019). Moving words, moving meanings: The discourse of population health. Journal of Professional Nursing, 35, 71-63.

Coen, J., & Curry, K. (2016). Improving heart failure outcomes: The role of the clinical nurse specialist. Critical Care Nursing Quarterly, 39(4), 335–344.

Congress.gov. (2018). H.R. 6 - SUPPORT for Patients and Communities Act. 115th Congress. 2017-2018. Available at https://www.congress.gov/bill/115th-congress/house-bill/6. Retrieved July 23, 2020.
the practice of clinical nurse specialists. Clinical Nurse Specialist, 30(5), 271–276.
Newhouse, R. B., Stanik-Hutt, J., White, K. M., Johantgen, M., Bass, E. B., Zangaro, G., & Weiner, J. P. (2011). Advanced practice nurse outcomes 1990-2008: A systematic review. Nursing Economics, 29(5), 1–21.
Phillips, S. J. (2016). 28th annual APRN legislative update: Advancements continue for APRN practice. The Nurse Practitioner, 41(1), 21–48.
Phillips, S. J. (2017). 29th annual APRN legislative update. The Nurse Practitioner, 42(1), 18–46.
Phillips, S. J. (2018). 30th annual APRN legislative update: Improving access to healthcare one state at a time. The Nurse Practitioner, 43(1), 27–54.
Radley, D. C., McCarthy, D., Hayes, S. L., & The Commonwealth Fund. (2017). Aiming higher: Results from the Commonwealth Fund scorecard on state health system performance. Retrieved from http://www.commonwealthfund.org/interactives/2017/mar/state-scorecard/.
Storfjell, J. L., Winslow, B. W., & Saunders, J. S. D. (2017). Catalysts for change: Harnessing the power of nurses to build population health in the 21st century. Robert Wood Johnson Foundation. Retrieved from https://campaignforaction.org/resource/catalysts-change-harnessing-power-nurses-build-population-health-21st-century/.
Tracy, M. F., & O’Grady, E. T. (2018). Advanced practice in nursing. An integrative approach (6th ed). Philadelphia, PA: Saunders Elsevier.
U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. (2012). Medicare and Medicaid Programs; Reform of Hospital and Critical Access Hospital Conditions of Participation. 42 CFR Parts 482 and 485. Federal Register. Rules and Regulations, 77(95). May 16, 2019. p. 29034. Retrieved from https://www.cms.gov/Regulations-and-Guidance/Legislation/CFCsAndCoPs/Downloads/CMS-3244-F.pdf.
U.S. Department of Veterans Affairs. Veterans Health Administration. (2017). Directive 1350: Advanced Practice Registered Nurse Full Practice Authority. Retrieved from https://www.va.gov/vhapublications/publications.cfm?pub=1.
U.S. Department of Labor. Bureau of Labor Statistics. (2018a). Occupational employment statistics. Occupational Employment and Wages, May 2018. 29-1141 Registered Nurses. Retrieved from https://www.bls.gov/oes/current/oes291141.htm.
U.S. Department of Labor. Bureau of Labor Statistics. (2018b). Occupational employment statistics. May 2018 Occupational Profiles. Retrieved from https://www.bls.gov/oes/current/oes_stru.htm#29-0000.