

# Advanced Practice Resources: Orthopaedic Nursing Graduate Curriculum, Role Descriptions, & Preceptor Guidelines, 3rd Edition

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#### **Disclaimer**

The NAON Advance Practice Resources Guide was written by and for orthopaedic clinical nurse specialists and nurse practitioners as a guide for developing orthopaedic nursing graduate curriculum, role descriptions, and preceptor guidelines. The strength of the document content was derived from various nursing regulatory and specialty associations. Specific requirements and guidelines from colleges of nursing, as well as employment role descriptions and preceptor guidelines, should be taken into account for individual situations. This guide should be interpreted as applicable only to those actions within the scope of the individual advance practice nurse's license and certification while not requiring the nurse to engage in any action that is outside the scope of individual licensure or competency.

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## Historical Perspective And Scope

In 2002, the National Association of Orthopaedic Nurses (NAON) released the second edition of “Advanced Practice Resources: Graduate Curriculum, Role Descriptions, Preceptor Guidelines”. The document was the culmination of work done by an advanced practice task force that included the following:

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The document provided a guide for clinical nurse specialist (CNS) and nurse practitioner (NP) masters students who wanted a clinical focus in orthopaedic nursing. A course of study was developed that included suggestions for courses and learning opportunities to develop expertise in advanced orthopaedic nursing practice. Orthopaedic nurses with advanced education practice in many roles, and across settings, including education, administration and research. The scope of this document remains limited to the CNS and NP, which are two of the four defined categories of advanced practice registered nurses (APRN), i.e. clinical nurse specialists, nurse practitioners, nurse midwives and nurse anesthetist. (American Nurses Association [ANA], 2010).

Although the CNS and the NP have a different focus in their role descriptions and domains of practice, they share some advanced practice competencies and take similar core courses. The CNS competencies were updated by the National Association of Clinical Nurse Specialists (NACNS) in conjunction with The National CNS Competency Task Force, of which NAON was a member (NACNS, 2010). These competencies include behavioral statements associated with the CNS spheres of influence and nurse characteristics such as direct care, consultation, systems leadership, collaboration, coaching, research, ethical decision-making, moral agency and advocacy. The American Academy of Nurse Practitioners (AANP) has published the Standards of Practice for Nurse Practitioners (AANP, 2010). The standards of practice serve as a basis for practice and include the following concepts: 1) process of care, 2) care priorities, 3) inter-professional/collaborative responsibilities, 4) accurate documentation of patient status and care, 5) responsibility as patient advocate, 6) quality assurance and continued competence, 7) adjunct roles, and 8) research as a basis for practice. The CNS and NP practicing in the specialty of orthopaedics incorporate additional specialty competencies identified in this document into their practice. These competencies evolve as the science of orthopaedics evolves.

Both CNS and NP curriculums are designed to further develop critical thinking, communication and advanced clinical decision making. Both programs include foundational courses in advanced health/physical assessment, advanced physiology/pathophysiology, and advanced pharmacology (American Association of Colleges of Nursing [AACN], 2006).

Differences are apparent in their role descriptions and domains of practice. Elective and specialty courses, along with precepted clinical experiences, provide the foundation for role development and specialization.

This third edition of “NAON Advanced Practice Resources” addresses specialty curriculum content and includes suggestions for course work and clinical experiences that culminate in the achievement of Orthopaedic Advanced Practice specialized competencies outlined in the Role Description sections.

In October 2006, the Orthopaedic Nursing Certification Board (ONCB®) developed advanced practice nurse certification for both the CNS and NP. Given the benefit of certification to patients and society and that certification is a validation of knowledge and experience, it is NAON’s position that all nurses who provide care to patients with musculoskeletal diseases should seek to become certified by ONCB (NAON, 2010a). After completion of a master’s or doctorate degree and the required hours of work experience as a CNS or NP in Orthopaedic nursing practice, the APRN graduate should seek certification through ONCB as evidence of a graduate-level prepared specialty nurse.

Increasing numbers of practice-focused doctoral programs in nursing have replaced master’s programs over the last decade. The doctorate of nursing practice (DNP) is a terminal practice degree in the discipline and by definition is specialized (AACN, 2006).

The specialized competencies, defined by the specialty organizations, are a required and major component of the DNP curriculum. Specialty organizations develop competency expectations that build upon and complement DNPEssentials1through 8. All DNPgraduates, prepared as APNs, must be prepared to sit for national specialty APNcertification. However, all advanced nursing practice graduates of a DNP program should be prepared and eligible for national and advanced specialty certification when available (AACN, 2006; NACNS, 2009).

NAON supports the “Consensus Model for APRN Regulation: Licensure, Accreditation, Certification and Education (LACE)” (Advanced Practice Registered Nurse Consensus Work Group and the National Council of State Boards of Nursing APRN Advisory Committee, 2008). The consensus model supports specialty nursing practice as optional, but a more focused area of preparation and practice of the APRN role. The specialty certification is meant as an adjunct, not a substitute for, national certification by a recognized certifying body such as the Nurses Credentialing Center (ANCC), American Association of Critical Care Nurses (AACN), or the American Academy of Nurse Practitioners (AANP). Some differences by states still exist for certification; however, state licensing boards will not regulate the APRN at the level of specialties. Professional certification in the specialty area of practice is strongly recommended (APRN Consensus Work Group and the National Council of State Boards of Nursing APRN Advisory Committee, 2008).

