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## **A National Job Task Analysis Study of the Wound Specialist Executive Summary**

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## **A National Job Task Analysis Study of the Wound Specialist**

### **Executive Summary**

The purpose of this study was to identify the knowledge requirements (topics) and responsibilities (tasks) of wound specialists as a first step in the development of a job-related certification examination. The American Board of Wound Management (ABWM) requested the services of Applied Measurement Professionals, Inc. (AMP) to design and conduct a study that would provide the support necessary to develop specifications upon which a content valid certification examination could be built. The ABWM identified the need to ensure that the Examination Specifications would be representative of wound specialists.

The ABWM appointed a Job Task Analysis Advisory Committee (AC) to conduct the activities necessary to identify responsibilities of wound management practitioners and develop Examination Specifications. The diversity of this group was reflective of the specialty areas practiced throughout the United States, and all AC members had demonstrated expertise in their respective areas of specialization.

The study involved development of a web-based job task analysis survey, distribution of the survey to target practitioners, and an analysis of their responses. The survey was designed to include three job analyses for wound care associates, wound specialists, and wound specialist physicians. Examination Specifications for wound specialists were developed only on the basis of wound specialist data. The Examination Specifications can be described as including a Detailed Content Outline and associated tasks, along with requirements related to the number of items to be included.

The AC met in December 2011 to initiate the following six tasks:

1. Develop a sampling plan
2. Identify topics and tasks for the survey instrument
3. Identify content categories
4. Determine the rating scales
5. Determine the relevant demographic variables of interest
6. Integrate demographics, rating scales, topics and tasks into a survey instrument

A total of 5,434 survey invitations containing a link to the online job task analysis study were e-mailed to wound management practitioners. After adjusting for undeliverable addresses (n=370) and opt outs (n=2), it was determined that approximately 30% of the sample responded (n=1,628). Among 1,628 respondents, 879 respondents identified themselves as wound specialists and completed the wound specialist part of the survey.

During a second meeting of the AC in April 2012, the AC reviewed the demographics of the respondent group, and concluded that the respondents were consistent with their expectation of the population of wound specialists. In addition, it was determined that a sufficient number of responses in relevant subgroups was received to facilitate subsequent analysis. Responses to some of the demographic variables are depicted in the following graphs.

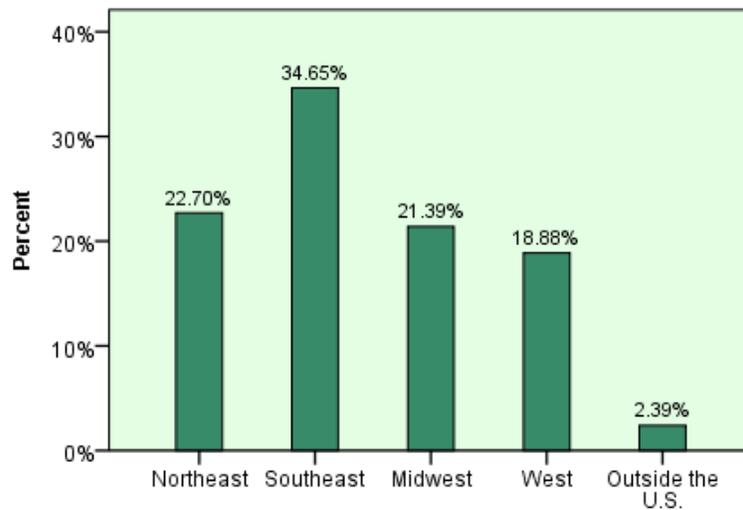


Figure 1. In which state do you primarily practice? (Recoded into Regions)

