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Contents

Contributors .............................................. xi
Reviewers .................................................. xiii
Foreword (Melanie Duffy) ...................... xv
Preface ....................................................... xvii
Acknowledgments ........................................... xix

UNIT I

THE NATURE OF CNS PRACTICE

Chapter 1 Evolution of Clinical Nurse Specialist Role and Practice in the United States ........... 3
Janet S. Fulton

Chapter 2 Professional Attributes in the Context of Emotional Intelligence,
Ethical Conduct, and Citizenship of the Clinical Nurse Specialist ................. 15
Janet M. Bingle and Sue Davidson

Chapter 3 Philosophical Underpinnings of Advanced Nursing Practice: A Synthesizing
Framework for Clinical Nurse Specialist Practice ........................................ 29
Frank D. Hicks

Chapter 4 Nurse Sensitive Outcomes ............................................................... 35
Diane M. Doran, Souraya Sidani, and Tammie DiPietro

UNIT II

DESIGNING AND EVALUATING NURSING INTERVENTIONS

Problems in the Nursing Domain ................................................................. 61
Brenda L. Lyon

Chapter 6 Designing Innovative Interventions .................................................... 75
Jeannette Richardson
Chapter 7  Evaluating Interventions  ................................................................. 87  
  Kelly A. Goudreau

UNIT III  PROMOTING INNOVATION, CHANGE, AND DIFFUSION IN PRACTICE

Chapter 8  Using Complex Adaptive Systems Theory to Guide Change  .......................... 99  
  Kathleen Chapman

Chapter 9  Engaging Staff in Learning ............................................................... 113  
  Christine M. Pacini

Chapter 10  Shaping Practice: Evidence-Based Practice Models .................................. 131  
  Lisa Hopp

Chapter 11  Transformational Leadership as the Clinical Nurse Specialist’s Capacity to Influence  149  
  Brenda L. Lyon

Chapter 12  Creating a Culture of Quality ........................................................... 159  
  Nancy Benton

Chapter 13  Newer Thinking About Patient Safety ............................................... 169  
  Patricia R. Ebright

UNIT IV  DELIVERING CARE TO CLIENTS

Chapter 14  Individual as Client ........................................................................... 185  
  Janet S. Fulton and Carol Baird

Chapter 15  Family as Client ................................................................................ 199  
  Barbara S. O’Brien and Ginette G. Ferszt

Chapter 16  Community as Client: Clinical Nurse Specialist Role .......................... 213  
  Naomi E. Ervin

Chapter 17  Population-Based Data Analysis ...................................................... 223  
  Ann L. Cupp Curley

Chapter 18  Client-Focused Teaching: The Role of the Clinical Nurse Specialist  .... 237  
  Kelly A. Goudreau
## UNIT V
### THE BUSINESS OF CLINICAL NURSE SPECIALIST PRACTICE

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Consultation in the Clinical Nurse Specialist Role</td>
<td>Geraldine S. Pearson</td>
<td>251</td>
</tr>
<tr>
<td>20</td>
<td>Mentoring</td>
<td>Kelly A. Goudreau</td>
<td>259</td>
</tr>
<tr>
<td>21</td>
<td>Project Management: A Core Competency for Professional Nurses and Nurse Managers</td>
<td>Robert Loo</td>
<td>267</td>
</tr>
<tr>
<td>22</td>
<td>Economic and Financial Considerations for Clinical Nurse Specialists</td>
<td>Leeann Blue and Mary L. Fisher</td>
<td>275</td>
</tr>
<tr>
<td>23</td>
<td>Technology Management in Complex Health Care Settings</td>
<td>Patricia O’Malley</td>
<td>285</td>
</tr>
<tr>
<td>24</td>
<td>Interview or Interviewee: Essential Skills for the Clinical Nurse Specialist Employment Interview</td>
<td>Ann F. Minnick</td>
<td>299</td>
</tr>
<tr>
<td>25</td>
<td>Entrepreneurship and Intrapreneurship in Advanced Nursing Practice</td>
<td>Maria R. Shirey</td>
<td>311</td>
</tr>
<tr>
<td>26</td>
<td>Billing and Reimbursement Issues</td>
<td>Susan Dresser</td>
<td>329</td>
</tr>
<tr>
<td>27</td>
<td>Regulatory and Professional Credentialing of Clinical Nurse Specialists</td>
<td>Brenda L. Lyon</td>
<td>341</td>
</tr>
<tr>
<td>28</td>
<td>Student Clinical Experiences: Responsibilities of Student, Preceptor, and Faculty</td>
<td>Florence Myrick and Diane Billay</td>
<td>349</td>
</tr>
</tbody>
</table>

---

## UNIT VI
### EXEMPLARS OF THE CLINICAL NURSE SPECIALIST ROLE IN A VARIETY OF SETTINGS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Hospital-Based Clinical Nurse Specialist Practice</td>
<td>Katie Brush and Theresa Murray</td>
<td>369</td>
</tr>
<tr>
<td>30</td>
<td>Clinical Nurse Specialist in Collaborative Private Practice</td>
<td>Jeffrey S. Jones</td>
<td>373</td>
</tr>
</tbody>
</table>
# Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 31</td>
<td>Clinical Nurse Specialist Entrepreneurship: A Journey From Idea to Invention.</td>
<td>379</td>
</tr>
<tr>
<td></td>
<td>Kathleen M. Vollman</td>
<td></td>
</tr>
<tr>
<td>Chapter 32</td>
<td>The Clinical Nurse Specialist in Industry/Business</td>
<td>383</td>
</tr>
<tr>
<td></td>
<td>Jane L. Bromund, Mary A. Short, and Kathleen C. Solotkin</td>
<td></td>
</tr>
</tbody>
</table>