Revisions to this document included input from NAON’s Advanced Practice Special Interest Groups (SIG) via the online forum and an on-site written survey of APRNs at the 2010 annual Congress. A broad based group of NAON members, with both master’s and doctoral degrees, participated as authors and reviewers. The authors are APRNs certified by ONCB.

## **Guidelines For An Orthopaedic Focus In An Advanced Graduate Nursing Program**

### **Overview and Purpose**

This document provides guidelines for nurses who are interested in pursuing a master’s of science degree or doctorate in nursing with a clinical focus in orthopaedic nursing. Since most advanced graduate nursing programs do not have a specialty track for orthopaedics, this document serves as a guide for development of a clinical concentration in advanced orthopaedic nursing practice across the lifespan. It should be helpful to both students and educators.

The proposed course of study provides guidelines for learning opportunities for graduate students to develop expertise in advanced orthopaedic nursing practice. The proposed curriculum encompasses both theory and practice components.

## Philosophy

The National Association of Orthopaedic Nurses believes that the specialty of orthopaedic nursing should set forth the highest standards of nursing practice for optimum patient care. NAON believes in the concept of the person as a total being having physical, social, emotional, and spiritual needs. Orthopaedic nurses educated at the master's and doctoral level are prepared to provide specialized care to a variety of clients with orthopaedic concerns and to affect a positive change in health care. The Orthopaedic APRN possesses a high degree of professional competence and clinical knowledge of orthopaedics and orthopaedic nursing. NAON's position is that the APRN provides expert care to individuals diagnosed with musculoskeletal conditions and educates and supports community groups interested in health promotion and illness/injury prevention. The Orthopaedic APRN may fulfill various roles including direct caregiver, consultant, educator, researcher, administrator, and/or primary health care provider (NAON, 2010b). The Orthopaedic APRN is able to function collaboratively with other professionals in assessing and addressing health care needs of society, diagnosing and treating orthopaedic conditions, participating in research, and evaluating outcomes of care.

## Objectives

Upon completion of the program, the graduate will:

- Demonstrate competency in advanced orthopaedic nursing practice with clients across the lifespan, in a variety of settings (ambulatory, acute/sub acute care, community, long-term care, office practice, and rehabilitation).
- Synthesize knowledge from arts, sciences, and humanities, as it relates to orthopaedic nursing to provide a basis for practice and role development.
- Collaborate with clients, families, and other health care providers to promote health.
- Apply teaching/learning principles in a variety of settings to educate clients, families and other health care providers.
- Participate in research to expand and further generate nursing knowledge, especially in the area of orthopaedics.
- Demonstrate leadership abilities and organizational skills in areas of clinical practice, research, education and case management.
- Practice as either an: Orthopaedic CNS or Orthopaedic NP.
- Pursue certification from the ONCB, when eligible, as an OCNS-C® or ONP-C®.

## Advanced Practice Curriculum Plan

The graduate core curriculum for a Master's in Nursing includes nine essentials that are required for all students:

- **Essential I: Scientific Background for Practice**
  - Recognizes that the master's-prepared nurse integrates scientific findings from nursing, biopsychosocial fields, genetics, public health, quality improvement, and organizational sciences for the continual improvement of nursing care across diverse settings.
- **Essential II: Organizational and Systems Leadership**
  - Recognizes that organizational and systems leadership are critical to the promotion of high quality and safe patient care. Leadership skills are needed that emphasize ethical and critical decision-making, effective working relationships, and a systems-perspective.

- **Essential III: Quality Improvement and Safety**
  - Recognizes that a master’s-prepared nurse must be articulate in the methods, tools, performance measures, and standards related to quality, as well as prepared to apply quality principles within an organization.
- **Essential IV: Translating and Integrating Scholarship into Practice**
  - Recognizes that the master’s-prepared nurse applies research outcomes within the practice setting, resolves practice problems, works as a change agent, and disseminates results.
- **Essential V: Informatics and Healthcare Technologies**
  - Recognizes that the master’s-prepared nurse uses patient-care technologies to deliver and enhance care and uses communication technologies to integrate and coordinate care.
- **Essential VI: Health Policy and Advocacy**
  - Recognizes that the master’s-prepared nurse is able to intervene at the system level through the policy development process and to employ advocacy strategies to influence health and health care.
- **Essential VII: Interprofessional Collaboration for Improving Patient and Population Health Outcomes**
  - Recognizes that the master’s-prepared nurse, as a member and leader of interprofessional teams, communicates, collaborates, and consults with other health professionals to manage and coordinate care.
- **Essential VIII: Clinical Prevention and Population Health for Improving Health**
  - Recognizes that the master’s-prepared nurse applies and integrates broad, organizational, client-centered, and culturally appropriate concepts in the planning, delivery, management, and evaluation of evidence-based clinical prevention and population care and services to individuals, families, and aggregates/identified populations.
- **Essential IX: Master’s-Level Nursing Practice**
  - Recognizes that master’s-level nursing practice is broadly defined as any form of nursing intervention that influences healthcare outcomes for individuals, populations, or systems. Master’s-level nursing graduates must have an advanced level of understanding of nursing and relevant sciences as well as the ability to integrate this knowledge into practice. Nursing practice interventions include both direct and indirect care components (AACN, 2011).

