



# **2008 Logical Job Analysis for Clinical Nurse Specialist Core Examination**

## **Summary Report**

**American Nurses Credentialing Center  
February 2008**

## Background

In 2007, the American Nurses Credentialing Center (ANCC) entered into agreement with the National Association of Clinical Nurse Specialists (NACNS) to collaborate on the development of a new Clinical Nurse Specialist Core Examination. The purpose of this endeavor is to address in part a barrier to practice for a significant number of Clinical Nurse Specialists (CNSs) in the United States: the lack of availability of certification examinations for a significant number of CNS specialties. The purpose of the CNS core examination is to test competencies required in CNS practice across the lifespan regardless of specialty.

ANCC conducted a logical job analysis for the Clinical Nurse Specialist Core Examination on February 13-15, 2008. The purpose of this meeting was to review nationally accepted clinical nurse specialist core competencies and to develop a test content outline and item distribution for the examination.

### **Logical Job Analysis Panel**

A panel of eleven (11) representatives with clinical nurse specialist expertise participated in the logical job analysis meeting facilitated by ANCC staff on February 13-15, 2008. **(See Appendix A for the names, credentials, role and geographic locations of each panel member).** Several factors were considered in determining the composition of the panel, including expertise as a clinical nurse specialist; and representative diversity across specialties, settings, and geographic regions.

### **Purpose of an Examination's Test Content Outline and Item Distribution**

An examination's test content outline and its item distribution are both considered parts of an examination's blueprint or specifications. The test content outline provides the domains and subdomains of knowledge that is to be covered on the examination and the item distribution indicates the portion of items that are to be covered in each section of the examination. The test content outline in conjunction with the item distribution serves as the backbone of the examination providing the framework for item bank development and examination form development.

The overarching purpose of a test content outline is to support the validity of the examination. In conjunction with this purpose the document also serves two other purposes: 1) a content guide used by item writers for the development of examination questions and 2) a content outline used by test takers for preparing for the examination.

### **Primary Resources Used In the Study**

- NACNS' *Statement on Clinical Nurse Specialist Practice and Education, 2<sup>nd</sup> edition (2004)*. This statement published by the National Association of Clinical Nurse Specialist provides a definition and description of Clinical Nurse Specialist practice, including a listing of core competencies and a description of essential core content areas.
- *CNS Core Competencies (2-13-2009 draft -- National CNS Competency Task Force)*. During 2007-2008, the National CNS Competency Task Force, consisting of more than 20 CNS related specialty organizations, convened to review the NACNS core CNS competencies and CNS practice competencies developed by specialty groups with the purpose of developing an updated set of core competencies. The most recent draft of the updated competencies was provided to the logical job analysis panel for review during the February 13-15, 2008 meeting. Since the document was still in draft form, the competencies presented in the NACNS' statement on Clinical Nurse Specialist Practice and Education 2<sup>nd</sup> edition (2004) were primarily used; with the draft *CNS Core*

*Competency* document being used for comparison and discussion purposes throughout the meeting

### **Methodology and Results**

The following process was used in conducting the meeting held on February 13-15, 2008:

- Discuss the purpose and scope of the examination
- Review the core competencies of the Clinical Nurse Specialist
- Conduct a linking assignment
- Analyze the results from the linking assignment
- Review the results of the linking assignment
- Develop the test content outline based on linking assignment results
- Approve the test content outline
- Determine domain and subdomain weights (item distribution)

#### **Discuss the Purpose and Scope of the Examination**

Prior to coming to the February 2008 meeting, the logical job analysis panel members were asked to review the NACNS' *Statement on Clinical Nurse Specialist Practice and Education, 2<sup>nd</sup> edition (2004)*. The meeting started with the panel members discussing the scope and purpose of the Clinical Nurse Specialist Core Examination in light of the *Statement*. Emphasis was given to the following intents of the CNS Core examination:

- The examination is to assess competencies required of CNS practice across the life span.
- The examination is to apply to *all* CNS regardless of specialty. (The examination should solely focus on the CNS role and not on specialty specific content.)
- The examination is to provide clinical nurse specialists working in specialties that do not currently have a CNS specific specialty examination an opportunity to verify CNS competencies. However, the examination is not intended to replace current CNS examinations (e.g., CNS in pediatric nursing).

#### **Review the core competencies of the Clinical Nurse Specialist**

The panel reviewed and discussed the CNS core competencies presented in the NACNS' *Statement on Clinical Nurse Specialist Practice and Education, 2<sup>nd</sup> Edition (2004)* to ensure that each panel member had an equal interpretation and understanding of the competencies throughout the rest of the meeting. The panel also reviewed the *CNS Core Competencies (2-13-2008 draft)* developed by the National CNS Competency Task Force. The panel highlighted any differences between the two documents and discussed any recent changes in CNS practice that may have an effect on the NACNS competencies.

