A National Practice Analysis of the Foot and Nail Care Nursing Professional
Executive Summary

The Wound, Ostomy and Continence Nursing Certification Board (WOCNCB®) completed a study in December 2003 that provides the support necessary to develop specifications upon which a content valid certification examination could be built for nurses providing foot and nail care (FNC). This study is known as a practice analysis, but other terms could apply, such as job analysis or role delineation study. The WOCNCB® appointed a Practice Analysis Advisory Committee (AC) to conduct the activities necessary to identify FNC nursing practitioners’ responsibilities and develop examination specifications. The diversity of this group was reflective of the specialty areas within FNC nursing and all AC members had demonstrated expertise in their respective areas of specialization. The AC membership is shown in Table 1.

Table 1. Practice Analysis Advisory Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Beth Hawkins-Bradley</td>
<td>RN, MSN, CWOCN</td>
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<tr>
<td>Cathryn Bratton</td>
<td>RN, BSN, CWOCN, CDE</td>
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<td>Craig L. Broussard</td>
<td>PhD, RN, CNS, CWCN</td>
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<td>Jan L Bryant</td>
<td>MSN, RN, CWOCN</td>
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<tr>
<td>Tara Beuscher</td>
<td>MSN, RN, CS, CWOCN, APNP</td>
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<tr>
<td>Teresa Kelechi</td>
<td>MSN, RNCS, CWCN</td>
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<tr>
<td>Mary Walden</td>
<td>WOCNCB President</td>
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The study involved development of a job analysis survey, distribution of that survey to practitioners, and an analysis of the responses. Test specifications for the certified FNC nurse were developed on the basis of these data. The survey was developed and distributed in 2000. At that time, a preliminary review of the responses led the WOCNCB® Board to determine, for a variety of reasons, that it was not appropriate to proceed immediately with the development of a certification offering. After revisiting the issue in 2003, however, a decision was made to proceed with a review of the data and development of test specifications that could lead to a certification examination.

The AC met during April 2000 to initiate the following six tasks:

1. Developing a sampling plan
2. Identifying tasks for the survey instrument
3. Identifying classifications of core tasks
4. Determining the rating scales
5. Determining the relevant demographic variables of interest
6. Integrating demographics, rating scales, and tasks into a survey instrument

A total of 1,498 surveys were mailed to RN professionals who provide foot and nail care. This sample included approximately 472 individuals who had expressed interest to the WOCNCB about the possibility of a foot and nail care certification program, or were otherwise suspected to have an interest. The remaining individuals in the sample included RNs who were members of a relevant professional association, for example,
the Wound Ostomy and Continence Nursing Society (WOCN), the American Association of Diabetic Educators (AADE) and the National Geriatric Nurses Association (NGNA).

It was determined that fourteen percent of the sample responded with surveys that were determined to be suitable for analysis (n=210). The responses to the demographic questions indicated that there were sufficient numbers of respondents in relevant groups for subsequent analysis. Approximately 98 percent of the respondents felt that the job analysis survey at least adequately addressed the responsibilities of RNs who provide FNC. In addition, respondents used all rating scales with an acceptable level of reliability.

During a second meeting of the AC in September 2003, decision rules were adopted and used to determine which tasks were appropriate for assessment, and therefore for inclusion in the final content outline for the examination. Application of the decision rules resulted in retention of 71 tasks. It was determined that a total of 80 multiple-choice items would be sufficient to assess the tasks within the specialty area. The AC also developed detailed test specifications, which provided slightly more specificity than the content outline, and also specified a distribution of items according to the cognitive level they are intended to address. The specifications dictate that each examination form will include 17 items requiring only the ability to recall information, 46 items requiring application of knowledge in a practice related setting, and 17 requiring analysis or more complex judgment on the part of the candidate.

The Foot and Nail Care Examination Committee of the WOCNCB® will use these test specifications in building each form of the specialty examination, and all items appearing on an examination will be linked to the specifications based on the unanimous agreement of the committee. In addition, the detailed content outline shown in Table 2 will be made available to candidates and education providers for use in preparing to attempt certification.

<table>
<thead>
<tr>
<th>Table 2. Foot and Nail Care Examination Content Outline</th>
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<tr>
<td><strong># Items</strong></td>
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<tr>
<td>1. Assessment</td>
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<tr>
<td>A. History</td>
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<tr>
<td>1. Collect health history</td>
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<tr>
<td>2. Assess medication history</td>
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<td>B. Physical Assessment</td>
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<tr>
<td>1. Assess patient for functional disabilities (e.g., gait, mobility, balance, visual, cognitive)</td>
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<td>2. Assess patient for health habits (e.g., smoking, exercise, hygiene, nutrition)</td>
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<td>3. Assess foot circulation by palpation (e.g., pulses, blanching, capillary refill)</td>
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<td>4. Assess foot circulation by Doppler</td>
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<td>5. Assess legs and feet for temperature</td>
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6. Assess hair growth on legs and feet
7. Assess foot skin integrity (e.g., fissures, ulcers, corns, calluses, dermatitis)
8. Assess physical/musculoskeletal function of the foot (e.g., range of motion, deformities, strength)
9. Assess sensation (e.g., monofilament testing, vibration)
10. Assess toenails and cuticles
11. Determine ankle brachial index (ABI)

C. Risk Assessment
1. Establish risk of ulceration on assessment
2. Establish risk of amputation based on assessment
3. Assess for issues of quality of life related to foot pathology

D. Footwear and Mobility Aid Assessment
1. Inspect footwear and socks/stockings
2. Inspect mobility aids (e.g., canes, walkers)

2. Nursing Interventions

A. Skin care
1. Perform hygiene
2. Identify appropriate interventions for managing hyperkeratrotic areas
3. Implement off-loading
4. Apply padding
5. Identify the need for compression therapy (e.g., to manage edema)
6. Apply moisturizers to skin
7. Perform cuticle care
8. Identify and make recommendations for skin conditions:
   a. Blisters
   b. Plantar warts
   c. Trauma
   d. Tinea pedis
   e. Paronychia
   f. Maceration
   g. Other skin conditions
9. Identify the need for use of therapeutic interventions (e.g., topical therapy) for skin conditions

B. Nail care
1. Define free nail border (i.e., remove debris)
2. Conduct debridement of toenails
3. Perform cleaning and sterilization of equipment
4. Use personal protective equipment
5. Maintain infection control for tinea pedis and candidiasis
6. Identify and make recommendations for the following conditions:
a. Onychomycosis  
b. Trauma  
c. Ingrowing/ingrown toenail  
d. Other conditions of the toenails

3. Education and Referral  

A. Education  

1. Provide patient/caregiver education related to:  
   a. foot care (e.g., hygiene, skin care, inspection, nail care)  
   b. pathophysiology affecting the foot  
   c. age-specific changes of the foot  
   d. proper footwear  
   e. problems that should be reported  
   f. anatomy and physiology of the foot  
   g. plan for follow-up care  
   h. weight management  
   i. prevention of specific problems

B. Referral  

1. Identify the need for appropriate referrals (i.e., primary care provider, podiatry, orthopedics, dermatology, endocrinology, vascular surgery, general surgery, physical therapy, occupational therapy, pedorthist/orthotist, home health, pain management, diabetes education, smoking cessation, case/care manager or social worker, wound care)  

2. Act as patient advocate regarding issues of foot care  

Total Items*  80

* Plus 10 unscored pretest items