There are three additional elements for APRNs: advanced physical assessment, advanced physiology and pathophysiology and advanced pharmacology (AACN, 2011).

The DNP curriculum contains eight foundational curricular elements with competencies for:

- Scientific Underpinnings for Practice.
- Organizational and Systems Leadership for Quality Improvement and Systems Thinking.
- Clinical Scholarship and Analytical Methods for Evidence-Based Practice.
- Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of health Care.
- Health Care Policy for Advocacy in Health Care.
- Interprofessional Collaboration for Improving Patient and Population health Outcomes.
- Clinical Prevention and Population Health for Improving the Nation’s Health.
- Advanced Nursing Practice (AACN, 2006).

This document contains suggestions for each of these three content areas: advanced health/physical assessment, advanced physiology/pathophysiology, and advanced pharmacology, as well as practice experiences needed for advanced nursing practice at the master’s and doctorate level.

## Suggested Courses

In addition to graduate core curriculum content outlined in *The Essentials of Master's Education for Advanced Practice Nursing* (2011) and *The Essentials of Doctoral Education for Advanced Practice Nursing* (2006), the student should include course work that contains theoretical content specific to the musculoskeletal system as well as clinical practicum

experiences with patients who have musculoskeletal (orthopaedic) abnormalities across the life span. The clinical practicums ideally incorporate experiences throughout the continuum of care encompassing such foci as outpatient evaluation and management, the perioperative experience, rehabilitation, long-term care, and home care. Students should have the opportunity to relate research and various theories applicable to clients with orthopaedic conditions. Emphasis is on evidenced based practice within the orthopaedic specialty including clinical expertise is combined with integration of best scientific evidence, patient values and preferences, and the clinical circumstances. Recommended content areas for course work and learning activities for clinical practicums include:

- Pathophysiology related to the musculoskeletal system.
- Disorders of skeletal function including developmental, traumatic, infectious and metabolic.
- Assessment and management of clients with musculoskeletal conditions.
- Assessment, health history, physical examination, and appropriate diagnostic testing, and referrals for integrated care across the continuum.
- Identification of musculoskeletal disorders, including, but not limited to developmental, traumatic, infectious and metabolic.
- Differential diagnosis and development of interventions, including long-term and short-term outcomes incorporating individual diversities related, but not limited to, life circumstances, cultural/ethnic background, and life span/developmental variations.
- Application of musculoskeletal assessment, diagnosis and intervention to an age-specific population, such as pediatrics or geriatrics if appropriate.
- Development of outcome criteria to assess interventions in the continuum of care.

Clinical courses should include content in role development in orthopaedics as either a CNS or NP. The proposed courses in terms of credit hours and number of courses would be dependent on the existing curriculum design.

### **Electives to Support Clinical Interest**

Suggested elective courses may include leadership principles, informatics, immunology, genetics, counseling, crisis intervention, psychology, pediatric growth and development, middle age and aging, biomechanics/kinesiology, pain management, alternative therapies, epidemiology and neuroanatomy.

### **Clinical Settings/Preceptors**

Settings should include, but not be limited to, ambulatory, acute/sub acute care, community, long-term care, office practice and rehabilitation. Orthopaedic CNSs or NPs are the first choice when selecting a clinical preceptor. Time spent with an orthopaedic surgeon as a preceptor for clinical expertise is valuable, (according to state rules and regulations) but the student needs sufficient time with an advanced practice nurse to facilitate socialization and role development.

### **Guidelines For Specific Course Content**

The following pages contain specific content suggestions in the areas of:

- I. Clinical Practice
- II. Education
- III. Consultation
- IV. Leadership
- V. Research

## I. **Clinical Practice**

### **Outcome**

The Orthopaedic APRN will demonstrate clinical expertise in providing direct patient care or in supervising others providing care using assessment, diagnosis, planning, intervention, and evaluation in the patient/family with musculoskeletal abnormalities, trauma, or surgery.

### **Criteria**

#### **Assessment**

- Develops patient/family and environmental risk factors for both musculoskeletal abnormalities and trauma.
- Identifies physical and psychosocial responses to musculoskeletal conditions and trauma and intervenes appropriately, providing resources/support systems for patient/family.
- Identifies patient/family/community knowledge of and/or knowledge deficits related to musculoskeletal abnormalities and trauma.
- Identifies public policy as it relates to prevention, treatment, and research pertaining to trauma, musculoskeletal abnormalities, and the elderly and infant mortality.
- Identifies accident prevention, treatment and rehabilitation for patient/family/community encompassing the lifespan.

#### **Diagnosis**

- Identifies differential diagnoses as it relates to specific musculoskeletal conditions.
- Identifies problems and/or deficits in patient/family responses to level of wellness.
- Describes potential and actual physical and psychosocial responses to musculoskeletal abnormalities and/or trauma.
- Compares and contrasts normal aging physiologic vs pathophysiologic changes in the elderly.
- Lists cultural, ethnic, familial, genetic, and geographic high-risk groups for potential musculoskeletal abnormalities.