#### **Conduct linking assignment**

During the logical job analysis meeting, each panel member individually completed a "linking assignment" (a.k.a. cross-walk activity). This assignment asked the panel members to review the "Competencies of CNS Practice" and the "Essential Core Content Areas for Developing Clinical Nurse Specialist Competencies" sections of NACNS *Statement on Clinical Nurse Specialist Practice and Education, 2<sup>nd</sup> edition (2004)* and determine which essential core content areas are required to successfully meet a particular competency. Training on how to approach the

assignment was conducted at the start of the activity to ensure that each panel member had a clear understanding of what constituted a link.

### **Analyze results from the linking assignment**

Results from the linking assignment were compiled and links were determined. A link between a particular measurement criterion and domain/subdomain was constituted if 6 out of 11 panel members (greater than 50% agreement) indicated that the particular competency was associated with the particular essential core content area.

### **Panel review of results from the linking assignment**

The links were reviewed and discussed by the panel as a whole to see if each of the links made sense or if any links were missing. The panel considered the following in its review and discussion of the results:

- Since the competencies were published in 2004, are there any activities that now have a greater emphasis in CNS Core practice but were not have been included in the competencies? (The review of the competencies in the CNS Competency Task Force draft document was considered in addressing this question)
- Were there any competencies that were not associated with any essential core content area? If so, what is the content needed to perform them? Do other content areas need to be added?
- Were there any content areas that did not link to any competencies? If so, is it okay to drop these content areas?

The final results from this phase of the meeting are listed in **Appendix B** and **Appendix C**. These appendixes list the final links between the competencies and content areas, as well as the listing of the additional areas that the panel determined needed to be added.

### **Review and modify test content outline based on links**

The results from the linking assignment and the additional content added based on the panel discussion of the results were used as the initial bases for the test content outline. For each content area, the panel reviewed the competencies linked to the particular content area and discussed specifically what knowledge and skills contained under that content area are required to perform the linked competencies. These knowledge and skills were added to the test content outline, and in light of the purposes of the document (for test takers and item writers), added examples and illustrations to further clarify the intent of each category. Once initially drafted, the panel reviewed the overall outline, discussing and combing categories that overlapped or were related closely enough to warrant being placed together.

### **Approve updated test content outline**

Once revised, the updated test content outline was approved by the panel.

### **Determine domain and subdomain weights (item distribution)**

After the test content outline was finalized, the item distribution was determined. Group consensus methods were used to determine the item distribution. The portion of items allocated to each domain was first determined and then the portion of items for the subdomains within each domain. Each individual panel member gave their initial vote on how the proportion of items should be distributed across the domains and subdomains and then the panel discussed the results highlighting the areas where the panel agreed or disagreed. For the areas the panel disagreed, the reasons for the various quantities of items were discussed and a final recommendation was made.

### Summary

This section presents the updated test content outline for the Clinical Nurse Specialist Core Examination as approved by the examination's Logical Job Analysis panel.

**American Nurses Credentialing Center**

**Test Content Outline  
 Effective Date: May 2009**

**Clinical Nurse Specialist Core  
 Board Certification Examination**

There are 175 questions on this examination. Of these, 150 are scored questions and 25 are nonscored pretest questions. Questions are pretested to determine how well they perform before they are used in the scored portion of the examination. The pretest questions cannot be distinguished from those that will be scored, so it is important that a candidate answer all questions. However, a candidate's score is based solely on the 150 scored questions. Performance on pretest questions does not affect a candidate's score.

This Test Content Outline identifies the areas that are included on the examination. The percentage and number of questions in each of the major categories of the scored portion of the examination are also shown.

<b>Category</b>	<b>Domains of Practice</b>	<b>No. of Questions</b>	<b>Percent</b>
I	Theoretical and Conceptual Frameworks for Clinical Nurse Specialist Practice	12	8.00%
II	Phenomena of Concern	15	10.00%
III	Design and Implementation of Evidence-based Nursing Assessments, Interventions and Programs with Patients, Families, Communities, Organizations, Populations, and/or Systems	12	8.00%
IV	Technology, Products, and Devices that Support Nursing Practice and Contribute to Improved Outcomes	8	5.33%
V	Teaching and Coaching	10	6.67%
VI	Influencing Change: Change Theory and Techniques	16	10.67%
VII	Systems/Organizations	16	10.67%
VIII	Leadership, Interdisciplinary Collaboration, Professionalism, and Advocacy	16	10.67%
IX	Consultation	7	4.67%
X	Measurement and Evaluation Methods	15	10.00%
XI	Evidence-based Practice and Research	23	15.33%
<b>Total</b>		<b>150</b>	<b>100%</b>

