A Role Delineation Study of the
Advanced Oncology Certified Nurse Practitioner
Conducted for the Oncology Nursing Certification Corporation (ONCC)

EXECUTIVE SUMMARY

A role delineation study was initiated in 2013 at the request of the Oncology Nursing Certification Corporation (ONCC), with psychometric facilitation being provided by Applied Measurement Professionals, Inc. (AMP). The purpose of the study, also known a job analysis or practice analysis, was to provide a detailed analysis of the job-related competencies of the Advanced Oncology Certified Nurse Practitioner (AOCNP®) for the ONCC to consider using in future possible efforts related to the development of a certification program. This study was conducted in conjunction with the role delineation for the AOCNS® credential, results of which are described elsewhere.

The ONCC staff provided background materials to AMP, including several textbooks, articles pertaining to advanced practice nursing and the previous role delineation study report. Using these materials, AMP prepared draft knowledge and task lists which were distributed to the Role Delineation Advisory Committee (RDAC) prior to a meeting on October 7-8, 2013. During that meeting, the RDAC adopted the following target practitioner definition of an advanced practice nurse:

A registered nurse (RN) with a current, active, unrestricted RN license possessing a graduate degree from an accredited NP or CNS program with a minimum of 1,000 hours (e.g., part-time, 20 or more hours per week for 1 year), or 500 hours supervised clinical practice in an adult oncology NP or CNS practice in any setting, and one graduate level oncology course of at least 2 credits or 30 hours of oncology CE within the last 60 months.

During the meeting, the components of a draft survey were reviewed and modified by the RDAC, including demographic questions along with the knowledge and task lists. Following the meeting, the survey was subjected to a pilot test, which led to changes that were made through an iterative process of reviews and modifications. The final survey was then approved in preparation for distribution on December 11, 2013 to 3,563 advanced practice nurses. ONCC disseminated an invitation with an embedded link via email. The published response deadline was January 10, 2014, but was extended to January 24, 2014.

The Committee met on March 20-21, 2014 to review the results of the survey responses. During this meeting, all data collected from the surveys and reviewed, including the demographic information and the significance ratings for each knowledge and task statement. After removal of partial respondents (i.e., those who didn’t respond to any knowledge/tasks), a total of 301 usable surveys pertaining solely to the advanced practice as an advanced oncology nurse practitioner were available for analyses.

The RDAC determined that the characteristics of the respondent group were generally as expected and the total number of responses was large enough and representative enough of AOCNP® practice to provide a sound basis for further analyses. Some of the demographic findings included:
• 68% had attained a Master's level degree as their highest degree,
• 54% held the AOCNP® credential, and
• On average, respondents had 17.0 years of experience as an oncology RN and 10.0 years as an advanced practice nurse.

The rating scale for knowledge statements and tasks allowed the survey respondents to indicate that the statement or task was “Not part of my practice” and these responses were recoded to zero. Other scale points included not very significant, significant, very significant, and essential which were recoded to 1, 2, 3 and 4 respectively. Overall the knowledge statements and tasks received very high ratings. When those who did not view the statement or task as a part of their practice were removed, the overall mean for both the knowledge ratings and the tasks were approximately 3.0, that is, very significant. Therefore, it is clear that the tasks and the knowledge statements generally defined the role well.

To create examination specifications, the RDAC needed to identify any areas of knowledge that were not clearly within the AOCNP® role, and to do so, the RDAC established a series of decision rules and criteria to retain knowledge and task statements. To ensure relevance to practice, the RDAC decided that at least 79% of the respondents had to indicate a knowledge was a part of their practice (i.e., a non-zero rating), and 64% for a task statement. The second rule adopted by the RDAC was related to the overall mean significance, and a mean at least 2.3 was required for each knowledge or task statement. Rules were also established for mean significance by region of practice within the United States, years as an advanced practice nurse, educational program focus and certifications currently held. The RDAC reviewed comments made by survey respondents, and as a result of applying the criteria related to the decision rules and in consideration of the comments, a few knowledge and task statements were removed or reworded. What remained to create the detailed content outline and examination specifications were 68 knowledge statements, grouped in eleven major domains of practice, as well as 101 tasks that should be considered to be eligible for assessment. During the meeting the RDAC also confirmed the linkage of knowledge statements and tasks.