#### **Planning**

- Plans short-term/long-term goals based on outcome criteria that are patient-focused.
- Uses inter-professional relationships in planning care with other members of the health care team.
- Establishes priorities and uses conceptual frameworks in developing nursing protocols and procedures.
- Involves patient/family in plan of care.
- Uses research as basis for planning change.

#### **Interventions**

- Teaches and prepares families before, during, and after diagnostic studies, procedures and surgery.
- Implements and/or directs plan of care.
- Charts responses to treatments and patient/family knowledge of musculoskeletal problem.
- Uses inter-professional relationships with all members of the health care team to promote optimal patient care.
- Assists with and/or coordinates continuity of care through discharge planning, home care, ambulatory care, and referrals.
- Uses a theoretical framework in nursing practice.
- Serves as a role model to demonstrate communication skills and advanced technical care.
- Discusses ICD-10 codes to assist patient/family with insurance filing as well as self-reimbursement and physician reimbursement.

## Evaluation

- Evaluates effectiveness of care based on outcome criteria.
- Evaluates accessibility of resources to meet patient/family/community needs and suggests alterations as indicated.
- Assesses efficiency of care regarding cost containment, facilitation, referrals, and communication to initiate changes.
- Identifies potential changes in orthopaedic nursing based on research and communicates these potential changes.

## Suggested Content for Clinical Practice

- *Core Curriculum for Orthopaedic Nursing (7th ed.)* (NAON, 2013).
- Technical principles and skills in physical assessment, traction, casting, mobilization, immobilization, preoperative/postoperative care and education, and rehabilitation.
- Pathophysiology
  1. Physiologic and pathophysiologic changes in the musculoskeletal system across the lifespan.
  2. Physiology of multiple organ systems/systems failures as seen with associated conditions such as malignancy, renal disease, multiple trauma, etc.
  3. Genetic aspects of orthopaedic anomalies.
  4. Epidemiology in relationship to bone abnormalities.
  5. Principles of fracture management.
  6. Biomechanics and movement.
  7. Physiology of major body systems and systems failure as they affect bone growth and the healing process.
- Principles of Disease Management
  1. Fracture /trauma prevention.
  2. Diagnosis and treatment modalities and interpretation.
  3. X-rays, CAT scans, MRI, Laboratory tests, hematology, cytology, pathology, etc.
  4. Pain management in adults/children.
  5. Epidemiology and pharmacology.
  6. Pharmacology.
  7. Nutritional role in orthopaedic abnormalities and fracture healing.
- Rehabilitation
  1. Physical therapy and occupational therapy treatment modalities.
  2. Role of body image in healing.
  3. Visualization, imagery, and music therapy treatment modalities.
- Psychosocial theories
  1. Illness-wellness continuum across the lifespan.
  2. Grief and loss.
  3. Stress management.
  4. Sexuality.
- Economics
  1. Reimbursement and insurance issues including HMOs, PPOs, Medicare, Medicaid, and VA.
  2. Cost efficient health care choices.
- Legal/Ethical Issues
  1. Informed consent.
  2. Patient's bill of rights.
  3. Cost ethics in treatment or in non-treatment.
  4. Cultural and religious issues.
  5. APRN legal guidelines and scope of practice.

## II. **Education**

### **Outcome**

The Orthopaedic APRN will demonstrate teaching/learning principles when educating the patient (adult or child)/family/community, and peers through assessment, diagnosis, planning, interventions or evaluations based on outcome criteria.

### **Criteria**

#### **Assessment**

- Summarizes needs of public/community or professionals based on evaluations.
- Identifies resources to meet the educational needs of the public/community and professional peers involved in orthopaedic nursing.

#### **Diagnosis**

- Identifies knowledge deficits in patients/families/communities or peers regarding orthopaedics and orthopaedic nursing: orthopaedic diseases, abnormalities, trauma, treatment resources, and injury prevention.
- Defines problems with delivery of services and education to meet the knowledge deficits.

#### **Planning**

- Works with patients/families and/or peers to develop educational goals, objectives, and outcome criteria based on teaching/learning principles.
- Identifies appropriate methods and materials to assist in achievement of goals, objectives and outcome criteria.

#### **Implementation**

- Relates orthopaedic information to patients, families, communities, peers, students, staff, and other members of the health care team.
- Develops resources for information such as web pages.
- Functions as a preceptor for students and staff.
- Develops lectures and/or posters to meet educational needs of the patient/family/community and other health team members.

#### **Evaluation**

- Documents learning by use of outcome criteria.
- Utilizes a measurement tool to evaluate learning.

#### **Suggested Content in Education**

- Teaching/learning principles for all ages.
- Educational strategies including lesson planning, principles of motivation, communication skills, audiovisual development, and development, implementation and evaluation tools.
- Public speaking and presentation principles.

## III. **Consultation**

### **Outcome**

The orthopaedic APRN demonstrates advanced knowledge of the consultation process.

### **Criteria**

- Outlines data in a needs assessment for individuals, families, and community groups within the health care team and/or educational system.

- Analyzes data using principles of consultation.
- Identifies goals using an interprofessional relationship with individuals, peers, community groups and healthcare professions.
- Uses consultation principles, outlines recommendations to improve care of the patient/family or group.
- Demonstrates consultation theory by use of contacts either as the consultor or consultee.
- Demonstrates innovative approaches to meet the needs of the orthopaedic patient/family or educational group.
- Functions as a change agent.
- Demonstrates use of consultation theories as a role model for peers.
- Serves as a consultant to patients/families and/or educational or community groups in the health care system.
- Compares and contrasts outcomes of recommendations to affect change in orthopaedic nursing care.
- Modifies contracts/goals or outcome criteria based on re-evaluations.