**Please Note: Critical thinking skills are required throughout the whole examination and covers topics throughout the life span.**

**I. Theoretical and Conceptual Frameworks for CNS Practice (8.00%)**

Knowledge of:

- A. Nursing theories (e.g., Orem, Rogers, Watson)
- B. Practice models (e.g., synergy model, spheres of influence)
- C. Health, illness and wellness (including stress, health behaviors, self-care and health behavior change)
- D. Shared theories
  - 1. systems theories (including physiological, environmental, social)
  - 2. family and role theories
  - 3. social theories (e.g., political theory, cultural diversity, feminist theory)
  - 4. critical thinking, decision making and problem solving theories
- E. Ethics theories and concepts

**II. Phenomena of Concern (examples may include: Cognitive impairment, iatrogenesis, developmental delay, end of life/dying, environmental hazards, impaired mobility, ineffective coping, impaired wound healing, nausea, parenting, sleep disturbances, pain, nutrition, unsafe work place) (10.00%)**

Knowledge of:

- A. Pathophysiology and physiology (e.g., risk factors, nondisease and disease etiologies)
- B. Pharmacological principles
- C. Normal growth and development across the lifespan
- D. Levels of prevention (primary, secondary, tertiary)

Skills in:

- E. Conducting a comprehensive history, physical, and psychological assessment of signs and symptoms, including interpreting changes in normal function indicative of illness and injury
- F. Formulating and prioritizing differential diagnosis
- G. Using evidence, standards of practice, practice guidelines, and best practices to provide direct care and indirect care

**III. Design and Implementation of Evidence-based Nursing Assessments, Interventions and Programs with Patients, Families, Communities, Organizations, Populations, and/or Systems (examples of types of assessments, interventions, and programs may include: nursing assessments to identify etiologies of risk; interventions to decrease medication errors, fall risks; programs for families of dying children; community-based screening programs; educational programs for patients/clients with a chronic condition) (8.00%)**

Knowledge of:

- A. Characteristics of and approaches to patients/families, communities, organizations, populations, and/or systems
- B. Program development methods and concepts

Skill in:

- C. Conducting a thorough analysis (e.g., data collection, data analysis, appropriate sources of data, available resources) and developing and selecting innovative approaches and methods
- D. Applying standards of practice, practice guidelines, and best practices to strategies to meet the needs of patients/families/communities, including recommending pharmacologic interventions and non-pharmacologic interventions

**IV. Technology, Products, and Devices that Support Nursing Practice and Contribute to Improved Outcomes (5.33%)**

Knowledge of:

- A. Informatics (e.g., documentation, communication, technological interventions, data management)
- B. Safety issues, ergonomics and recalls
- C. Confidentiality and ethical issues related to technology

Skill in:

- D. Evaluating and selecting technology, products and devices (e.g., utility, cost-benefit analysis, ease of use, effects on patients outcomes, ethical considerations, software, IV pumps, patient handling/movement equipment, accuracy, sensitivity and specificity of a device)
- E. Using technology, products, and devices that support nursing practice and contribute to improved outcomes (e.g., documentation, telemedicine, education)

**V. Teaching and Coaching (includes various types of learners: patients/families/communities, nurses, health care professionals, and other stakeholders) (6.67%)**

Knowledge of:

- A. Teaching and learning theories and concepts (e.g., adult learning theory, learning needs assessment, age appropriate educational methods, mentoring theories and concepts)

Skill in:

- B. Conducting needs assessment
- C. Designing teaching strategies to enhance learning environments, including designing health messages and health education materials to match literacy, ability, cultural diversity, and physical capabilities
- D. Mentoring, precepting, and developing professional growth strategies
- E. Coaching patients and families to navigate the healthcare system

**VI. Influencing Change: Change Theory and Techniques (10.67%)**

Knowledge of:

- A. Change theory
- B. Conflict management and group dynamics

Skill in:

- C. Assessing the drivers of and barriers to change
- D. Using expert power (e.g., clinical, legislative, political, organizational)
- E. Designing and implementing change at patient, practice and system levels (e.g., using persuasion to influence decision-making, building consensus, influencing changes in risk behaviors, engaging leaders in a planned change strategy (including informal leaders)
- F. Managing conflict

**VII. Systems/Organizations (10.67%)**

Knowledge of:

- A. Systems and organizational theories and concepts (e.g., intended and unintended outcomes of change across units; individual, group and organizational behaviors)