The RDAC used an iterative process to determine the relative weight of examination specifications for a possible certification offering, and several factors were considered. First, the judgments expressed by the survey respondents about allocation of items to the eleven domains were considered. In addition, the RDAC considered the number of knowledge statements, the breadth of each knowledge statement, and the mean significance of the knowledge statement, as well as the mean significance of the aggregate of the knowledge in each of the eleven domains. Members of the RDAC independently expressed judgments regarding the percentage that should be allocated to each domain. The mean of the judgments was used as a starting point, and following discussion, the RDAC approved the distribution of items shown in the final examination specifications shown on the following pages, recommending that 125 scored items would be appropriate to assess knowledge related to the eleven domains. The RDAC discussed whether a second dimension should be used to create a matrix, for example, using the cognitive process expected of candidates or the task statements as a second dimension. The RDAC decided that a second dimension would not be necessary, but item developers should indicate one of the 101 approved tasks and the cognitive level expectation for every item, and that an effort should be made to include items that go beyond testing of simple recall.

Respectfully submitted:
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I. Screening, Prevention, Early Detection, and Genetic Risk
   A. At-risk populations (e.g., disparities in cultures, socioeconomic status, age, occupations, cancer history)
   B. Screening, early detection
   C. Cancer prevention, risk reduction guidelines (e.g., cancer risk factors such as smoking, nutrition, environmental)
   D. Hereditary cancer risk assessment and genetic counseling methods
   E. Epidemiology (i.e., frequency, incidence, prevalence)

II. Diagnosis, Staging, and Treatment Planning
   A. Diagnostic tests and results
   B. Patient assessment
   C. Staging guidelines
   D. Natural history of disease (e.g., presentation, common metastatic sites, prognosis)
   E. Prognostic indicators (e.g., immunoassays, flow cytometry, performance status, hormonal, status, biomarkers)

III. Cancer Treatment
   A. Clinical trials and research studies
   B. Systemic therapies (e.g., chemotherapy, hormonal, targeted, biologic)
   C. Localized therapies (e.g., intravesicular, intrapertoneal, intrathecal)
   D. Surgical and interventional procedures
   E. Radiation therapy
   F. Blood and marrow transplantation
   G. Multimodal (combined) therapies
   H. Complementary and alternative therapies
   I. Delivery systems (e.g., vascular access devices, infusion devices)
   J. Interrelationship of disease, treatment, and comorbid conditions
   K. Standards of care for specific cancers
   L. Clinical response to treatment
   M. Palliative care

IV. Side Effect and Symptom Management
   A. Etiology, incidence, and patterns (e.g., acute, chronic, late)
   B. Toxicity rating scales
   C. Pharmacologic interventions
   D. Multidisciplinary therapies (e.g., rehabilitation services, nutrition, counseling)
   E. Integrative therapies (i.e., complementary and alternative methods)
   F. Procedural interventions (e.g., paracentesis, thoracentesis, surgery, stents, drains)
   G. Management of complications (e.g., infection, thrombosis)

V. Oncologic Emergencies
   A. Risk factors and prevention strategies
   B. Etiology
   C. Assessment strategies (e.g., physical examination, differential diagnosis)
   D. Treatment strategies
### VI. Survivorship
- Psychosocial (e.g., fear of recurrence, depression, post-traumatic stress disorder, family relations)
- Physical (e.g., neuropathy, cardiomyopathy, cognitive effects, secondary cancers, infertility)
- Financial and legal (e.g., employment, insurance, discrimination, disability, debt)
- Survivorship treatment summaries
- Survivorship plan of care (e.g., communication with primary care provider, follow-up surveillance)

### VII. End-of-Life Care
- Philosophy of hospice
- End-of-life care principles (e.g., symptom management, family and caregiver support, cultural variations, education)
- Grief and bereavement process
- End-of-life care settings
- Financial issues in end-of-life care