## Unit VII

### Exemplars of Clinical Nurse Specialist Practice in a Variety of Specialty Areas

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 33</td>
<td>Providing Pediatric Palliative Care in a Regional Children’s Medical Center.</td>
<td>391</td>
</tr>
<tr>
<td></td>
<td>Patricia O’Malley</td>
<td></td>
</tr>
<tr>
<td>Chapter 34</td>
<td>Implementing a Comprehensive Bariatric Care Protocol</td>
<td>393</td>
</tr>
<tr>
<td></td>
<td>Kathleen D. Wright</td>
<td></td>
</tr>
<tr>
<td>Chapter 35</td>
<td>Improving Patient Pain Management Across a Health Care System</td>
<td>399</td>
</tr>
<tr>
<td></td>
<td>Mary Pat Johnston</td>
<td></td>
</tr>
<tr>
<td>Chapter 36</td>
<td>Leading Revisions of Neutropenia Practice Guidelines</td>
<td>403</td>
</tr>
<tr>
<td></td>
<td>Barbara Holmes Gobel</td>
<td></td>
</tr>
<tr>
<td>Chapter 37</td>
<td>Facilitating a Programmatic Approach to Children</td>
<td>409</td>
</tr>
<tr>
<td></td>
<td>with Special Health Care Needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jo Ellen Rust</td>
<td></td>
</tr>
<tr>
<td>Chapter 38</td>
<td>Psychiatric Consultation Liaison Clinical Nurse Specialist</td>
<td>413</td>
</tr>
<tr>
<td></td>
<td>in the Acute Care Setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pamela A. Minarik</td>
<td></td>
</tr>
<tr>
<td>Chapter 39</td>
<td>Growing a Clinical Nurse Specialist Practice in a Rehabilitation Setting.</td>
<td>419</td>
</tr>
<tr>
<td></td>
<td>Kathleen L. Dunn</td>
<td></td>
</tr>
<tr>
<td>Chapter 40</td>
<td>Exploring Clinical Nurse Specialist Practice in the Emergency Department.</td>
<td>425</td>
</tr>
<tr>
<td></td>
<td>Garrett Chan</td>
<td></td>
</tr>
<tr>
<td>Chapter 41</td>
<td>Establishing a Private Practice for Diabetes Self-Management</td>
<td>431</td>
</tr>
<tr>
<td></td>
<td>Patricia S. Moore</td>
<td></td>
</tr>
<tr>
<td>Chapter 42</td>
<td>Improving Outcomes With a Rapid Response Program</td>
<td>437</td>
</tr>
<tr>
<td></td>
<td>Victoria Church</td>
<td></td>
</tr>
<tr>
<td>Appendix</td>
<td>Specialty Practice Organizations in Nursing</td>
<td>441</td>
</tr>
<tr>
<td></td>
<td>Michelle Treon and Diana Jones</td>
<td></td>
</tr>
</tbody>
</table>

Index                                                                 | 449  |
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The National Association of Clinical Nurse Specialists (NACNS) represents all clinical nurse specialists (CNSs) regardless of specialty or practice setting. Drs. Fulton, Lyon, and Goudreau have included information in this book that is applicable to the various specialties and settings in which the CNS practices and reflects the work of the CNS in today’s health care environment. Foundations of Clinical Nurse Specialist Practice explains the basis for CNS practice from inception and Hildegard Peplau’s concept of the CNS to the world of today, with a focus on quality, safety, technology, reimbursement issues, and financial constraints. Evidence-based practice, transformational leadership, and regulatory issues affecting CNS practice are other areas of focus of the book. The exemplars in Unit VI cite specific examples of the work the CNS does on a daily basis. Each project may have appeared to be a monumental task, but the CNS proceeded step by step until the final, quality outcome was achieved. NACNS is honored to support a comprehensive work of this magnitude that addresses the multiple facets of CNS practice.

Melanie Duffy, MSN, RN, CCRN, CCNS
President, NACNS
Clinical nurse specialists (CNSs) make unique contributions to the health and safety of the public by working directly and indirectly with patients, families, groups, and communities. These contributions often occur through clinical intervention and leadership at the point of nursing care delivery or by influencing factors that impact the point of delivery. CNSs are clinical experts in a delimited specialty area of practice, while also diffusing expert knowledge about phenomena central to nursing practice—such as pain, mobility, and skin integrity—that cut across specialties. CNSs help to shape specialty-focused practice innovations by identifying new or changing nursing care needs and by bringing new advanced nursing knowledge to well-established specialty practice areas.

Across diverse specialties, CNSs exhibit core practice competencies that cluster into three domains. The domains, also referred to as spheres of influence, are client, nursing practice/nurses, and system/organization. CNSs bridge the gap between what is known and what is practiced and collaborate in the removal of system barriers that impede the delivery of safe and cost-effective care. A wide range of knowledge is required to practice effectively in all three domains.

The inception of the National Association of Clinical Nurse Specialists (NACNS) in 1995 was a milestone in the continuing evolution of the CNS role and education. NACNS’s mission includes making visible the unique contributions of CNSs to health care. Today, perhaps more than ever, the contributions of CNSs to quality, cost-effective patient care are vital. NACNS’s curricular recommendations represented the first ever comprehensive overview of CNS educational program content. Prior to the recommendations, CNS educational programs varied based on specialty focus, local needs, and university/school considerations. The trend in textbooks was toward generic advanced practice, resulting in a lack of educational materials for CNS educators and students.

The book is written as a textbook to be used in the education of CNSs and the continuing development of practicing CNSs and is consistent with NACNS curricular recommendations. No one book can ever include the expanse of knowledge needed by CNSs. As editors, we included content believed to be core foundational knowledge for CNS practice, knowledge that will help CNS students and practicing CNSs achieve the core competencies. Unit I begins with an overview of the evolution of CNSs from the 1940s to present, setting the stage for understanding contemporary CNS practice. Also included are chapters describing the professional attributes of CNSs, the philosophical underpinnings of CNS practice, and nursing-sensitive outcomes. Units II, III, and IV include content supporting the how of CNS practice. For example, there are chapters devoted to clinical reasoning, designing and evaluating interventions, working in complex systems, influencing quality, and promoting patient safety. Unit V addresses the business of CNS practice, such as interviewing, entrepreneurship, billing and reimbursement, and understanding regulation. Unit VI includes exemplars demonstrating CNS practice in different settings—hospital, private practice, business and industry, and entrepreneurship ventures. The last unit, Unit VII, offers 10 short vignettes describing CNS practice in various specialties.