Skill in:

- B. Assessing organizational culture and evaluating environmental climate, including formal and informal power bases
- C. Creating, evaluating, and influencing organizational policies and standards of care
- D. Predicting and evaluating individual, group, and organizational behaviors
- E. Assist groups or organizations to respond proactively to outside influences requiring regulatory or other change
- F. Analyzing safety and error (e.g., root cause analysis and failure mode effects analysis)
- G. Designs programs to improve clinical and system level processes and outcomes

**VIII. Leadership, Interdisciplinary Collaboration, Professionalism, and Advocacy (10.67%)**

Knowledge of:

- A. Theories and concepts of leadership, collaboration and communication
- B. Political advocacy and activism
- C. Factors that influence scope of practice of the CNS

Skill in:

- D. Developing facilitators and removing barriers to collaboration
- E. Promotes the role and scope of practice of the CNS to legislators, regulators, other health care providers and the public
- F. Communicating expert knowledge
- G. Advocating for equitable healthcare through legislative, political and/or professional processes
- H. Promoting a practice climate conducive to providing ethical care
- I. Establishing collaborative relationships that promote patient/community safety, culturally competent care, and clinical excellence (e.g., leading, building teams, and facilitating groups)

**IX. Consultation (4.67%)**

Knowledge of:

- A. Consultation theory and research

Skill in:

- B. Providing patient-, nurse-, and system-centered consultation (e.g., clarifying the role of a consultant in problem-solving, developing alternative strategies for a client to consider, using clinical expertise as a power base, initiating consultation to obtain resources, analyzing the impact of fiscal, legal, accrediting and regulatory issues on practice)

**X. Measurement and Outcome Evaluation Methods (10.00%)**

Knowledge of:

- A. Measurement principles and concepts
- B. Clinical considerations of measurements, outcome evaluation methods and techniques (e.g., physiological, behavioral, psychosocial) required to:
  - 1. assess and diagnosis problems
  - 2. evaluate quality of care and clinical and fiscal outcomes.
- C. Systems characteristics, resources, and variances

Skill in:

- D. Designing and/or selecting measurement instruments for evaluation of interventions at the individual, group, and system level, including critiquing the validity, reliability and clinical applicability of measurement instruments
- E. Selecting appropriate outcomes of interest (e.g., clinical, fiscal, patient/family satisfaction, nurse satisfaction, benchmarking, organizational outcomes [e.g., readmissions, iatrogenic complications])
- F. Developing databases relevant to the evaluation of:
  - 1. CNS practice outcomes
  - 2. Efficacy of treatment

**XI. Evidence-based Practice and Research (15.33%)**

Knowledge of:

- A. Systematic inquiry (e.g., research methods, scientific methods)
- B. Evidence based practice principles and models (e.g., Patient Population, Intervention, Comparison, Outcome (PICO); levels of evidence; triad of evidence based practice – evidence, patient preference, and clinician experience)

Skill in:

- C. Accessing current and relevant data needed to answer clinical questions
- D. Analyzing, comparing, and prioritizing evidence
- E. Integrating evidence into the health, illness and wellness management
- F. Applying principles of evidence-based practice and quality improvement to all health care
- G. Cultivating a system climate of clinical inquiry
- H. Disseminating expert knowledge
- I. Participating in the research process (e.g. collecting data, subject recruitment, consulting in research)

## APPENDIX A

### Clinical Nurse Specialist Core Examination Logical Job Analysis Panel Members

<b>Participant</b>	<b>Credentials</b>	<b>Specialty</b>
Jeffrey Albaugh	MSN, APRN, CUCNS	Urology
Margueritte Barksdale	MSN, RN, OCNS-C	Orthopedics
Kathleen L. Dunn	MS, RN, CRRN-A, CNS	Rehabilitation
Susan Goodwin	MS, RN, CNS, CSPAN	Perianesthesia
Mary Gordon	MS, RN, CNS	Burn
Theresa Kessler	PhD, CNS-BC, RN	Adult Health
Susan Kohl	MSN, CSN-BC, RN	Medical-Surgical- Telemetry
Audrey Lyndon	PhD, RNC, CNS	Perinatal
Mary Anne Hales Reynolds	PhD, CNS-BC, RN	Cardiovascular
Amy Scholtz	MSN, RNC	Neonatal
Darleen Williams	MSN, RN, CEN, CCNS, EMT-P	Emergency