### VIII. Psychosocial Issues
- Risk factors for psychosocial disturbances/alterations (e.g., social support, financial aspects, family dynamics)
- Assessment instruments and techniques (e.g., interview, patient self-assessment)
- Psychiatric and psychosocial comorbidities (e.g., anxiety, depression, cognitive impairment)
- Effects of cancer or treatment on psychosocial issues (e.g., sexuality, quality of life, family dynamics, coping)
- Cultural, spiritual, and religious diversity

### IX. Coordination of Care
- Patient navigation
- Care management
- Insurance and reimbursement issues
- Roles of other healthcare disciplines
- Community resources

### X. Professional Practice
- Ethical/legal issues (e.g., ethical decision-making models, informed consent, advance directives)
- Legal or regulatory requirements (e.g., licensing, documentation)
- Insurance reimbursement documentation requirements
- Outcomes of advance practice nurse interventions on individuals, groups, and systems
- Accreditation standards (e.g., The Joint Commission, American College of Surgeons, Health Care Financing Administration)
- Competency evaluation of self and others (e.g., peer review)
- Advanced practice standards of care
- Collaborative practice agreements (e.g., peers, physician)
- Healthcare legislation

### XI. Roles of the Advanced Practice Nurse
- Mentor, preceptor, and educator
- Patient education (e.g., needs assessment, preparation of materials)
- Research process (e.g., problem identification, synthesis of research literature, rights of human subjects)
- Research application
- Consultant

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Total: 100
AOCNP® Tasks

I. Screening, Prevention, Early Detection, and Genetic Risk
   A. Assess and provide information on cancer risk factors, prevention, risk reduction, and early detection to patients and their families
   B. Provide information for patients/families about hereditary cancer risk
   C. Order screening tests (e.g., PSA, mammogram)
   D. Perform screening examinations (e.g., clinical breast, digital rectal)
   E. Prescribe risk reduction medications
   F. Identify barriers and develop strategies to promote patient participation in prevention and detection activities (e.g., smoking cessation, mammography screening)

II. Diagnosis, Staging, and Treatment Planning
   A. Obtain patient history (e.g., family, medical, social, and medication history)
   B. Perform a physical examination
   C. Formulate a problem list
   D. Educate patients regarding diagnostic, prognostic, and staging tests
   E. Recommend diagnostic, prognostic, and staging tests
   F. Order diagnostic, prognostic, and staging tests
   G. Perform diagnostic procedures
   H. Formulate a patient’s plan of care based on pathology, laboratory and radiology results
   I. Stage the cancer
   J. Educate patients regarding the plan of care

III. Cancer Treatment
   A. Review clinical trials/research studies to determine if they are available and appropriate for the patient
   B. Develop a plan of treatment in collaboration with the healthcare team and patient
   C. Educate patient and caregiver regarding potential outcomes (including side effects) of identified treatment modalities and delivery systems
   D. Assess patient for use of and interest in complementary and alternative methods
   E. Educate patient/caretakers on risks and benefits (including interactions) of complementary and alternative methods
   F. Facilitate patient/caregiver decision making regarding treatment
   G. Obtain informed consent from patient
   H. Order treatment regimens
   I. Monitor treatment side effects
   J. Evaluate medications for comorbid conditions or polypharmacy (e.g., antihypertensives, diabetic on steroids)
   K. Prescribe or adjust medications for comorbid conditions, toxicity, or polypharmacy
   L. Adjust cancer treatment for comorbid conditions (e.g., congestive heart failure, renal insufficiency, liver disease)
   M. Evaluate clinical response to treatment (e.g., partial response, complete response, progression) and need for treatment modification
IV. Side Effect and Symptom Management
   A. Assess for disease-related and/or treatment-related symptoms
   B. Plan pharmacologic and non-pharmacologic interventions using evidence-based practice
   C. Prescribe pharmacologic and procedural interventions
   D. Perform procedural interventions
   E. Perform non-pharmacologic interventions
   F. Administer pharmacologic treatments
   G. Evaluate patient’s response and modify interventions
   H. Evaluate quality of life based on side effects and symptoms

