

confidential



Technology
That Works

People
Who Care



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

www.goAMP.com

Copyright © 2012 by Applied Measurement Professionals, Inc. (AMP) and the American Board of Wound Management (ABWM). PROPRIETARY. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy and recording, or any information and retrieval system, without permission in writing from AMP and ABWM.

A National Job Task Analysis Study of the Wound Specialist Physician

Executive Summary

The purpose of this study was to identify the knowledge requirements (topics) and responsibilities (tasks) of wound specialist physicians 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 specialist physicians.

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 specialist physicians were developed only on the basis of wound specialist physician 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, 368 respondents identified themselves as wound specialist physicians and completed the wound specialist physician 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 specialist physicians. 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.

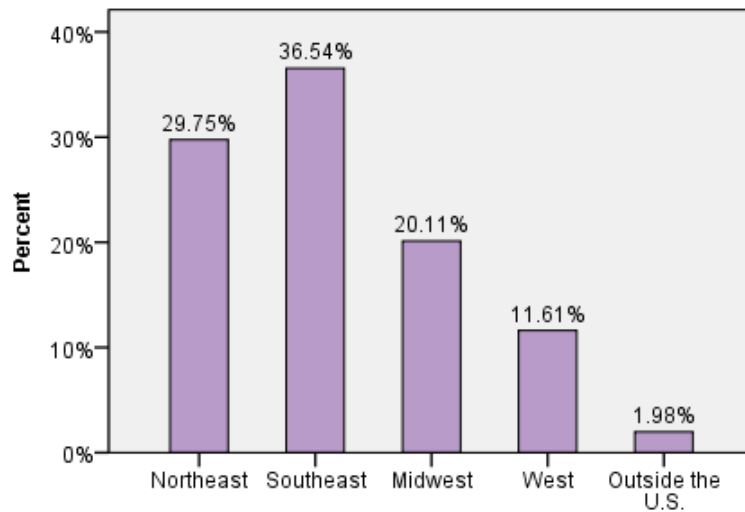


Figure 1. In which state do you primarily practice? (Recoded into Regions)

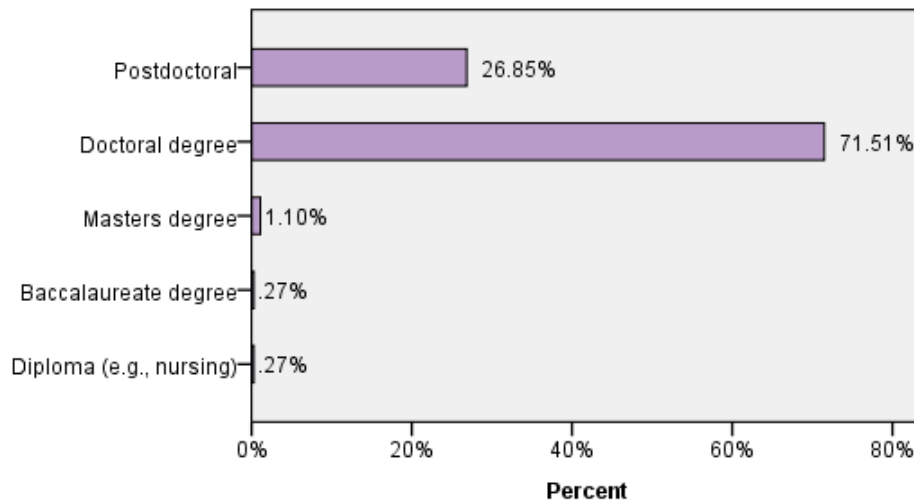


Figure 2. Which of the following best describes your highest level of education?