### **Suggested Content**

Per *NAON Core Curriculum* (7<sup>th</sup>ed.) (NAON, 2013) and *The Essentials of Master's Education for Advanced Practice Nursing* (AACN, 2011).

## **IV. Organizations and Systems Leadership**

### **Outcome**

The orthopaedic APRN demonstrates principles of organization as well as leadership and management within the health care system.

### **Criteria**

- Summarizes environmental factors impacting health care delivery.
- Recognizes leadership potential and behaviors in others.
- Identifies health care policy issues.
- Identifies need for development of programs to enhance knowledge of orthopaedics.
- Outlines specific behaviors in the formal and informal structure of the health care system.
- Defines group relationship and management problems within the system that need nurturing, restructuring, or change.
- Plans with peers to nurture, restructure, or implement changes in orthopaedic nursing care based on research.
- Combines principles of behavior management/modification and conflict management in the health care system and community.
- Uses data analysis and operates as a change agent.
- Compares and contrasts need for change.
- Participates in health care policy changes.
- Produces orthopaedic nursing policies, procedures, and related standards for the health care system in a collegial relationship with peers.
- Computes budgets within the system.
- Monitors compliance with standards of care.
- Documents actions, outcomes, and revisions as necessary.
- Serves as an active member of professional nursing organizations.
- Participates in quality assurance/improvement programs.
- Participates in performance evaluations of self and others.
- Combines utilization review and performance improvement to demonstrate need for change.
- Promotes positive organizational environments to improve patient safety.

## Suggested Content

Per *The Essentials of Master's Education for Advanced Practice Nursing* (AACN, 2011).

### V. Research

#### Outcome

The Orthopaedic APRN demonstrates knowledge of the research process through systematic investigational research.

#### Criteria

- Documents support for nursing research in orthopaedics in all sectors of health care delivery.
- Determines need for orthopaedic nursing research by identifying problems for research.
- Assists in preparation of research proposals, protocols, and/or grants.
- Generates and participates in nursing research or research activities involving orthopaedic patients.
- Applies research findings to current practice and teaches others to do the same.
- Uses data analysis in any areas related to orthopaedic nursing.
- Promotes research findings to appropriate personnel to facilitate evidence-based practice.
- Evaluates results of changes in practice.
- Analyzes current nursing research and utilizes knowledge for evidence-based practice.

#### Suggested Content

- Statistics.
- Research courses per *The Essentials of Master's Education for Advanced Practice Nursing* (AACN, 2011).

## Role Description: Orthopaedic Clinical Nurse Specialist

### Qualifications

The Orthopaedic Clinical Nurse Specialist (CNS) is a practicing CNS who has met requirements for and successfully completed the Orthopaedic Clinical Nurse Specialist certification exam (OCNS-C). According to the ONCB (2010), to qualify for taking the OCNS-C exam, the candidate must:

- Hold a current, full and unrestricted license as a registered nurse (RN) in the United States, or its possessions.

**OR**

- Hold a current, full and unrestricted license to practice as a first-level, general nurse in the country in which the candidate's general nursing education was completed, and meet the eligibility criteria for licensure as a registered nurse (RN) in the United States.

**AND**

- Have graduated from a nursing program at an accredited institution offering graduate-level credit for all of the coursework which includes both didactic and clinical components.
- Hold a Master's Degree or higher in nursing from an advanced practice (APRN) nursing program as a clinical nurse specialist (CNS).

Have a minimum of 1,500 hours of advance practice nursing work experience within the past three (3) years if a current ONC and presently be functioning as a CNS in orthopaedic nursing. If the candidate does not currently hold the ONC credential, he or she must have a minimum of 2500 hours of work experience as a CNS in orthopaedic nursing practice within the past three (3) years, and presently be functioning as a CNS in orthopaedic nursing.

## **Nature and Scope of Practice**

The CNS role is one of the four categories of APRNs defined by the National Council of State Boards of Nursing (NCSBON, 2008). The foundation of an APRN role is knowledge and skill of basic nursing education and registered nurse licensure with additional education and credentialing to include graduation from a nationally accredited graduate APRN program (master's or doctoral level) and achievement and maintenance of APRN certification by a national certifying body with the certification including components of the APRN role and at least one population focus. Currently, requirements for recognition as a CNS, APRN, and accepted CNS certification exams vary by state.

## **Principle Responsibilities**

The orthopaedic CNS demonstrates expertise in the specialty of orthopaedic nursing and functions to support quality and cost-effective outcomes related to musculoskeletal health and treatment. Three *spheres of influence* are affected by the orthopaedic CNS practice: 1) patients and clients, 2) the practice of other nurses, and 3) healthcare organizations (National CNS Competency Task Force Executive Summary, 2010).

Essential professional attributes include honesty, personal integrity, confidence, ability to take risks and accept consequences, personal insight of strengths and weaknesses, pursuit of continual learning, ability for self-examination and acceptance of review by others, and value and support of diversity. The orthopaedic CNS is a role model for ethical conduct and professional citizenship (NACNS Statement on Clinical Nurse Specialist Practice and Education, 2004).