## Appendix B

### Clinical Nurse Specialist Core Examination Logical Job Analysis Linking Assignment Results

#### Essential Core Content Areas\*

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Theoretical foundations of CNS practice</li> <li>2. Phenomena of Concern</li> <li>3. Design and development of innovative nursing interventions</li> <li>4. Clinical inquiry/critical thinking using advanced knowledge</li> <li>5. Technology, products, and devices</li> <li>6. Teaching and coaching</li> <li>7. Influencing change</li> </ol> | <ol style="list-style-type: none"> <li>8. Systems thinking</li> <li>9. Leadership for multidisciplinary collaboration</li> <li>10. Consultation theory</li> <li>11. Measurement</li> <li>12. Outcome evaluation methods</li> <li>13. Evidence-based practice and research utilization</li> </ol> |
|---|--|

#### Linking Assignment Results

##### Competencies of CNS Practice\*

##### Corresponding Essential Core Content Areas

#### I. Sphere of Influence: Patient/Client

##### 1. Assessment

I-1a. Conducts comprehensive, holistic wellness and illness assessments using known or innovative evidence-based techniques, tools, and methods.	1, 2, 3, 4, 11
I-1b. Obtains data about context, such as disease, culture, and age-related factors, along with data related to etiologies (including both nondisease and disease-related factors) necessary to formulate differential diagnoses.	1, 2, 4, 11
I-1c. Identifies the need for new or modified assessment methods or instruments within a specialty area.	2, 3, 4, 5, 11, 13
I-1d. Before designing new programs, identified, collects, and analyzes appropriate data on the target population that serve as the basis for demonstrating CNS impact on program outcomes.	1, 2, 3, 4, 7, 8, 11, 12, 13

##### 2. Diagnosis, Planning, and Identification of Outcomes

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\* Essential Core Content Areas and Competencies of CNS Practice are cited from the National Association of Clinical Nurse Specialist. *Statement on Clinical Nurse Specialist Practice and Education, 2nd Edition (2004)* with permission from The National Association of Clinical Nurse Specialists (NACNS)

**Competencies of CNS Practice \***

**Corresponding Essential Core Content Areas**

I-2a. Synthesizes assessment data and develops differential diagnoses of illness problems.	1, 2, 4, 13
I-2b. Draws conclusions about individual or aggregate patient problems with etiologies amenable to nursing interventions.	1, 2, 4, 13
I-2c. Describes problems in context, including variations in normal and abnormal symptoms, functional problems, or risk behaviors inherent in disease, illness, or developmental processes.	1, 2, 4, 13
I-2d. Plans for systematic investigation of patient problems needing clinical inquiry, including etiologies of problems, needs for interventions, outcomes of current practice, and costs associated with care.	1, 2, 3, 4, 11, 12, 13
I-2e. Predicts outcomes of interventions relative to prevention, remediation, modification, and/or resolution of problems.	1, 2, 4, 11, 12, 13,
I-2f. Anticipates ethical conflicts that may arise in the healthcare environment and plans for resolution.	1, 2, 4, 8, 13

**3. Intervention**

I-3a. Selects evidence-based nursing interventions for patients/clients that target the etiologies of illness or risk behaviors.	1, 2, 3, 4, 6, 13
I-3b. Develops interventions that enhance the attainment of predicted outcomes while minimizing unintended consequences.	1, 2, 3, 4, 12, 13
I-3c. Implements interventions that integrate the unique needs of individuals, families, groups, and communities.	1, 2, 3, 4, 6, 7, 13
I-3d. Collaborates with multidisciplinary professionals to integrate nursing interventions into a comprehensive plan of care to enhance patient outcomes.	1, 2, 3, 4, 7, 8, 9, 10, 12, 13
I-3e. Incorporates evidence-based research into nursing interventions within the specialty population.	2, 3, 4, 13

**4. Evaluation**

I-4a. Selects, develops, and/or applies appropriate methods to evaluate outcomes of nursing interventions.	1, 2, 4, 11, 12, 13
I-4b. Evaluates effects of nursing interventions for individuals and populations of patient/clients for clinical effectiveness, patient responses, efficiency, cost-effectiveness, consumer satisfaction, and ethical considerations.	1, 2, 4, 11, 12, 13

**Competencies of CNS Practice \***

**Corresponding Essential Core Content Areas**

I-4c. Collaborates with patient/clients and other healthcare professionals, as appropriate, to monitor progress toward outcomes and modifications as needed.	2, 4, 7, 9, 10, 11, 12
I-4d. Evaluates the impact of nursing interventions on fiscal and human resources.	4, 8, 11, 12
I-4e. Documents outcomes in a reportable manner.	2, 4, 11, 12
I-4f. Disseminates the results of innovative care.	6, 7, 8, 9, 13