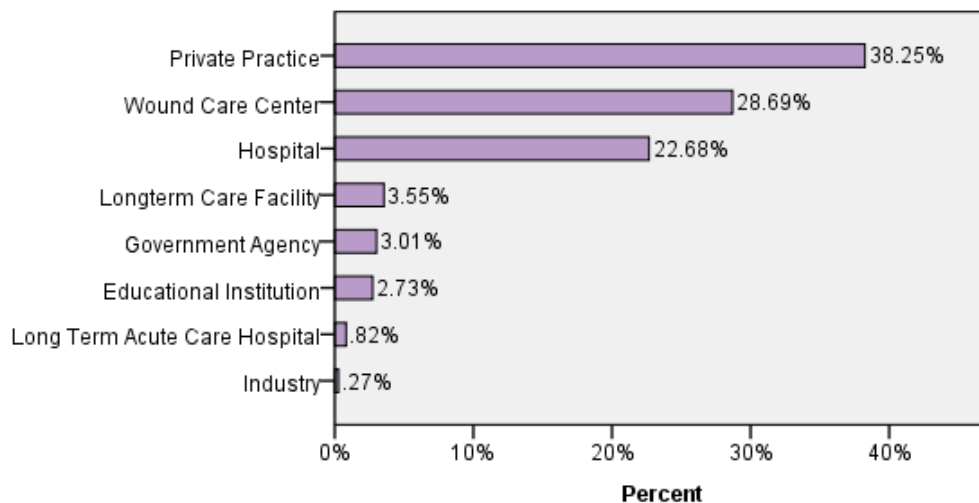


Figure 3. What is your primary place of practice/employment?

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, and
- Important throughout the United States

The scope of the wound specialist physician's role encompasses the role of the wound sepcialists, and the current CWSP includes successful completion of the CWS examination as a prerequisite to attempting the CWSP examination. In consideration of these two guiding principles, the committee unanimously agreed that wound specialist physicans should also possess topics of knowledge required for wound specialists. Topics should remain on the Detailed Content Outline of CWSP examination if they received an above average importance rating from the job task analysis for wound specialists.

Application of the decision rules and revision based on candidate comments resulted in 49 topics and 40 tasks. It was determined that a total of 150 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 considertation of the breadth and depth of content, using the survey respondents judgments regarding the percentage of a CWSP 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 39 items should require recall on the part of the candidate, 45 should require application of knowledge, and 66 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.
May 2012

 American Board of Wound Management Certified Wound Specialist Physician (CWSP) Detailed Content Outline*	Total
1. Wound Healing Environment	25
A. Anatomy and Physiology: <ol style="list-style-type: none"> 1. Integumentary 2. Musculoskeletal 3. Vascular 4. Neurological 5. Lymphatic 6. Other systems B. Wound Healing: <ol style="list-style-type: none"> 1. Phases 2. Cell function 3. Acute vs. chronic 	
2. Assessment and Diagnosis	40
A. History B. Physical examination C. Wound and skin assessment D. Pain assessment E. Risk assessment F. Functional assessment G. Laboratory/Imaging H. Nutrition	
3. Patient Management	40
A. Wound bed preparation/debridement B. Dressings C. Skin substitutes D. Topical agents E. Complications in repair (including bioburden) F. Nutrition G. Biophysical technologies: <ol style="list-style-type: none"> 1. Electrical stimulation 2. Ultrasound H. Compression therapy <ol style="list-style-type: none"> I. Negative pressure wound therapy J. Oxygen Therapy K. Pressure redistribution (i.e., offloading) 	

 American Board of Wound Management Certified Wound Specialist Physician (CWSP) Detailed Content Outline*		Total
4. Etiological Considerations		30
	<ul style="list-style-type: none"> A. Neuropathy B. Diabetes 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 	
5. Professional Issues		15
	<ul style="list-style-type: none"> 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 	
Total Scored Items		150

In addition to classifying by topic (above) items will be classified by task (to the lowest level, e.g., P4d2). Tasks that are eligible for assessment include:

Assessment & Diagnosis

- P1 Obtain patient history
- P2 Perform physical examination
- P3 Order and interpret laboratory tests and imaging studies
 - a. Arterial and venous studies
 - b. TCPO²
 - c. MRI
 - d. MRA
 - e. Ultrasound
 - f. Nuclear medicine
 - g. X Ray
 - h. Biopsy
 - i. Cultures
- P4 Identify characteristics of the wound
 - a. Measurement
 - b. Periwound Appearance
 - c. Drainage
 - d. Tissue Types
 - 1. Exuberant Granulation
 - 2. Friable Granulation
 - 3. Significance of Changes
- P5 Determine etiology of the wound
 - a. Arterial
 - b. Venous
 - c. Lymphatic
 - d. Neoplastic
 - e. Pressure
 - f. Dermatological
 - g. Surgical
 - 1. Compartment Syndrome
 - 2. Wound Dehiscence
 - 3. Fistula
 - 4. Foreign Body
 - h. Traumatic/Skin Tears
 - i. Burns
 - 1. Thermal/radiation
 - 2. Chemical
 - 3. Mechanical
 - 4. Electrocution
 - 5. Parkland Formula/Fluid Resuscitation
 - j. Bites
 - k. Diabetic
 - l. Neuropathic