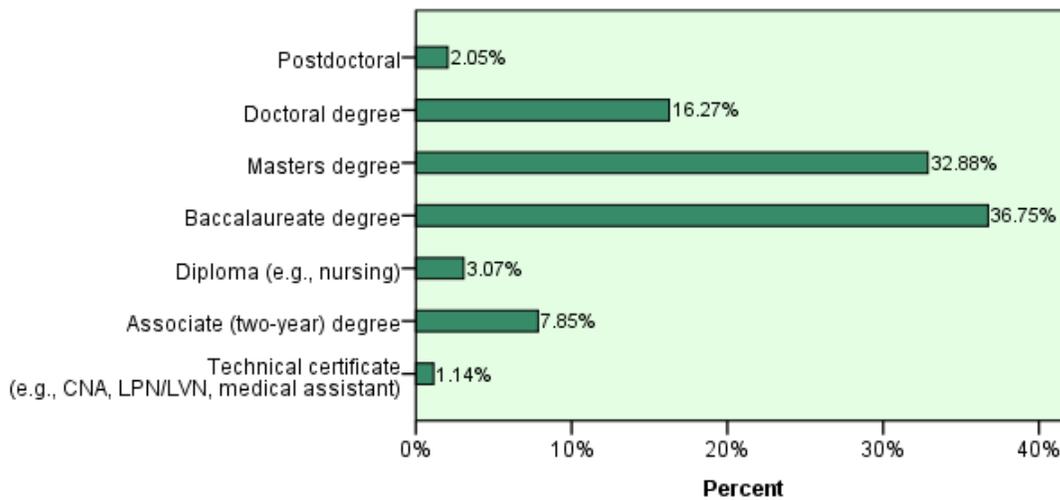


Figure 2. Which of the following best describes your highest level of education?

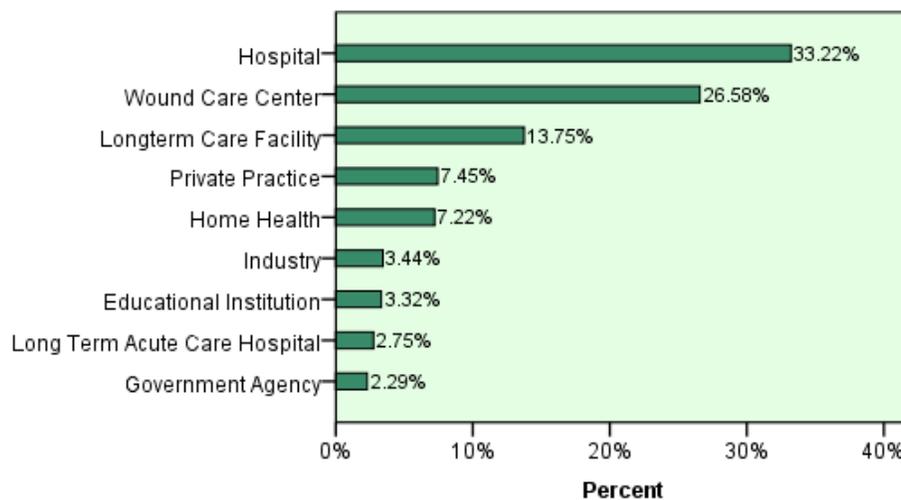


Figure 3. What is your primary place of practice/employment?

Approximately 99% of the respondents felt that the job task analysis study at least adequately addressed the responsibilities of wound management practitioners. In addition, respondents used all rating scales with an acceptable level of reliability.

During the second meeting, decision rules were adopted and used to determine which topics and tasks were appropriate for assessment, and therefore for inclusion in the final Detailed Content Outline. Decision rules were established to ensure that the resulting content was:

- Part of practice
- Important to practice
- Important throughout the United States
- Important regardless of educational preparation,
- Important regardless of years of experience, and
- Important regardless of certification status (CWS certified or not)

Application of the decision rules and revision based on candidate comments resulted in 48 topics and 42 tasks. It was determined that a total of 125 multiple-choice items would be sufficient to assess these topics and tasks. The number of items specified for each content category was determined by the AC based upon consideration of the breadth and depth of content, using the survey respondents judgments regarding the percentage of a CWS examination that should be included in each area. Finally, the AC evaluated the cognitive complexity that would likely be associated with the categories on the content outline, and determined that 30 items should require recall on the part of the candidate, 64 should require application of knowledge, and 31 should require analysis of a wound care patient situation. The final Detailed Content Outline, along with associated tasks, is shown on the pages that follow.