It is our fervent belief that the future of CNSs and CNS practice is bright and that the need for the unique contributions of CNSs will be increasingly in demand as hospitals and other health care settings are moved to performance-based reimbursement. We hope that faculty teaching in programs preparing CNSs, CNS students, and practicing CNSs will find this book to be a helpful resource.

Janet S. Fulton
Brenda L. Lyon
Kelly A. Goudreau
Many thanks are in order for making this book a reality. We are particularly grateful to Laura Parker, administrative assistant, for her steadfast support in coordinating the logistical, contractual, and structural elements necessary to move the work forward. Thanks to the staff at Springer Publishing, especially Margaret Zuccarini, acquisitions editor, for her guidance and support. Developing a book is, as we learned, a challenging and time-consuming process. We thank our colleagues in the nursing community for generously sharing their expertise as chapter editors and reviewers.

We would also like to thank our family, friends, and colleagues for their support in the long journey that is this book.

“Thanks to my family, husband, Morgan, and sons, Alexander and David, for their spirit, humor, and patience. You’re the best. And to colleagues, faculty and staff.”

Jan Fulton

“Thanks to my close CNS colleagues (Jan Bingle, Sue Davidson, Nancy Dayhoff, Lois Meier, and Kathleen Vollman) and to hundreds of CNS students who over the years have challenged me to both grow in the role and to help shape the evolution of CNS practice in the educational and regulatory arena.”

Brenda Lyon

“Thanks to my husband, Serge, and my daughters, Kelsey and Christianne Goudreau, who had to wait as Mum went to ‘go write and edit chapters’ just one more day. Thanks also to all the CNSs whose thought provoking ideas have challenged and shaped my skills. You all have helped me to learn and grow in ways I would never have imagined.”

Kelly Goudreau
UNIT I

The Nature of CNS Practice
Much has been written about the clinical nurse specialist (CNS) role beginning in the 1950s, yet CNS curricula are often void of content about the evolution of the role. The two most commonly used curricular recommendations for CNS programs—the *Statement on Clinical Nurse Specialist Practice and Education* (National Association of Clinical Nurse Specialists [NACNS], 2004) and *Essentials of Master’s Education for Advanced Practice Nursing* (American Association of Colleges of Nursing [AACN], 1996)—are silent on the topic of history pertaining to the role. An electronic search of the Cumulative Index to Nursing and Allied Health Literature (CINAHL) database from 1981 (earliest date available for e-search) to 2008 found about 3,800 articles under the search term *clinical nurse specialist*. Earlier articles have been reproduced in books, and some significant works are available in JSTOR, a digital archive for scholarship. In exploring the evolution of the CNS’s role and practice, it is important to consider the context of nursing in society as a major influence shaping the CNS role. For an expanded understanding, readers are encouraged to explore the historical references cited in this chapter and other related historical works.

**EARLY HISTORICAL ROOTS**

Evidence suggests that the idea for a clinical expert in nursing emerged in the 1940s and ’50s. In the first textbook written for CNSs, *The Clinical Nurse Specialist: Interpretations* by Riehl and McVay (1973), the editors suggested that the 1923 Winslow-Goldmark Committee report on nursing education, sponsored by the Rockefeller Foundation, set in motion events creating a need for clinical experts in nursing practice. Also called *The Study of Nursing and Nursing Education in the United States*, the report noted inadequacies in hospital nursing education and identified as a central problem the extended hours of service worked by students in the apprenticeship hospital training programs. A poor educational option, hospital training was made worse by lack of curricular standards, insufficient pedagogical knowledge among faculty, and inadequate instruction in the application of science and theory to practice (Bullough & Bullough, 1979; Ellis & Hartley, 2004; McHenry, 1983). As a result of these findings, nursing placed great emphasis on roles of teaching and administration in an effort to improve nursing education and clinical education experiences. Evidence of this focus can be seen in the preface to Wolf’s 1947 textbook for nurses:

The never-ending task of improving the quality of nursing practice falls squarely upon the shoulders of the teaching personnel in school of nursing and in public health nursing agencies. Those who are responsible for planning and providing the classroom and field practice experiences for nurse students are constantly striving to enrich these learning experiences and keep them in line with newer developments in the broad field of public health and preventative medicine. (p. v)
The 1948 release of Esther Lucile Brown’s *The Future of Nursing* further reinforced the need to improve nursing education. Called the Brown Report, it also criticized hospital training programs and strongly advocated collegiate education for nursing. Less well identified with the report was Brown’s observation about the over-emphasis on teaching and administration at the expense of patient care. She called for increasing efforts to help students develop clinical knowledge and skill supporting direct care of patients; to better prepare nurses for care of persons both sick and well; and to teach scientific knowledge and create opportunities for students to apply knowledge in the care of patients. Nurses, Brown argued, needed to possess discriminative judgment and be able to exert leadership. Under leadership she included: (1) making a unique contribution to the prevention and treatment of illness; (2) improving nursing skills and developing new nursing skills; (3) teaching and supervising other nurses and ancillary workers; and (4) cooperating with other professions in planning for health at community, state, national, and international levels (Allen, Koos, Bradley, & Wolf, 1948).

In 1956, the National League for Nursing (NLN) sponsored the National Working Conference in Williamsburg, Virginia, to discuss the need for a psychiatric clinical expert (NLN, 1958). Against a backdrop of programs to train teachers and administrators, conference participants affirmed the need and determined that a new role should be created. The purpose of this new role, labeled clinical specialist, was “to bring about advances in the art and science of psychiatric nursing and to promote the application of new knowledge and methods in the care of patients” (NLN, 1958/1973, p.8). The final conference report included a description of clinical competencies for the new role and basic elements of a graduate-level curriculum to prepare nurses for the role.