- m. Infectious
 - 1. Osteomyelitis
 - 2. Necrotizing Fasciitis
 - 3. Abscess
 - 4. Sepsis
 - 5. Soft Tissue
- n. Atypical
 - 1. Calciphylaxis
 - 2. Vasculitis/vasculopathy
 - 3. Stevens Johnson
 - 4. Collagen vascular disease (e.g., Lupus Erythematosus)
 - 5. Pyoderma Gangrenosum
- P6 Determine severity of the wound
- P7 Determine classification of the wound using:
 - a. Wagner classification
 - b. University of Texas classification
 - c. NPUAP (e.g., Stages I-IV, unstageable, suspected deep tissue injuries)
 - d. Rule Of Nines

Treatment of Wounds

- P8 Manage treatment of the wound using
 - a. Debridement
 - b. Hyperbaric oxygen therapy
 - c. Electrical stimulation
 - d. Contact and non-contact ultrasound
 - e. Negative pressure wound therapy
 - f. Compression therapy
 - g. Dressings and topical agents
 - h. Skin Substitutes
 - i. Surgical Procedures
 - 1. Skin Grafts
 - 2. Flaps
 - 3. Amputation
 - 4. Excision
 - 5. Incision and Drainage
 - j. Offloading measures (e.g., beds, special shoes)
- P9 Manage pharmacology
 - a. pain medications
 - b. antibiotics
 - c. systemic therapies (e.g., glucose control, transfusions)
- P10 Manage complications:
 - a. Bleeding
 - b. Allergic Reactions
 - c. Adverse Events
 - 1. Systemic
 - 2. Local
 - d. Scarring

- P11 Address nutritional deficits
- P12 Arrange for consultations and referrals
 - a. Burn Center
 - b. Hyperbaric
 - c. Endocrinology
 - d. Diabetes education
 - e. Surgical
 - f. Vascular
 - g. Infectious Disease
 - h. Physical Medicine
 - i. Orthotics
 - j. Social Services
 - k. Nutrition
 - l. Pain Management
 - m. Palliative/Hospice

Wound Prevention

- P13 Identify and manage patient risk factors
 - a. Addictions
 - 1. Nicotine
 - 2. Substance Abuse
 - b. Obesity
 - c. Diabetes
 - d. Malnourishment
 - e. Neurological Deficits
 - f. Orthopedic Misalignment
 - g. Unstable Scar
 - h. Radiation Therapy
 - i. Chronic Immunosuppression
 - j. Psychological
 - k. Socioeconomic
 - l. Residual Limb
- P14 Educate patients and their families
 - a. Social Support
 - b. Nutrition
 - c. Patient Responsibility/ Nonadherent Patient
- P15 Recommend and prescribe preventive measures to ensure patient safety

Professional Issues

- P16 Comply with documentation requirements
 - a. Legal
 - b. Reimbursement
 - c. HIPAA
 - d. Consent For Treatment
 - e. CMS “Never” Events (Present on Admission)

- P17 Identify and respond to issues related to medicoethics
 - a. Patient Competency
 - b. Advance Directives
 - c. Off Label Treatment
 - d. Indigent Patients
 - e. Treatment Choice
- P18 Identify and respond to issues related to medicoeconomics
 - a. Cost Consideration
 - b. Physician Compensation
 - c. Accountable care
- P19 Determine appropriate levels of care
 - a. Acute
 - b. Chronic
 - c. Home
- P20 Incorporate a critical evaluation of literature to practice
- P21 Apply principles of evidence-based medicine

 **Technology**
That Works

People

 Who Care



Applied Measurement Professionals, Inc.

18000 W. 105th Street

Olathe, Kansas 66061.7543

913.895.4600

Fax: 913.895.4650

www.goAMP.com