



NATIONAL ASSOCIATION OF
CLINICAL NURSE SPECIALISTS

NACNS Position Statement on Advanced Pharmacology: Practice, Curricular and Regulatory Recommendations

The four purposes of this Position Statement are to:

- Clarify the recommendations for advanced pharmacology knowledge and education for Clinical Nurse Specialists (CNSs) as described in the National Association of Clinical Nurse Specialists (NACNS) *Statement on CNS Practice and Education* (2004).
- Describe the importance of advanced pharmacologic knowledge within the context of nursing's legally authorized autonomous scope of practice defined by the RN license and practiced at an advanced level.
- Explicate issues associated with pharmacologic knowledge for evolving nursing practice.
- Recommend education and regulation for CNS prescriptive authority.

1. Clarify the recommendations for advanced pharmacology knowledge and education for CNSs as described in the NACNS *Statement on CNS Practice and Education* (2004).

The American Association of Colleges of Nursing. *The Essentials of Master's Education for Advanced Practice Nursing* (1996) recommends that:

Every APN graduate should have a well-grounded understanding of basic pharmacologic principles, which includes the cellular response level. This area of core content should include both pharmacotherapeutics and pharmacokinetics of broad categories of pharmacologic agents (p. 14).

NACNS has **consistently** supported:

- Advanced pharmacology knowledge for CNSs specific to their specialty.
- Inclusion of this expanded content in CNS curricula.

NACNS distinguishes between advanced knowledge of pharmacology and knowledge required for prescriptive authority. Advanced knowledge of pharmacology for CNSs should include: principles of pharmacodynamics, pharmacokinetics, pharmacotherapeutics, drug-drug, and drug-food interactions pertinent to the nursing specialty (NACNS, 2004). This advanced knowledge of pharmacology is related but does not equate to the intent and focus of knowledge for prescriptive authority.

2. Describe the importance of advanced pharmacology knowledge within the context of nursing's legally authorized autonomous scope of practice defined by the RN license and practiced at an advanced level.

CNS competencies build upon baccalaureate (or its equivalent) education in nursing. Thus, CNS students enter into graduate studies with generalist pharmacology knowledge. They also have skills to seek knowledge about, administer, and monitor existing and new-to-market medications and pharmaceutical agents. The legal authority to administer and monitor medications and pharmaceutical agents is granted by the RN license. Thus, upon entry into a CNS program, students possess knowledge of pharmacokinetics and pharmacodynamics from a generalist perspective and can apply that knowledge to the care of patients.

The purpose of CNS education is to build advanced specialty-focused practice in nursing. **NACNS has consistently recommended curricular content in advanced pharmacology to support specialty CNS practice.** Clinical benchmarks, practice guidelines, care protocols and standing physician order sets are the most commonly used tools for pharmacotherapeutics by CNSs (O'Malley & Mains, 2003).

Advanced pharmacology knowledge in the specialty area informs CNS specialty practice. CNS actions based on this knowledge include:

- Comprehensive patient/client assessment including interaction and other pharmacodynamics of medications particular to the specialty with more generic medications,
 - Differential diagnosis of illness, e.g. symptoms and functional problems and risk behaviors, plus the ruling in or out of iatrogenic effects of medications including specialty medications,
 - Selection and implementation of nursing interventions / therapeutics that
 - are appropriate within the patient's or population's context including but not limited to disease state and medication load, and
 - Use of current scientific knowledge and evidence
- Development and use of evidence-based evaluation tools to measure outcomes and cost-effectiveness.

For CNSs, practice competencies within nursing's autonomous scope of practice and are focused on:

- Providing advanced nursing practice services,
- Insuring patient safety,
- Improving nursing care quality,
- Providing cost-effective nursing care, and
- Advancing the practice of nursing by bridging the gap between what is known through evidence and what is done in practice.

3. Explicate issues associated with pharmacologic knowledge for evolving nursing practice.

a. Educational issues

The level of knowledge needed for advanced practice nurses to safely prescribe should support content in pharmacokinetics and pharmacodynamics. Nurses with prescriptive authority also need coursework in differential diagnosis and management of disease. CNSs need

knowledge of physiology and pathophysiology specific to their specialty. CNSs use these core subjects to acquire knowledge and skills in the differential diagnosis of illness and wellness (NACNS, 2004).

b. Legal issues

Surveys show that a majority of CNSs currently in practice do not need or desire prescriptive authority to fully implement their advanced nursing practice (Lyon, 2003). The need for prescriptive authority for some CNS practice may vary by specialties, job requirements, or other variables. There are regulatory differences between states. Some state regulations require CNSs to obtain prescriptive authority, thus obfuscating the true need in CNS practice.

c. Focus of practice

The 'unit of care' for CNSs may be individuals or groups, such as marital dyads, family units, and communities. Advanced pharmacology knowledge can inform practice for these clients; however, prescriptive authority for pharmacotherapeutic agents is distinctly an individual level intervention. Prescriptive authority for CNSs caring for groups is not needed to fully implement their advanced practice.

4. Recommend education and regulation for CNS prescriptive authority.

a. CNS Curricular Recommendations

Practice competencies drive curricular content. CNS practice focuses on differential diagnosis of illness, e.g. symptoms and functional problems, and risk behaviors. Additionally, CNSs are expert in executing selected delegated medical regimens associated with the diagnosis and treatment of disease for a specialty population (NACNS, 2004). To support competency in these focus areas, the NACNS *Statement on CNS Practice and Education* states that CNS curricular content in the area of pharmacology should include principles of pharmacodynamics, pharmacokinetics, pharmacotherapeutics, drug-drug, and drug-food interactions (NACNS, 2004). This level of knowledge is adequate to achieve the core competencies.

Additional course content for prescriptive authority must include, at a minimum, differential diagnosis and management of disease. Content for prescriptive authority should also include principles of selection of classes of drugs supported by an in-depth understanding of pharmacologic principles, information on state and federal statute related to prescribing, and information on fiscal and ethical implications of prescribing. In addition to the clinical practice hours needed to master core CNS competencies recommended in the NACNS *Statement on CNS Practice and Education* (2004), CNSs must demonstrate competence in the prescription of pharmacological agents through supervised clinical practice.

b. Regulation

At this juncture in the evolution of advanced practice nursing, it is imperative that regulation permit prescriptive authority for CNSs to be discretionary. A number of states already provide for such discretion.

Building upon the model title protection language, NACNS recommends the following model language:

A CNS seeking authority to prescribe pharmacologic agents shall file with the Board of Nursing a written application for authority to prescribe. The Board shall issue authority to prescribe to each applicant who meets the requirements specified by the Board of Nursing or by state statute as appropriate to the state.

Conclusion:

NACNS believes that these four core areas and the explication of the NACNS position will provide further opportunities for dialogue and clarification of educational and regulatory issues related to prescriptive authority for CNSs. Central to these beliefs are:

1. CNSs are already well-prepared educationally to practice advanced nursing with regard to advanced pharmacologic knowledge and,
2. CNSs need additional education and regulation in order to prescribe, differentially diagnose disease, and treat medical conditions through pharmacologic intervention.

References:

American Association of Colleges of Nursing. *The Essentials of Master's Education for Advanced Practice Nursing*. Washington, D. C.: AACN, 1996.

Lyon, B. L. (2003). Advanced practice registered nurse compact: A call to action with a primer on the regulation of CNS practice. *Clinical Nurse Specialist*, 17(4), 185-187.

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O'Malley, P. & Mains, J. (2003). Update on prescriptive authority for the clinical nurse specialist. *Clinical Nurse Specialist*. 17(4), 191-193.