Concerns about the lack of attention to developing clinical nursing experts continued. Appointed the first dean of the Graduate School of Nursing at New York Medical College, Frances Reiter became a leading voice for developing educational programs to prepare advanced clinical experts in many different specialty areas (Hiestand, 2006). Reiter’s 1961 essay *Improvement in Nursing Practice* criticized hospital nursing service departments for devaluing direct patient care provided by the graduate nurses (graduate nurse being the term used for now registered nurses). She asserted that hospital nursing services were controlled by nurses who were not clinically skilled, but highly influenced by policies of hospital administration (Reiter, 1961). In addressing the American Nurses Association (ANA), she forecast a preferred future:

> I believe that some day an Academy of Nursing will be established. Membership in this academy will be an honorable one. The members will be selected from those practitioners who are clinical nursing specialists. Because of their values in practice, their clinical knowledge and their judgment, this corps of practitioners will give us professional leadership in advancing the excellence of our practice. (p. 18)

Reiter’s goal as dean was to prepare a new kind of expert clinical nurse. In 1948, she had chaired the second of five studies funded by the W. K. Kellogg Foundation to develop teaching and learning experiences for nurses, the *Study of Advanced Clinical Nursing Education* (Hiestand, 2006). In 1966, she again called for a renewed emphasis on clinical practice and described an expert nurse-clinician. Reiter’s expert nurse-clinician was a master practitioner for all dimensions of nursing practice—able to provide both basic and technical care while using discriminative judgment in assessing problems (diagnosis), determining care priorities, and selecting nursing measures (interventions) to achieve therapeutic objectives (outcomes). The expert nurse-clinician would possess sound knowledge of basic sciences and principles underlying care and would use this knowledge to promote quality of care and remove system-level barriers to care delivery. As she expressed it, the expert nurse-clinician would be “committed to ‘hacking’ her way down through the personnel pyramid so that her professional knowledge and judgment are exerted on behalf of every patient” (Reiter, 1966, p. 9). Further, the expert nurse-clinician’s motivation, judgment, and expert nursing skills were envisioned to benefit patients both directly and indirectly because the visible expertise of this clinician was expected to provide leadership for the nursing staff in the delivery of patient care.

In summary, the early history of the CNS included a vision of a clinical role in nursing in response to a growing need for knowledgeable and skilled experts in the delivery of nursing care. An expert clinical nurse should be grounded in theory and scientific evidence, possess clinical skill, and be able to advance nursing care techniques, mentor nursing staff, assure excellence and quality, collaborate with other care providers, and remove system barriers to care delivery. This vision of the clinical expert created the CNS role.

**THE CNS ROLE TAKES SHAPE**

Although the psychiatric CNS is recognized as the first CNS specialty, the role of the CNS as a clinical expert was conceived before being linked to a specialty. Role is defined as expected functions of a person and is characterized by a pattern of behavior in a given social context. CNS is a functional role in nursing. The functional role is actualized through a set of professional practice competencies.
Not until 1998 were the common functional role competencies of CNS practice enunciated (NACNS, 1998). However, the establishment of the first-ever CNS core practice competencies relied heavily on a review of the literature (Baldwin et al., 2007). Multiple articles, beginning in the 1960s, helped to define and establish the core practice competences of the CNS role. Table 1.1 summarizes the role description and core competencies identified in the literature of the 1960s and early 1970s.

**ADVANCED SPECIALTY PRACTICE**

At the same time the CNS role was being conceptualized, specialization in health care was evolving and creeping into nursing practice. In 1949, the idea of specialization was introduced at a conference of graduate program directors convened at the University of Minnesota (Sills, 1983). In 1967, Little noted that specialization in nursing had moved well beyond the usual fields of practice (public health and hospital nursing) and the usual functions of teaching, supervision, and administration. Specialization was emerging in clinical areas based on body systems, age, type of illness, and scientific content areas. She conceded that specialization in nursing had indeed arrived.

The idea of specialty-focused practice for nurses was discussed in the very first issue of the *American Journal of Nursing* in an article by Katherine DeWitt (1900). In “Specialties in Nursing,” DeWitt noted that nurses should be trained as generalists, and while she

<table>
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<tr>
<th>Descriptions of CNS Role</th>
<th>Descriptions of CNS Competencies</th>
<th>Year</th>
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<tbody>
<tr>
<td>Independent provider for continuity of care; clinical leader for nursing staff.</td>
<td>Explore and study (research) ways to improve patient care; understand patient needs; apply theory to practice; observe and report results objectively.</td>
<td>1964</td>
<td>Crawford</td>
</tr>
<tr>
<td>Independent clinician; model of expertness representing advanced or newly developing practices.</td>
<td>Clinical expert; develop innovations in practice based on emerging knowledge; interdisciplinary collaboration.</td>
<td>1965</td>
<td>Peplau</td>
</tr>
<tr>
<td>Expert nurse in direct care of patients; working with other nurses to improve performance.</td>
<td>Work with difficult patients; analyze needs; problem solve; interpret nursing care principles to nursing personnel.</td>
<td>1966</td>
<td>Anderson</td>
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<td>Expert professional practitioner; assumes direct and continuing responsibility for nursing care of patients.</td>
<td>High levels of knowledge and cognitive ability demonstrated in practice; skilled decision maker; high level of ability in identifying patient problems and selecting intervention.</td>
<td>1967</td>
<td>Johnson, Wilcox, &amp; Moidel</td>
</tr>
<tr>
<td>Professional nurse with advanced knowledge and competence in nursing.</td>
<td>Activities include many things: teaching, providing leadership in planning patient care, or exclusively practicing direct nursing care.</td>
<td>1968</td>
<td>Towner</td>
</tr>
<tr>
<td>A nurse who practices nursing by applying specific, relevant theories and knowledge from nursing and allied disciplines to persons requiring specialized nursing services.</td>
<td>Deliver expert care; guide allied nursing personnel as teacher and model; innovate or initiate change; contribute to nursing knowledge through research and practice; coordinate activities with persons in allied disciplines; consult with those requiring clinical nursing judgment and knowledge.</td>
<td>1969</td>
<td>Berlinger</td>
</tr>
<tr>
<td>Expert nurse with definite responsibility for influencing patient care.</td>
<td>Uses a theoretical framework for change—one that allows for description and analysis of problems for organizing and interpreting what she perceives; brings about through conscious, deliberate, and collaborative effort the improvement of patient care.</td>
<td>1969</td>
<td>Gorden</td>
</tr>
<tr>
<td>Nurse with special preparation through education and experience to serve as expert practitioner and consultant.</td>
<td>Practitioner providing direct care; consultant directing, guiding, and assisting nursing staff to provide nursing care to patients; educator providing staff development to improve clinical competence; collaborates in initiating and facilitating patient care programs with health team members.</td>
<td>1973</td>
<td>Kurihara</td>
</tr>
</tbody>
</table>
saw no immediate need for specialists, she conceded that nurses could pursue specialty practice out of personal interest. DeWitt’s comments were prompted by the turn-of-the-century emergence of specialties in medicine. Physicians were becoming more focused on medical practice; dentistry and pharmacology were becoming autonomous specialty practices and no longer services provided by the physician. DeWitt stated that when a nurse chooses a specialty, she (all nurses were referred to using the feminine pronoun in most early nursing literature) should engage in additional and continued studies in the specialty area and likewise should keep abreast of advances in science in the specialty. Her remarks indicate a belief that generalist education should precede specialty education.