Seven core competencies, as identified by the National CNS Competency Task Force, form the foundation of Orthopaedic CNS practice.

### **Direct Care:**

The orthopaedic CNS uses advanced nursing management of health, illness, and disease states with a holistic perspective to promote musculoskeletal health and well being and improved quality of life for patients, families, and groups of patients with orthopaedic risk factors or conditions.

### **Consultation:**

The orthopaedic CNS contributes specialized orthopaedic knowledge and expertise as an active participant in problem solving and decision-making with the professional health care team to achieve positive outcomes for patients, staff, and system.

### **Systems Leadership:**

The orthopaedic CNS manages change and empowers others to influence orthopaedic clinical practice and processes within and across systems.

### **Collaboration:**

The orthopaedic CNS works with others at an advanced level to achieve the best possible clinical outcomes for individuals with orthopaedic risk factors and conditions.

### **Coaching:**

The orthopaedic CNS provides guidance and support to promote professional growth of nurses, with the goal of advancing orthopaedic care of individuals, families, groups of patients, and the orthopaedic nursing profession.

**Research:**

The orthopaedic CNS demonstrates thorough and systematic inquiry by searching for, interpreting, and using research and evidence to support optimal quality and clinical practice. Actively participates in the conduction of research.

**Ethical Decision-Making, Moral Agency and Advocacy:**

The orthopaedic CNS identifies, articulates, and takes action when ethical issues arise at the patient, family, health care provider, system, community, and public policy levels.

Essential behaviors for each of the seven core competencies are detailed within the National CNS Competency Task Force Executive Summary (2010).

**Curriculum Recommendations**

NAON supports the goal of standardization of clinical nurse specialist education curriculum as outlined by NACNS (2011).

**Core Content**

- Research.
- Ethics.
- Health policy.
- Health promotion.
- Healthcare organization & financing.
- Diversity.
- Social issues.

**Clinical Practice Didactic Content**

- Advanced physiology/pathophysiology.
- Advanced assessment.
- Advanced pharmacology.

**Clinical Nurse Specialist Role Content**

- Theoretical foundations for CNS practice.
- Theoretical and empirical knowledge related to the CNS role in assessment, diagnosis, & treatment.
- Theoretical and scientific base for development of innovative nursing interventions and programs of care.
- Clinical inquiry & critical thinking.
- Evaluation of technology, products, and devices.
- Teaching, coaching, and mentoring within each of the spheres of influence.
- Influencing change.
- Systems thinking.
- Consultation theory.
- Measurement.
- Outcomes evaluation.
- Evidence-based practice & research utilization.

## Clinical Practicum

- A minimum of 500 hours of clinical practice in settings that provide musculoskeletal care.
- Practicum integrates development of CNS competencies within the patient, nursing, and organization spheres of influence.
- Emphasis on learning CNS practice within the orthopaedic specialty under direct guidance from an orthopaedic CNS preceptor with Orthopaedic Clinical Nurse Specialist certification preferred.

## Role Description: Orthopaedic Nurse Practitioner

### Qualifications

1. Current licensure as a registered nurse in the state of practice.
2. Certification as a nurse practitioner as defined by the educational preparation such as family nurse practitioner, adult nurse practitioner, acute care nurse practitioner, or pediatric nurse practitioner.
3. Licensure as a nurse practitioner in accordance with requirements of the state of practice.
4. Requirements\*:
  - Master's Degree in Nursing with focus area as a nurse practitioner.  
\*Nurses who obtained certificates as nurse practitioners may continue to practice in that capacity in their current practice settings.
  - Minimum 3 years clinical nursing experience.
  - Minimum 2 years in orthopaedics.

Have a minimum of 1,500 hours of advance practice nursing work experience within the past three (3) years if a current ONC and presently be functioning as an NP in orthopaedic nursing. If the candidate does not currently hold the ONC credential, he or she must have a minimum of 2500 hours of work experience as an NP in orthopaedic nursing practice within the past three (3) years, and presently be functioning as an NP in orthopaedic nursing

### Nature and Scope of Practice

The orthopaedic NP has advanced education and clinical training. The NP also possesses a high degree of professional expertise and knowledge of orthopaedics that is demonstrated by assessment, diagnosis, and treatment of clients with actual and potential orthopaedic problems. The scope of practice for the NP varies in each state according to state laws. It is essential to be familiar with the laws and regulations of the state in which the license to practice is granted. The NP functions as a diagnostician and prescriber, clinician, educator, consultant, researcher, and leader in the promotion and development of the profession. The NP may function as an administrator, but it is not a primary function.

As identified by the National Association of Nurse Practitioner Faculty (NONPF, 2012), eight core competencies form the foundation of Orthopaedic NP practice.

### Core Competencies

#### Scientific Foundation Competencies

The orthopaedic nurse practitioner:

- Critically analyzes data and evidence for improving advanced orthopaedic nursing practice.
- Integrates knowledge from the humanities and sciences within the context of nursing science.
- Translates research and other forms of knowledge to improve practice processes and outcomes.
- Develops new practice approaches based on the integration of research, theory, and practice knowledge.