**II. Sphere of Influence: Nurses and Nursing Practice**

**1. Assessment: Identifying and Defining Problems and Opportunities**

II-1a. Uses/designs methods and instruments to assess patterns of outcomes related to nursing practice within and across units of care.	1, 2, 4, 8, 11, 12, 13
II-1b. Uses/designs appropriate methods and instruments to assess knowledge, skills, and practice competencies of nurses and nursing personnel to advance the practice of nursing.	1, 2, 4, 6, 11, 13
II-1c. Identifies, in collaboration with nursing personnel and other healthcare providers, needed changes in equipment or other products based on evidence, clinical outcomes and cost-effectiveness.	3, 4, 5, 8, 9, 12, 13
II-1d. Gathers and analyzes data to substantiate desirable and undesirable patient outcomes linked to nursing practice.	2, 4, 11, 12, 13
II-1e. Identifies interpersonal, technological, environmental, or system facilitators and barriers to implementing nursing practices that influence nurse-sensitive outcomes.	1, 4, 5, 7, 8, 12, 13
II-1f. Collaborates with nurses to assess the processes within and across units that contribute to barriers in changing nursing practices.	1, 4, 7, 8, 9, 10

**2. Diagnosis, Outcome Identification, and Planning**

II-2a. Draws conclusions about the evidence-base and outcomes of nursing practice that require change, enhancement, or maintenance.	1, 2, 4, 12, 13
II-2b. Identifies desired outcomes of continuing or changing nursing practices.	2, 4, 12, 13
II-2c. Anticipates both intended and unintended consequences of change.	4, 7, 8, 13
II-2d. Incorporates clinical and fiscal considerations in	4, 5, 8, 12, 13

**Competencies of CNS Practice \***

**Corresponding Essential Core Content Areas**

	the planning process for product and device evaluation.	
II-2e.	Plans for achieving intended and avoiding unintended outcomes.	4, 8, 12, 13
II-2f.	Plans for using facilitators and overcoming barriers for changing nursing practice and incorporating new products and devices.	5, 7, 8, 9
II-2g.	Considers resource management needs when weighing the benefits of changing practices.	4, 7, 8
<b>3. Intervention: Developing and Testing Solutions</b>		
II-3a.	Anchors nursing practice to evidence-based information to achieve nurse-sensitive outcomes.	2, 12, 13
II-3b.	Mentors nurses to critique and apply research evidence to nursing practices.	4, 6, 7, 13
II-3c.	Works collaboratively with nursing personnel to implement innovative interventions that improve outcomes.	3, 4, 7, 9, 12, 13
II-3d.	Implements interventions that are effective and appropriate to the complexity of patient care problems and the resources of the system.	3, 4, 7, 8, 13
II-3e.	Develops and implements educational programs that target the needs of staff to improve nursing practice and patient outcomes.	1, 4, 6, 13
II-3f.	Assists staff in the development of innovative, cost-effective patient/client programs of care.	3, 4, 6, 9, 12, 13
II-3g.	Mentor nurses to acquire new skills and develop their careers.	6, 7
II-3h.	Creates an environment that stimulates self-learning and reflective practice.	6, 8, 13
<b>4. Evaluation of the Effects</b>		
II-4a.	Evaluates the ability of nurses and nursing personnel to implement changes in nursing practice, with individual patients/clients and populations.	4, 6, 7
II-4b.	Evaluates the effects of change on clinical outcomes, nurse satisfaction, and collaboration with other multidisciplinary healthcare providers.	4, 7, 8, 9, 11, 12
II-4c.	Documents outcomes in a reportable manner.	11, 12
II-4d.	Disseminates results of changes to stakeholders.	6, 7, 9