Respectfully Submitted:  
Lawrence J. Fabrey, PhD, Sr. Vice President, Psychometrics  
Lily Chuang, MS, Research Associate, Psychometrics  
Applied Measurement Professionals, Inc.  
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 American Board of Wound Management <b>Certified Wound Specialist (CWS)</b> <b>Detailed Content Outline*</b>		<b>Total</b>
<b>1. Wound Healing Environment</b>		<b>24</b>
<ul style="list-style-type: none"> <li>A. Anatomy and Physiology:                             <ul style="list-style-type: none"> <li>1. Integumentary</li> <li>2. Musculoskeletal</li> <li>3. Vascular</li> <li>4. Neurological</li> <li>5. Lymphatic</li> </ul> </li> <li>B. Wound Healing:                             <ul style="list-style-type: none"> <li>1. Phases</li> <li>2. Cell function</li> <li>3. Acute vs. chronic</li> </ul> </li> </ul>		
<b>2. Assessment and Diagnosis</b>		<b>28</b>
<ul style="list-style-type: none"> <li>A. History</li> <li>B. Physical examination</li> <li>C. Wound and skin assessment</li> <li>D. Pain assessment</li> <li>E. Risk assessment</li> <li>F. Functional assessment</li> <li>G. Laboratory/Imaging</li> <li>H. Nutrition</li> </ul>		
<b>3. Patient Management</b>		<b>32</b>
<ul style="list-style-type: none"> <li>A. Wound bed preparation/debridement</li> <li>B. Dressings</li> <li>C. Skin substitutes</li> <li>D. Topical agents</li> <li>E. Complications in repair (including bioburden)</li> <li>F. Nutrition</li> <li>G. Biophysical technologies:                             <ul style="list-style-type: none"> <li>1. Electrical stimulation</li> <li>2. Ultrasound</li> </ul> </li> <li>H. Compression therapy</li> <li>I. Negative pressure wound therapy</li> <li>J. Oxygen Therapy</li> <li>K. Pressure redistribution (i.e., offloading)</li> </ul>		
<b>4. Etiological Considerations</b>		<b>29</b>
<ul style="list-style-type: none"> <li>A. Neuropathy</li> <li>B. Diabetes</li> </ul>		

 American Board of Wound Management <b>Certified Wound Specialist (CWS)</b> <b>Detailed Content Outline*</b>		<b>Total</b>
C. Venous insufficiency D. Ischemia E. Pressure ulcers F. Lymphedema G. Trauma H. Surgical complications I. Atypical wounds (e.g., malignancy) J. Dermatological K. Infectious L. Burns		
<b>5. Professional Issues</b>		<b>12</b>
A. Documentation B. Patient adherence C. Legal Concepts D. Reimbursement and medical economics E. Medical ethics (e.g., palliative care, reasonable expectation of outcomes) F. Multidisciplinary teams G. Epidemiology H. Evidence based practice and research		
<b>Total Scored Items</b>		<b>125</b>

***In addition to classifying by topic (above) items will be classified by task. Tasks that are eligible for assessment include:***

**History and Physical Examination Tasks**

- S1 Obtain history of present illness to include wound duration, causative event, previous treatments, medications, and patient comorbidities
- S2 Obtain vital signs
- Assess:
- S3 circulatory system
- S4 integumentary system
- S5 musculoskeletal system
- S6 neurological system
- S7 limb volume
- S8 pain level
- S9 tissue oxygenation
- S10 wound bioburden
- S11 wound characteristics

## Evaluation and Diagnosis Tasks

*Determine classification of the wound using:*

- S12 Wagner scale
- S13 NPUAP (e.g., Stages I-IV, unstageable, suspected deep tissue injuries)
- S14 Rule of Nines
- S15 Perform risk assessment
- S16 Determine wound severity
- S17 Review or interpret laboratory and imaging tests
- S18 Assess barriers to wound healing
- S19 Determine wound etiology

## Treatment Tasks

- S20 Establish goals
- S21 Perform techniques to cleanse and reduce bioburden
- S22 Debride the wound
- S23 Apply dressings to the wound
- S24 Manage at-risk skin and periwound
- S25 Apply compression therapy
- S26 Use advanced therapeutic adjunctive treatments
  - a. negative pressure wound therapy
  - b. ultrasound
  - c. hyperbaric oxygen
  - d. electrical stimulation
- S27 Apply offloading device for the lower extremity
- S28 Use support surface for pressure relief/reduction
- S29 Address the nutritional needs of the patient
- S30 Address pain management issues
- S31 Manage bioengineered tissue
- S32 Use advanced topical therapeutic agents (e.g., becaplermin, collagenase)

## Follow-up Care Tasks

- S33 Discuss and review the plan of care
- S34 Educate patient/family/caregiver on disease management and prevention
- S35 Monitor laboratory values
- S36 Monitor pharmacologic use (e.g., indications, side effects)
- S37 Refer patients to consultants/specialists
- S38 Perform complete wound care documentation

## Professional Practice Tasks

- S39 Stay current on government reimbursement guidelines
- S40 Coordinate wound care continuum of care
- S41 Understand methodology and strength of evidence related to research
- S42 Follow confidentiality and security regulations

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*Applied Measurement Professionals, Inc.*

18000 W. 105<sup>th</sup> Street

Olathe, Kansas 66061.7543

913.895.4600

Fax: 913.895.4650

[www.goAMP.com](http://www.goAMP.com)