V. Oncologic Emergencies
   A. Assess patient’s risk factors
   B. Educate patient and caregivers regarding oncologic emergencies
   C. Educate staff regarding oncologic emergencies
   D. Assess symptom severity and treatment urgency
   E. Formulate a differential diagnosis
   F. Recommend diagnostic tests
   G. Order diagnostic tests
   H. Interpret results of diagnostic tests
   I. Recommend interventions
   J. Order interventions
   K. Assess patient response to interventions and modify interventions as needed
   L. Revise treatment plan based on patients’ status after oncologic emergencies

VI. Survivorship
   A. Assess for psychosocial issues
   B. Assess for actual or potential late physical effects of cancer or treatment
   C. Assess for financial and legal issues
   D. Communicate with primary care provider and other healthcare team members
   E. Facilitate follow up regarding surveillance plan
   F. Order medications, diagnostic tests, and interventions for the surveillance plan
   G. Compile survivorship treatment summaries
   H. Develop survivorship plan of care (e.g., lifestyle modifications, fertility planning)

VII. End-of-Life Care
   A. Educate patients and caregivers about end-of-life care and end-of-life processes (e.g., grief, signs/symptoms of dying, care delivery)
   B. Involve caregivers in delivery of end-of-life care
   C. Advocate for the patient’s wishes (e.g., compliance with advance directives)
   D. Discuss “do not resuscitate” orders with patient and/or caregivers
   E. Assess patient and caregiver for physical, emotional, and spiritual end-of-life care needs
   F. Make referrals (e.g., hospice, home health, extended care, bereavement services)
   G. Manage symptoms at end of life
VIII. Psychosocial Issues
   A. Conduct psychosocial evaluation of patients and caregivers
   B. Identify patients and families/caregivers in crisis and refer appropriately
   C. Develop and implement strategies to improve patient and caregiver psychosocial issues
   D. Evaluate and revise interventions based on patient’s and caregiver’s response
   E. Refer patients and caregivers to appropriate support services (e.g., financial counseling, rehabilitation, support groups)
   F. Prescribe therapies

IX. Coordination of Care
   A. Identify patients with complex or high risk needs that would benefit from interventions by APN
   B. Collaborate with the patient, caregiver, and healthcare team to identify interventions (e.g., care management)
   C. Collaborate with the healthcare team to identify interventions and evaluate outcomes for patient populations (e.g., navigation, clinical guidelines)
   D. Assess patients’ capabilities and support self-care strategies during and after treatment
   E. Refer patients to appropriate resources
   F. Coordinate/advocate for the provision of optimal cancer care (e.g., third party payers, HMO)

X. Professional Practice
   A. Integrate culturally competent care into all aspects of practice
   B. Provide and facilitate the use of an ethical decision making model
   C. Maintain clinical records according to professional and legal standards
   D. Review and discuss advance directives with patients and caregivers
   E. Use standard practice guidelines in delivery of care
   F. Develop network for referring patients and caregivers
   G. Serve as a role model, preceptor, and mentor
   H. Promote evidence-based practice to improve patient care
   I. Participate in professional organizations
   J. Use theoretical frameworks as a basis for practice

XI. Roles of the Advanced Practice Nurse
   A. Administrator
      1. Develop evidence-based policies and procedures
      2. Promote a practice environment that supports psychosocial, developmental, and professional practice needs
      3. Use performance improvement methods to evaluate and improve practice
      4. Collaborate with institutional leaders to develop strategic plans for cancer care
   B. Consultant
      1. Recommend strategies to provide high quality cancer care
      2. Provide individual clinical consultation (e.g., patients, colleagues)
   C. Educator
      1. Conduct educational needs assessments
      2. Create educational materials
      3. Present educational programs to staff or community
      4. Contribute to oncology nursing knowledge through publications or presentations
      5. Evaluate program outcomes
   D. Researcher
      1. Critique research to determine usefulness in practice
      2. Apply evidence-based research to practice
      3. Participate in research projects
      4. Safeguard the rights of patients serving as research subjects