**Competencies of CNS Practice \***

**Corresponding Essential Core  
 Content Areas**

<b>III. Sphere of Influence: Organization/System</b>	
<b>1. Assessment: Identifying and Defining Problems and Opportunities</b>	
III-1a. Uses/designs system-level assessment methods and instruments to identify organization structures and functions that impact nursing practice and nurse-sensitive patient care outcomes.	1, 4, 8, 11, 13
III-1b. Assesses the professional climate and multidisciplinary collaboration within and across units for their impact on nursing practice and outcomes	4, 8, 9
III-1c. Assesses targeted system-level variables, such as culture, finances, regulatory requirements, and external demands that influence nursing practice and outcomes.	1, 4, 8, 12, 13
III-1d. Identifies relationships within and external to the organization/system that are facilitators or barriers to nursing practice and any proposed change.	4, 7, 8, 9, 10
III-1e. Identifies effects of organizational culture on departments, teams and/or groups within an organization.	8, 9
III-1f. Monitors legislative and regulatory health policy that may impact nursing practice and/or CNS practice for the specialty area/population.	8, 9
<b>2. Diagnosis, Outcome Identification, and Planning</b>	
III-2a. Diagnoses facilitators and barriers to achieving desired outcomes of integrated programs of care across the continuum and at points of service.	4, 8, 10, 11
III-2b. Diagnoses variations in organizational culture (i.e., values, beliefs, or attitudes) that can positively or negatively affect outcomes.	4, 8
III-2c. Draws conclusions about the effects of variance across the organization that influence outcomes of nursing practice.	4, 8, 12
III-2d. Plans for achieving intended system-wide outcomes, while avoiding or minimizing unintended consequences.	4, 8, 12
III-2e. Draws conclusions about the impact of legislative and regulatory policies as they apply to nursing practice and outcomes for specialty populations.	2, 4, 8
<b>3. Intervention: Developing and Testing Solutions</b>	
III-3a. Develops innovative solutions that can be generalized across differing units, populations, or specialties.	3, 4, 8, 13

**Competencies of CNS Practice \***

**Corresponding Essential Core  
 Content Areas**

III-3b. Leads nursing and multidisciplinary groups in implementing innovative patient care programs that address issues across the full continuum of care for different population groups and/or different specialties.	2, 7, 8, 9
III-3c. Contributes to the development of multidisciplinary standards of practice and evidence-based guidelines for care, such as pathways, care maps, benchmarks.	2, 8, 9, 10, 13
III-3d. Solidifies relationships and multidisciplinary linkages that foster the adoption of innovations.	7, 8, 9, 13
III-3e. Develops or influences system-level policies that will affect innovation and programs of care.	4, 7, 8, 9
III-3f. Targets and reduces system-level barriers to proposed changes in nursing practices and programs of care.	7, 8, 9, 10
III-3g. Facilitates factors to effect program-level change.	7, 8, 9
III-3h. Designs methods/strategies to sustain and spread change and innovation.	4, 7, 8
III-3i. Implements methods and processes to sustain evidence-based changes in nursing practice, programs of care and clinical innovation.	6, 7, 8, 13
III-3j. Provides leadership for legislative and regulatory initiatives to advance the health of the public with a focus on the specialty practice area/population.	2, 7, 9
III-3k. Mobilizes professional and public resources to support legislative and regulatory issues that advance the health of the public.	7, 8, 9
<b>4. Evaluation of the Effects</b>	
III-4a. Selects evaluation methods and instruments to identify system-level outcomes of programs of care.	4, 8, 11, 12, 13
III-4b. Evaluates system-level clinical and fiscal outcomes of products, devices, and patient care processes using performance methods.	5, 8, 11, 12
III-4c. Uses organizational structure and processes to provide feedback about the effectiveness of nursing practices and multidisciplinary relationships in meeting identified outcomes of programs of care.	2, 7, 8, 9, 12
III-4d. Evaluates organizational policies for their ability to support and sustain outcomes of programs of care	4, 8, 12, 13

**Competencies of CNS Practice \***

**Corresponding Essential Core Content Areas**

Competencies of CNS Practice *	Corresponding Essential Core Content Areas
III-4e. Evaluates and documents the impact of CNS practice on the organization	1, 4, 7, 8, 11, 12, 13
III-4f. Documents all outcomes in a reportable manner	11, 12
III-4g. Disseminates outcomes of system-wide changes, impact of nursing practices, and CNS work to stakeholders.	6, 7, 8, 9

**Other Areas of Knowledge Panel Members Suggested to Add**

- Collect data from a variety of sources/methods
- Prioritize diagnoses
- Making appropriate referrals
- Ethical decision making with treatments related to industry
- Research beyond Evidence Based Practice
- Diagnosis and Interventions related to prescriptive authority
- Issues related to Diversity
- Leadership within large and small organizations
- Concept of power
- Designing measurement instruments
- Various scopes of practices
- Autonomy of practice
- Legal Liability
- Environmental influences on care
- Regulatory bodies, medicare, Medicaid that are also at community based and not just hospital based centers
- Health policy and nursing practice
- Leadership principles/content
- Consultation process
- Dissemination of findings
- Advocacy
- Leadership
- Legislative competency

## Appendix C

### Clinical Nurse Specialist Core Examination Logical Job Analysis Essential Core Content Areas and Corresponding Competencies of CNS Practice\*