## **Leadership Competencies**

The orthopaedic nurse practitioner:

- Assumes complex and advanced leadership roles to initiate and guide change.
- Provides leadership to foster collaboration with multiple stakeholders (e.g. patients, community, integrated health care teams, and policy makers) to improve musculoskeletal health care.
- Demonstrates leadership that uses critical and reflective thinking.
- Advocates for improved access, quality and cost effective health care for the client with musculoskeletal diseases.
- Advances orthopaedic nursing practice through the development and implementation of innovations incorporating principles of change.
- Communicates practice knowledge effectively both orally and in writing.
- Participates in professional organizations and activities that influence advanced practice nursing and/or health outcomes of the orthopaedic patient population.

## **Quality Competencies**

The orthopaedic nurse practitioner:

- Uses best available evidence to continuously improve quality of orthopaedic clinical practice.
- Evaluates the relationships among access, cost, quality, and safety and their influence on health care.
- Evaluates how organizational structure, care processes, financing, marketing and policy decisions impact the quality of musculoskeletal health care.
- Applies skills in peer review to promote a culture of excellence in advanced practice orthopaedic nursing.
- Anticipates variations in orthopaedic practice and is proactive in implementing interventions to ensure quality.

## **Practice Inquiry Competencies**

The orthopaedic nurse practitioner:

- Provides leadership in the translation of new knowledge into practice.
- Generates knowledge from orthopaedic clinical practice to improve practice and patient outcomes.
- Applies clinical investigative skills to improve musculoskeletal health outcomes.
- Leads practice inquiry, individually or in partnership with others.
- Disseminates evidence from inquiry to diverse audiences using multiple modalities.
- Analyzes clinical guidelines for individualized application into practice.

## **Technology and Information Literacy Competencies**

The orthopaedic nurse practitioner:

- Integrates appropriate technologies for knowledge management to improve musculoskeletal health care.
- Translates technical and scientific health information appropriate for various users' needs:
  - Assesses patient and caregiver educational needs to provide effective, personalized musculoskeletal health care.
  - Coaches the patient and caregiver for positive behavioral change.
- Demonstrates information literacy skills in complex decision making.
- Contributes to the design of clinical information systems that promote safe, quality and cost effective musculoskeletal care.

- Uses technology systems that capture data on variables for the evaluation of nursing care of the patient with musculoskeletal disorders.

### **Policy Competencies**

The orthopaedic nurse practitioner:

- Demonstrates an understanding of the interdependence of policy and practice.
- Advocates for ethical policies that promote access, equity, quality, and cost for musculoskeletal care.
- Analyzes ethical, legal, and social factors influencing musculoskeletal health policy development.
- Contributes to the development of musculoskeletal health policy.
- Analyzes the implications of musculoskeletal health policy across disciplines.
- Evaluates the impact of globalization on musculoskeletal health care policy development.

### **Health Delivery System Competencies**

The orthopaedic nurse practitioner:

- Applies knowledge of organizational practices and complex systems to improve musculoskeletal health care delivery.
- Affects musculoskeletal health care change using broad based skills including negotiating, consensus-building, and partnering.
- Minimizes risk to patients and providers at the individual and systems level.
- Facilitates the development of musculoskeletal health care systems that address the needs of culturally diverse populations, providers, and other stakeholders.
- Evaluates the impact of musculoskeletal health care delivery on patients, providers, other stakeholders, and the environment.
- Analyzes organizational structure, functions and resources to improve the delivery of musculoskeletal care.
- Collaborates in planning for transitions across the continuum of musculoskeletal health care.

### **Ethics Competencies**

The orthopaedic nurse practitioner:

- Integrates ethical principles in decision making.
- Evaluates the ethical consequences of decisions.
- Applies ethically sound solutions to complex issues in musculoskeletal health related to individuals, populations and systems of care.

### **Independent Practice Competencies**

The orthopaedic nurse practitioner:

- Functions as a licensed independent practitioner.
- Demonstrates the highest level of accountability for professional musculoskeletal practice.
- Practices independently managing previously diagnosed and undiagnosed patients with musculoskeletal disorders:
  - Provides the full spectrum of health care services to include health promotion, disease prevention, health protection, anticipatory guidance, counseling, disease management, palliative, and end of life care for those experiencing musculoskeletal disorders.

- Uses advanced health assessment skills to differentiate between normal, variations of normal and abnormal findings in persons with musculoskeletal disorders.
- Employs screening and diagnostic strategies in the development of diagnoses in persons with musculoskeletal disorders.
- Prescribes medications within scope of practice.
- Manages the health/illness status of patients and families over time.
- Provides patient and family-centered musculoskeletal care recognizing cultural diversity and the patient or designee as a full partner in decision-making:
  - Works to establish a relationship with the patient and family with musculoskeletal disorders characterized by mutual respect, empathy, and collaboration.
  - Creates a climate of patient and family-centered care to include confidentiality, privacy, comfort, emotional support, mutual trust, and respect.
  - Incorporates the patient’s cultural and spiritual preferences, values, and beliefs into health care.
  - Preserves the patient’s control over decision making by negotiating a mutually acceptable plan of care.

### **Principal Responsibilities**

#### **Practitioner**

The NP has the authority and responsibility to assess, diagnose, and treat clients within the scope of their individual state’s Nurse Practice Act.