Specialization is the mark of advancement of a profession (ANA, 1980; Snyder, 1990). In a landmark paper, Peplau (1965) discussed the nature of specialties in clinical nursing practice. She noted three social trends that gave rise to specialty practice: (1) increasing knowledge about a phenomenon, (2) new technology emerging from new knowledge, and (3) emerging areas of public need. The areas for specialty practice suggested by Peplau are summarized in Table 1.2. The suggested categories and examples were not intended to be either exhaustive or static, only suggestions based on Peplau’s observation about nursing practice at the time.

Specialization is a division or partitioning of a more general area of practice along some logical lines. It involves a narrowing and deepening of focus or a recombination of aspects of different areas of knowledge and practice competencies with a simultaneous narrowing and deepening of focus (Peplau, 1965). Specialties are the inevitable result of new knowledge and demands of the public for new services (Smoyak, 1976). As such, specialties are adaptations arising in response to scientific and technological discoveries and continuously evolving to meet health concerns in a society. Specialties evolve and are refined, promoted, and molded. Specialties become outdated and are discarded. Most importantly, specialties are determined by society. Specialization gives nursing the ability to address the public’s need for health services by expanding and contracting focus.

In discussing specialty practice, Peplau (1965) offered two cautions. The first caution addressed the growing complexity of health care delivery, particularly in post–World War II hospitals, which saw the emergence of multiple types of care providers. Peplau noted that “nurses must pinpoint intersecting, overlapping, and identical functions and activities which they share with other professional disciplines. And nurses must identify their unique nursing functions” (Peplau, 1965, p. 276, emphasis added). This caution echoes Brown’s recommendation that nursing identify its unique contribution to patient care. Peplau was concerned that nurses not gravitate into practice areas and specialties where they would merely be duplicating the services offered by others. Peplau’s second caution addressed keeping specialization efforts focused on developing clinical experts in patient care. Experts in the delivery

1.2 | Areas of Specialization Suggested by Peplau

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<tr>
<th>AREAS OF SPECIALIZATION</th>
<th>EXAMPLES</th>
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<tbody>
<tr>
<td>Areas of practice</td>
<td>General hospitals, psychiatric hospitals, tuberculosis hospitals, mental retardation centers, industry</td>
</tr>
<tr>
<td>Organs and body systems</td>
<td>Cardiac, renal, and cardiac surgery</td>
</tr>
<tr>
<td>Age of client</td>
<td>Infant, premature infant, child, juvenile, adolescent, adult, and geriatric</td>
</tr>
<tr>
<td>Degree of illness</td>
<td>Progressive care, acute illness, convalescent care, and chronic illness services</td>
</tr>
<tr>
<td>Length of illness</td>
<td>Short-term (ambulatory), intermediate, and long-term</td>
</tr>
<tr>
<td>Fields of knowledge</td>
<td>Knowledge gives rise to new terminology, for example, nuclear nursing, interpersonal nursing, electronics nursing, and space nursing</td>
</tr>
<tr>
<td>Subroles of the work role of staff nurse</td>
<td>Mother-surrogate nurse, expert technical nurse, health teacher, nurse counselor</td>
</tr>
<tr>
<td>Professional goal</td>
<td>Rehabilitation nursing, prevention nursing, curative nursing, ameliorative nursing</td>
</tr>
<tr>
<td>Clinical services</td>
<td>Medical, surgical, maternal, pediatric, psychiatric-mental health</td>
</tr>
</tbody>
</table>

of patient care services, such as care coordinators or others with responsibilities for supervisory or administrative duties, were different from and should not be substituted for clinical experts in patient care.

Specialties ebb and flow, adapting to the availability of knowledge, advances in technology, and public health demands. Today, due to advances in antibiotic therapies, we don’t need nurses specializing in tuberculosis hospital care as Peplau (1965) suggested. Similarly, Peplau could not have foreseen a need for clinical specialists in acquired immune deficiency syndrome (AIDS), a disease that was only described in the 1980s. It has been and remains the responsibility of CNSs, grounded in nursing theory, science, and use of evidence in practice, to interpret needs and bring nursing expertise to new and emerging specialties for the public good.

Defining Specialty Practice

In 1980, ANA defined specialization in nursing as “a narrowed focus on a part of the whole field of nursing. It entails application of broad range of theories to selected phenomena within the domain of nursing, in order to secure depth of understanding as a basis for advances in nursing practice” (p. 21). Currently, specialty is defined by the NACNS (2004) and the ANA (2004) as a delimited or concentrated area of expert clinical practice with focused knowledge and competencies. NACNS stated that specialties could be identified as population, type of problem, setting, type of care, or disease. The American Board of Nurse Specialties (ABNS) defined a specialty as: (1) a distinct and well-articulated and recognized by other providers, and (2) possessing a tested body of research or data-based knowledge related to the nursing specialty. ABNS criteria fit the overall purpose and function of nursing and is national in scope, and (2) possessing a tested body of research or data-based knowledge related to the nursing specialty (Burns & Welk, 1997). ABNS criteria for a specialty fit a mature specialty, one that is linked to a professional association that sets standards and promotes activities to contribute to the conduct, review, and dissemination of knowledge in the specialty.