Essential Core Content Areas	Competencies of CNS Practice
1. Theoretical foundations of CNS practice	I-1a, I-1b, I-1d, I-2a, I-2b, I-2c, I-2d, I-2e, I-2f, I-3a, I-3b, I-3c, I-3d, I-4a, I-4b, II-1a, II-1b, II-1e, II-1f, II-2a, II-3e, III-1a, III-1c, III-4e
2. Phenomena of Concern	I-1a, I-1b, I-1c, I-1d, I-2a, I-2b, I-2c, I-2d, I-2e, I-2f, I-3a, I-3b, I-3c, I-3d, I-3e, I-4a, I-4b, I-4c, I-4e, II-1a, II-1b, II-1d, II-2a, II-2b, II-3a, III-2e, III-3b, III-3c, III-3j, III-4c
3. Design and development of innovative nursing interventions	I-1a, I-1c, I-1d, I-2d, I-3a, I-3b, I-3c, I-3d, I-3e, II-1c, II-3c, II-3d, II-3f, III-3a
4. Clinical inquiry/critical thinking using advanced knowledge	I-1a, I-1b, I-1c, I-1d, I-2a, I-2b, I-2c, I-2d, I-2e, I-2f, I-3a, I-3b, I-3c, I-3d, I-3e, I-4a, I-4b, I-4c, I-4d, I-4e, II-1a, II-1b, II-1c, II-1d, II-1e, II-1f, II-2a, II-2b, II-2c, II-2d, II-2e, II-2g, II-3b, II-3c, II-3d, II-3e, II-3f, II-4a, II-4b, III-1a, III-1b, III-1c, III-1d, III-2a, III-2b, III-2c, III-2d, III-2e, III-3a, III-3e, III-3h, III-4a, III-4d, III-4e
5. Technology, products, and devices	I-1c, II-1c, II-1e, II-2d, II-2f, III-4b
6. Teaching and coaching	I-3a, I-3c, I-4f, II-1b, II-3b, II-3e, II-3f, II-3g, II-3h, II-4a, II-4d, III-3i, III-4g
7. Influencing change	I-3c, I-3d, I-4c, I-4f, II-1e, II-1f, II-2c, II-2f, II-2g, II-3b, II-3c, II-3d, II-3g, II-4a, II-4b, II-4d, III-1d, III-3b, III-3d, III-3e, III-3f, III-3g, III-3h, III-3i, III-3j, III-3k, II-4c, III-4e, III-4g
8. Systems thinking	I-1d, I-2f, I-3d, I-4d, I-4f, II-1a, II-1c, II-1e, II-1f, II-2c, II-2d, II-2e, II-2f, II-2g, II-3d, II-3h, II-4b, III-1a, III-1b, III-1c, III-1d, III-1e, III-1f, III-2a, III-2b, III-2c, III-2d, III-3a, III-3b, III-3c, III-3d, III-3e, III-3f, III-3g, III-3h, III-3i, III-3k, III-4a, III-4b, III-4c, III-4d, III-4e, III-4g
9. Leadership for multidisciplinary collaboration	I-3d, I-4c, I-4f, II-1c, II-1f, II-2f, II-3c, II-3f, II-4b, II-4d, III-1b, III-1d, III-1e, III-1f, III-3b, III-3c, III-3e, III-3f, III-3g, III-3j, III-3k, III-4c, III-4g, III-3j, III-3k, III-4c, III-4g
10. Consultation theory	I-3d, I-4c, II-1f, III-1d, III-2a, III-3c, III-3f
11. Measurement	I-1a, I-1b, I-1c, I-1d, I-2d, I-2e, I-4a, I-4b, I-4c, I-4d, I-4e, II-1a, II-1b, II-1d, II-4b, II-4c, III-1a, III-2a, III-4a, III-4b, III-4e, III-4f
12. Outcome evaluation methods	I-1d, I-2d, I-2e, I-3b, I-3d, I-4a, I-4b, I-4c, I-4d, I-4e, II-1a, II-1c, II-1d, II-1e, II-2a, II-2b, II-2d, II-2e, II-3a, II-3c, II-3f, II-4b, II-4c, III-1c, III-2c, III-2d, III-4a, III-4b, III-4c, III-4d, III-4e, III-4f
13. Evidence-based practice and research utilization	I-1c, I-1d, I-2a, I-2b, I-2c, I-2d, I-2e, I-2f, I-3a, I-3b, I-3c, I-3d, I-3e, I-4a, I-4b, I-4f, II-1a, II-1b, II-1c, II-1d, II-1e, II-2a, II-2b, II-2c, II-2d, II-2e, II-3a, II-3b, II-3c, II-3d, II-3e, II-3f, II-3h, III-1a, III-1c, III-3a, III-3c, III-3d, III-3i, III-4a, III-4d, III-4e

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See Appendix B for a listing of the NACNS' Competencies of CNS Practice.