- Obtains health histories, performs physical exams.
- Diagnoses and treats minor acute orthopaedic problems.
- Diagnoses and collaboratively treats major acute orthopaedic problems depending on educational preparation and certification.
- Diagnoses and treats chronic stable orthopaedic problems.
- Screens for actual or potential orthopaedic problems.
- Identifies health and medical risk factors.
- Orders and interprets diagnostic studies such as lab and x-rays.
- Develops a plan of care in collaboration with client/family and other healthcare professionals.
- Prescribes/recommends pharmacologic and non-pharmacologic interventions.
- Collaborates with clients, family, nursing staff, physicians, and other health team members in providing care for the orthopaedic client with complex conditions.
- Evaluates treatment plan.
- Reassess and modifies the plan of treatment as necessary to achieve desired goals.

#### **Educator**

The NP has the responsibility of educating the client, family, other health care providers and community regarding orthopaedic issues.

- Educates in areas related to:
  - Specific orthopaedic diagnoses and treatment plans.
  - Prevention and health maintenance of orthopaedic abnormalities.
- Serves as preceptor to nursing students.
- Educates individuals, families, and communities on violence and injury prevention (Centers for Disease Control [CDC]: 2010).
- Educates individuals, families, and communities on disaster preparedness (AACN, 2010).

### **Consultant**

The NP possesses advanced clinical knowledge and expertise:

- Acts as resource for peers and other health care professionals.
- Serves as a consultant to agencies, nursing organizations, and consumer groups.
- Identifies ethical issues in clinical practice and facilitates a resolution with the client, family, and health care team.

### **Researcher**

The NP role requires knowledge of research process and has the ability to apply research findings into practice:

- Utilizes research findings in the development of policies, procedures and guidelines for clinical care.
- Identifies research questions and conducts or participates in the research process.
- Assists in the preparation of research proposals, protocols, and/or grants.
- Communicates research findings at professional meetings or by publication.
- Critically appraises research for its accuracy and relevancy for current practice and helps establish evidence-based practice.

### **Leader in Professional Development**

The NP demonstrates professionalism and continued professional growth:

- Serves as role model and exemplifies the professional advanced practice role.
- Serves as an active member of professional nursing organizations, especially those related to orthopaedics.
- Participates in political aspects of health care and health care policy formation.
- Functions as a health care advocate in the community.

### **Care Priorities**

The NP's practice model emphasizes:

- Education of client and family.
- Facilitation of client participation in self-care by providing information needed to make decisions and choices for the promotion, maintenance, and restoration of health.
- Consultation with other health care professionals.
- Use of appropriate health care resources.
- Promotion of optimal health.
- Promotion of a safe environment.
- Theoretical framework for practice.

### **Additional Professional Behaviors**

The NP:

- Maintains accurate and confidential records.
- Participates in quality assurance and improvement process.
- Maintains national certification as a nurse practitioner and as an orthopaedic nurse practitioner (ONP-C<sup>®</sup>).

## Advanced Practice Nurse: Guidelines For Clinical Preceptors

### Qualifications

Preceptors for graduate level education of nurses in an academic program preparing the student for an advanced degree in nursing with a clinical focus in orthopaedics should have the following qualifications:

1. Current RN license in the state where teaching and practicing.
2. Master's or Doctorate Degree in Nursing.
3. Certification as OCNS-C or ONP-C.
4. Certification through the American Nurse Credentialing Center (ANCC) of the American Academy of Nurse Practitioners or ANCC certification for CNS where required.
5. 2-5 years of orthopaedic nursing experience.
6. Physician preceptors practicing in areas such as orthopaedics, physical medicine and rehabilitation, or pain management who are currently licensed in the state where teaching and practicing.

### Residency/Practicum

Options to consider optimizing the learning experience for the graduate student should include:

- Focus on the continuum of care through clinical work in a variety of settings: clinic/office, operating room, acute care, critical care/emergency/trauma, rehabilitation, and home care.
- Acquaintance with developmental components including: family, pediatric, adolescent, adult, and the older adult.
- Inclusion of wellness components through community education, wellness centers for pediatric and elderly populations, and school screening programs.
- Use of an interprofessional approach through, physician assistants, discharge/home care liaisons, insurance nurses, orthopaedic surgeons, case managers, physical and occupational therapists, social workers, educators, orthotists, nurse managers, and orthopaedic technicians.
- Familiarity of operating room activities, including surgical assistance.

### Recommended Student Activities

The experience should include: exposure to/participation in advanced physical assessment and interventions: quality improvement; case management; staff management and development; client education; staff learning needs assessment and education; cost analysis activity, finance and budgeting; research, writing a research proposal; co-authorship of a manuscript; service learning in community agencies, ethics, health policy, health promotion, organization; and financing of healthcare, human diversity and social issues.

### Recommended Orthopaedic Focused Activities

The experience should include exposure to/participation in orthopaedic physical assessment; basic radiographic interpretation; traction set-up and application; cast application and removal; insertion and removal of skeletal pins; surgical scrub/first assistance skills; suturing technique and removal of sutures; removal of wound drains/central lines; splint/sling/brace/immobilization sizing and application; advanced pain management; aspiration and injection of joints, bursa, tendons, and tendon sheaths; and advanced wound and skin management.

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