Styles (1990) pointed out that a single, central authority should be designated to recognize specialties and specialty standards to give nursing a source of authority for its specialties. Without a central authority in nursing, Style argued, specialties are self-declared and self-ordained, susceptible to internal fluctuations and disorganization, and vulnerable to outside forces competing for power and resources. In contrast, Snyder (1990) noted that because nursing is continuously developing its body of knowledge and is also part of a dynamic health care system and society, any organizing framework for specialization in nursing would be, of necessity, continuously evolving. At present, CNSs practice in small, emerging specialties and in well-established specialties attached to large professional organizations. Several specialty organizations have established scope and standards for CNS practice, such as the Scope of Practice and Standards of Professional Performance for Acute and Critical-Care Clinical Nurse Specialist (American Association of Critical Care Nurses, 2002) and the Oncology Clinical Nurse Specialist Competencies (Oncology Nursing Society, 2008).

A Model for Evolving CNS Specialty Practice

A three-stage model has been proposed to describe the evolution of advanced practice roles (Hanson & Hamric, 2003). According to Hanson and Hamric’s model, in Stage I, a specialty develops in a practice setting. The specialty emerges in response to unmet needs in the health care system, particularly unmet patient needs, often involving activities not valued by physicians and not seen as a nursing role. Nurses in this stage attain on-the-job skills and expand practice to encompass these new skills. Clinical research coordinator is cited as an example of an emerging specialty currently in Stage I (Hanson & Hamric, 2003). In Stage II, organized training develops for the specialty. Training may be institution or agency specific and characterized as an apprentice model. Anesthesia, midwifery, and nurse practitioner are examples of specialties that began with training programs (Hanson & Hamric, 2003). In Stage III, graduate education with standardized curriculum emerges for the specialty. Salyer and Hamric (2008) add a fourth stage to the model; in Stage IV, the specialty is well-articulated and recognized by other providers, and certification exams are developed.

CNS role evolution does not fit well into Hanson and Hamric’s model (2003). The CNS role emerged before specialty practice, conceived by nursing to address a void in clinical practice expertise in nursing and initiated with an expectation of graduate education. The emphasis on graduate education has been consistent since the earliest descriptions of the role and reinforced across the years. Nonacademic/nonuniversity–based training programs never existed for the CNS role. Certification options exist for some CNS specialties, but not all. A modified model of evolution for CNS role and practice would be as follows. Stage I, scientific discovery, knowledge, and technology create a public need for nursing services in a new area. CNSs practicing in related specialties pursue specialty knowledge from many sources; no one owns knowledge. Stage II, CNSs combine new scientific knowledge with existing clinical expertise and identify the level and type of nursing care necessary to meet the public need. Stage III, CNSs provide leadership to nursing services in the area by disseminating knowledge, role modeling, mentoring, and other activities.
CNSs develop norms and standards of care for nursing practice in the newly emerging specialty. Depending on the scope of the newly emerging specialty, CNSs may engage in developing and promoting specialty certification or other mechanisms to advance quality care for the patient population. For example, as patients were appearing with a yet undefined disease in the early 1980s, CNSs and other nurses with specialties in infection control, oncology, and palliative care began providing care for this group. AIDS was eventually described, a scientific literature amassed, professional organizations developed, and care standards established. A new specialty emerged based on public need.

The CNS role has a unique and rich history contributing texture and dimension in an ongoing evolutionary journey. For the CNS role, specialty practice represents an interpretation of nursing services into a discrete area of public need.

**CNS EDUCATION**

In 1943, the NLN appointed a committee to identify guiding assumptions and basic principles for developing clinical post-graduate courses (Mayo, 1944). One assumption set forth by the committee stated: “The fundamental purpose of all advanced clinical nursing courses is the further preparation of qualified graduate nurses as clinical nursing specialists in order to ensure a constantly improving quality of nursing practice” (Mayo, 1944, p. 581). As graduate education became available, very few nurses held bachelor degrees, and it was difficult to establish cohorts of baccalaureate-prepared nurses for master’s level classes. Throughout the 1940s and ’50s, diploma and bachelor prepared nurses often enrolled in the same courses; the only determinant of the degree granted was the degree held upon enrollment. Course content varied widely, and classes did not always contain theory and science. During this same time, specialty education was largely controlled by hospitals and used by administration to recruit nurses and manipulate the nursing workforce for hospital goals (Smoyak, 1976). Not until specialty knowledge (science and theory) was embedded in academic curricula did the reality of a graduate-prepared specialist as expert clinician emerge. The first graduate specialty program to prepare only CNSs as expert clinicians was the graduate program in advanced psychiatric nursing at Rutgers University in New Jersey. The design and delivery of the program as a specialty-focused graduate program was important because up to this point graduate courses included students seeking options in administration or teaching and were not necessarily always taught by faculty in the specialty or with an advanced degree (Smoyak, 1976).

Curriculum recommendations were developed for CNS educational programs but not formally organized as a standardized curriculum. The 1969 NLN report *Extending the Boundaries of Nursing Education* noted that the role should be flexible, but no single definition of the clinical specialist could be reached. A cluster of role components were identified and set forth: therapist/practitioner, teacher, consultant, researcher, and change agent. The therapist/practitioner component was a direct care provider in a specialty area of expertise and included assessment, interpreting cues (diagnosis), and intervention. The teacher component included one-on-one bedside work with staff nurses, formal (classes) and informal (in-service) staff development programs, assessment of staff competencies, interpreting the nursing literature, and building staff nurses’ skills. The consultant component was linked to the ability to move about in the system—“unit to unit”—offering expertise and knowledge as needed and responding to calls by staff nurses for assistance in solving problems. For the researcher component, no description was included in the report. The change agent component is described as effecting changes in the system of delivering health care. The report emphasized placing a CNS in the clinical setting so she would be able to move about without interference while being an integral part of the staff because she would be able to identify staff needs and help then develop professionally. To prepare a graduate student to perform competently in the role components, four educational requirements were recommended. These requirements are listed in Table 1.3. In the same 1969 NLN report, Berlinger advocated four educational strands for all CNS education: the process of nursing, the process of clinical nursing specialization, the process of scientific investigation, and the process of communication. Further, she recommended that each student evolve a philosophy of nursing practice congruent with her philosophy of nursing and adopt or develop a conceptual framework for nursing practice. Clinical experiences in the specialty area were recommended for the purpose of knowledge of scientific investigation, critical analysis of current research, and the conduct of independent research as well as the care of patients in the specific specialty.

Descriptions of CNS curricula were published. For example, McIntyre (1970) listed five essential content areas underpinning the CNS program at the University of California—San Francisco: (1) intense study and experience with complex, specialized health problems; (2) opportunity to use advanced technology; (3) deliberative and continuous exchange with members of other health professions; (4) participation with members of the community in the improvement of nursing care; and (5) opportunity to identify the unknowns in care, including participation in research. Rhein (1973) outlined
Early CNS Educational Requirements

EDUCATIONAL REQUIREMENTS

1. A broad base in the psychopathology and pathophysiology related to the clinical specialty. Even though the nurse planned to specialize in the nursing care of patients with neurological conditions, for example, her preparation should include a sound foundation in the whole medical-surgical nursing.

2. Knowledge and skills in the clinical practice of the specialty and in teaching and research.

3. The behavioral sciences essential to the leadership role and to prepare the person to be a change agent.

4. Knowledge and understanding of the social framework in which health care is given. Some participants felt that public health nursing concepts would be sufficient; others suggested a breadth of knowledge of social agencies and societal influences.

From (NLN, 1969, pp. 78–79).

The specialist in nursing practice is a nurse who, through study and supervised practice at the graduate level (master’s or doctorate) has become an expert in a defined area of knowledge and practice in a selected clinical area of nursing. (ANA, 1980, p. 23)

While CNS education was available at the graduate level, CNS curricula varied by school and specialty. Throughout the 1980s and most of the 1990s, publications appeared discussing CNS education, but no organized effort existed to create national standards for CNS education. Schools relied on the NLN recommendations to guide curricula. Sills (1983) reported CNS graduate programs varying in length from 9 to 28 months with most programs taking 2 full academic years to complete. Some CNS programs were designated “clinical” options to distinguish them from administration and teaching options. Other CNS programs were linked to a specialty and had separate curricular tracks for each specialty. For example, at some point between mid-1970 and mid-1990, the University of Cincinnati College of Nursing offered distinct CNS specialty tracks for pulmonary, medical-surgical, burn-trauma, occupational health, gerontology, oncology, adult mental health, and child/adolescent mental health.

In 1996, the AACN published The Essentials of Master’s Education for Advanced Practice Nursing. The Essentials recommended content to be included in advanced practice nursing curricula preparing clinical specialists, nurse midwives, nurse anesthetists, and nurse practitioners. In 1999, the National Advisory Council on Nurse Education and Practice (NACNEP), established by Title VIII of the Public Health Service Act to advise the Secretary on nursing workforce issues, completed a comprehensive report addressing federal support for the preparation of the CNS workforce. Among the recommendations, the report called for the federal government to support and encourage the profession’s efforts to standardize requirements for
educational preparation for core competencies of the CNS role. In 1998, NACNS published the first edition of *The Statement on Clinical Nurse Specialist Practice and Education*, which included both core practice competencies for the CNS role and recommendations for educational preparation of the CNS. In 2003, Walker and colleagues found that 56% of schools preparing CNSs used the NACNS recommendations to guide curricula. The second edition of the *Statement* was published in 2004 and again included core practice competencies and curricular recommendations. At this writing, NACNS has a national effort under way to move the recommendations to the level of curricular standards. Curricular standards are anticipated to help with more consistent competencies among graduates; however, a more prescriptive standardized curriculum is not envisioned because it could be constraining and may hamper CNS programs in response to public needs for nursing care.

**SUB-ROLES MODEL OF CNS PRACTICE**

The CNS role components identified in the 1969 NLN report—therapist/practitioner, teacher, consultant, researcher, and change agent—continued to be cited in the literature in the 1970s. With slight variations, these role components became the unifying description of the CNS role. Throughout the 1980s, greater emphasis was placed on understanding the CNS role. Hamric (1983) noted that the change agent component involved a variety of indirect activities to improve care quality and suggested that the CNS role included both direct and indirect functions. Direct care functions included expert practitioner, role model, and patient advocate. Indirect care functions included change agent, consultant/resource person, clinical teacher, supervisor, researcher, liaison, and innovator. Hamric’s 1983 observation was consistent with Reiter’s 1966 vision of the CNS as engaged in both directly and indirectly contributing to patient outcomes. Further, Hamric (1983) described the CNS role as a constellation of sub-roles.

Well over 1,000 articles were published in the 1980s describing CNS practice in many different specialties and focusing on one or more of the role components. In 1986, the ANA Council of Clinical Nurse Specialists published *The Role of the Clinical Nurse Specialist*, which listed the dimensions of the CNS role as specialist in clinical practice, educator, consultant, researcher, and administrator. The administrator dimension was controversial; many authors argued against administrative functions, citing a move to a supervisory function over staff negated the clinical focus of the role. The ANA considered the administrator component optional and provided examples of the CNS assuming responsibility for direct care programs in the area of specialization and in situations for maintaining a direct client-based practice.

In further describing the CNS role, Hamric (1989) identified three foundational elements—primary criteria, skills and competencies, and sub-roles. Primary criteria were those conditions required for the role, such as an earned graduate degree in nursing with a focus on clinical practice, eligibility for certification by a professional society, and a practice focus on patient/client/family. Sub-roles were identified as expert practice, consultation, education, and research. Skills and competencies were identified as change agent, collaborator, clinical leader, role model, and patient advocate. The rationale for deciding to classify an item under competencies or sub-roles was not addressed. Nonetheless, by the end of the 1980s, the role components of expert clinician, educator, and researcher were solidified. Other role components frequently associated with the CNS role were consultant, collaborator, role model, and change agent.

The sub-roles description became a de facto organizing framework for the CNS role. Textbooks began to appear emphasizing the sub-roles. Hamric and Spross’s 1989 book included chapters on the sub-roles, each discussing direct patient care provider, consultant, educator, researcher, collaborator, and clinical leader. Sparacino, Cooper, and Minarik’s (1990) book included a chapter on the role components—clinician, consultant, educator, researcher, administrator, and clinical leader. Gawlinski and Kern’s (1994) text for CNSs in the critical care specialty was organized according to sub-roles and included sections on practitioner, educator, consultant, researcher, and leader/manager. Additional publications, articles, and books used the sub-roles framework.

At the same time, research about the CNS role was appearing in the literature. The methods and methodologies used for these studies helped codify the sub-roles by assuming a sub-role framework and designing instruments to collect data fitting each sub-role. Surveys often asked CNSs to identify the percentage of time spent in sub-role activities. An often expressed critique of this research was the conceptualization of role components as discrete entities when, in practice, the role was highly integrated.

Additionally, the distinction between sub-roles and clinical competencies is not clear. Practitioner, educator, researcher, consultant, collaborator, change agent, patient advocate, and leader are all expected professional competencies associated with nursing practice. These competencies exist on a continuum; the level of performance in the competency varies based on academic preparation and job role. All nurses provide clinical care, teach patients, collaborate, act as patient advocates, and so forth. For example, bachelor-prepared nurses engage in research activities, as do masters and doctorally prepared CNSs, albeit not at the same level. The sub-roles framework did little to distinguish the CNS from other
nursing roles. What were not articulated in the sub-roles framework were the performance expectations—clinical competencies unique to the CNS role.

**INTEGRATED MODEL OF CNS PRACTICE**

**Core CNS Practice Competencies**

Finally, after many years of waiting, core competencies for CNS practice were identified in the 1998 publication of the NACNS *Statement on Clinical Nurse Specialist Practice and Education*. The development of the core practice competencies represented a rigorous process, including an extensive review of the literature, interviews of practicing CNSs and administrators, and a national external review (Baldwin et al., 2007). The final list of core competencies reflected CNS practice regardless of specialty. Following the release of the 2004 revisions of the *Statement*, a national validation study was conducted further demonstrating the validity of the core competencies for CNSs regardless of specialty (Baldwin, Clark, Fulton, & Mayo, 2009). At this writing, a third revision of CNS core practice competencies is undergoing review.

**Domains of Practice**

The core competencies represented a more integrated description of CNS practice. However, the competencies did cluster into domains representing consumers and stakeholders of CNS services. The domains were patient/client, nurses and nursing practice, and organizations and systems (NACNS, 1998). The domains were labeled *spheres of influence* to denote the scope or breadth of practice activities and the target outcomes associated with a particular sphere. The patient/client sphere was identified as central, reinforcing the long-standing view of CNSs as clinical experts. The nurses and nursing practice sphere recognized the CNS practice involved in working one-on-one with nurses to deliver care and improving norms of care and standards that direct the actions of nurses and nursing personnel. The organizations/system sphere reflects the practice of CNSs in articulating the value of nursing care at the organizational level and influencing decision making at the system level to remove barriers and facilitate quality care and improved patient outcomes (NACNS, 2004). CNS role core competencies are actualized in specialty knowledge, standards, and skills, as demonstrated in Figure 1.1. Outcomes of CNS practice were also identified for each domain, demonstrating the link between CNS practice consistent with the core competencies and anticipated clinical outcomes.

This more integrated model of CNS practice, commonly referred to as the *spheres of influence* model, is more descriptive of CNS practice than the previous sub-roles model. The addition of core competencies adds greater clarity to curriculum content because educators know the performance expectations of graduates. Identifying core competencies and expected outcomes also informs employers, the public, and other providers what to expect from CNS practice.

**OPPORTUNITIES FOR THE FUTURE**

The CNS is an expanded nursing role prepared at the graduate level, either master’s or doctorate. CNSs acquire and apply scientific knowledge and skills for the purpose of meeting the public need for clinically expert nursing services with both newly emerging and established specialty populations. CNSs are leaders in providing innovative nurse-initiated interventions resulting in improved health outcomes for specialty populations. Through hundreds of articles about the CNS role and practice available in the professional literature, this consistent core representation of the CNS role and practice has emerged. It is curious, however, that so many publications include commentary noting CNS role ambiguity and a poor understanding of the CNS role by nurses, administrators, and other health care providers. Continued assertion about CNS role ambiguity is a curiosity given the many CNSs successfully practicing in the role and the many administrators supporting the role. With the focus of the CNS role on interpreting and advancing nursing practice, it seems likely that ambiguity about the CNS role is a reflection of a lack of clarity about nursing, nursing practice, and the unique contributions nursing makes to the public.
good. Understanding the CNS role and practice is tied inextricably to the ability to articulate the value of nursing. Lacking the ability to articulate nursing clearly, it becomes even more challenging to describe nursing practiced at an advanced level.

This is the dual challenge for CNSs in the future to continue moving forward with the advice offered by Brown (1948)—to clearly articulate the unique contributions of nursing to patient care, while describing, implementing, and evaluating nursing practice at an advanced level. It’s difficult to manage what is not measured. CNS core competencies have been developed, and CNS practice outcomes described. The next decade should be dedicated to intense efforts to measure the outcomes of CNS practice, which will, in turn, demonstrate the value of nursing practiced at the advanced level. If CNSs successfully address the opportunity, much will be achieved for the benefit of our patients, their families, and general public welfare.

DISCUSSION QUESTIONS

1. Discuss the significance of collegiate education on the emergence of the CNS role. What social and/or professional influences surrounded moving nursing education from the hospital training program to university academic programs? How have these influences changed over time; are they similar or nonexistent today?

2. Discuss the development of a framework for the CNS role and practice. Identify themes in early descriptions of the CNS role that are present in the current integrated spheres of influence framework.

ANALYSIS AND SYNTHESIS EXERCISES

1. Clinical expertise in nursing practice is central to the CNS role and practice. Trace the development of a selected specialty practice. Explore the relationships among the specialty and scientific knowledge development, technological influences, and public need for nursing services.

2. Analyze trends in nursing that influenced development of nursing and the CNS role. The American Journal of Nursing is electronically archived in JSTOR and available through Google Scholar; explore this historical literature for influences on today’s CNS role.

CLINICAL APPLICATION

Review the NACNS core practice competencies and outcomes. Identify methods for measuring outcomes related to CNS practice. Compare and contrast variations in methods and data needed to measure the same outcome in different specialties.

REFERENCES


