

CERTIFICATION EXAMINATION
FOR PHYSICIANS IN
**WOUND MEDICINE
AND SURGERY**

HANDBOOK FOR CANDIDATES

Testing Periods

Application Deadline: May 1, 2018
Testing Window: June 16-June 30, 2018

Application Deadline: November 1, 2018
Testing Window: December 1-December 15, 2018



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This handbook contains necessary information about the Certification Examination for Physicians in Wound Medicine and Surgery. Please retain it for future reference. Candidates are responsible for reading these instructions carefully. This handbook is subject to change.

CERTIFICATION

The American Board of Wound Medicine and Surgery (ABWMS™) endorses the concept of voluntary, periodic certification by examination for physicians engaged in the active practice of wound medicine and surgery. Board certification is highly valued and provides formal recognition of a unique body of knowledge in the science and practice of wound medicine and surgery.

DESIGNATION

TO PROMOTE ENHANCED DELIVERY OF SAFE AND EFFECTIVE CARE THROUGH THE CERTIFICATION OF QUALIFIED PHYSICIANS IN WOUND MEDICINE AND SURGERY:

1. Recognizing formally those individuals who meet eligibility requirements of the American Board of Wound Medicine and Surgery and pass the Certification Examination for Physicians in Wound Medicine and Surgery.
2. Encouraging continued professional growth in the practice of wound medicine and surgery.
3. Establishing and measuring the level of knowledge required for certification by a wound medicine and surgery physician.
4. Providing a standard of minimum knowledge deemed appropriate for physicians practicing wound medicine and surgery, thereby assisting the employer, public, and health care professionals in the assessment of wound medicine and surgery physicians.

ELIGIBILITY REQUIREMENTS

By the application deadline, candidates must meet all of the following eligibility requirements:

1. Be a currently licensed physician in the United States or Canada **[Submit a copy of current license with Application.]**
2. Be certified or board eligible by a relevant primary board (American Board of Medical Specialties [ABMS], American Osteopathic Association [AOA]) **[Submit documentation with Application.]**
3. a. Have three years of experience in active practice of wound care documented by institutional Medical Director, Chief of Staff, or Chief Clinical Officer. **[Submit support letter, written on official letterhead, with Application.]**

OR

- b. Be enrolled in or completed an ABMS or AOA approved training program and have completed a dedicated one year wound medicine and surgery fellowship as documented by the fellowship director. **[Submit documentation with Application.]**
4. Complete and file an Application for the Certification Examination for Physicians in Wound Medicine and Surgery.
5. Pay the required fee.

EXAMINATION DEVELOPMENT AND ADMINISTRATION

The Certification Examination for Physicians in Wound Medicine and Surgery is developed by the American Board of Wound Medicine and Surgery (www.abwms.org) with the assistance of the Professional Testing Corporation (PTC) [1350 Broadway – 17th Floor, New York, New York 10018, (212) 356-0660, www.ptcny.com]. The Certification Examination for Physicians in Wound Medicine and Surgery is also administered for the American Board of Wound Medicine and Surgery by PTC. Questions concerning the examination should be referred to PTC.

ATTAINMENT OF DESIGNATION AND REDESIGNATION

Eligible candidates who pass the Certification Examination for Physicians in Wound Medicine and Surgery are eligible to use the designation Diplomate after their names and will receive certificates from the American Board of Wound Medicine and Surgery. A registry of designated Diplomates will be maintained by the American Board of Wound Medicine and Surgery and may be reported in various publications.

The Diplomate designation is recognized for a period of 10 years provided the Diplomate pays an annual registration fee. After the 10 years, the Diplomate must retake and pass the current Certification Examination for Physicians in Wound Medicine and Surgery or meet such alternative requirements as may be mandated by the Committee on Recertification.

REVOCAION OF DESIGNATION

Designation will be revoked for violations of the policies of the American Board of Wound Medicine and Surgery, including but not limited to:

1. Falsification of an Application.
2. Revocation of any current license to practice medicine.
3. Misrepresentation of designation status.
4. Failure to pay the annual registration fee.

The American Board of Wound Medicine and Surgery shall make all decisions regarding revocation of designation.

COMPLETION OF APPLICATION

1. Read and follow the directions on the application and in this handbook. All applications must be completed online. The application can be found on Professional Testing Corporation's website www.ptcny.com/clients/ABWMS.
2. The online application, all required documentation, and appropriate fees for the examination must be received on or before the appropriate deadline listed in this handbook.

APPLICATION CHECKLIST

Candidates **MUST** upload the following documentation to their online application:

- ✓ Copy of current medical license
- ✓ Copy of board certification
- ✓ Supporting letter from institutional Medical Director, Chief of Staff, or Chief Clinical Officer attesting to physician’s three years of experience in active practice of wound care, written on official letterhead

FEES

Please note: Fees are **NOT** refundable.

Examination Fee for the Certification Examination for Physicians in Wound Medicine and Surgery
(Initial Certification for New Candidates): \$850.00

MAKE CHECK OR MONEY ORDER PAYABLE TO: PROFESSIONAL TESTING CORPORATION

To pay by Visa, MasterCard, or American Express, complete the Credit Card Payment section on the Online Application. **DO NOT SEND CASH.**

REFUNDS

Candidates who are unable to take the examination as scheduled may request a transfer to the next testing period. The transfer must be made in writing, submitted to PTC within 30 days of the originally scheduled testing date and must be submitted with a rescheduling fee of \$210.00. Candidates are responsible for contacting PSI and canceling their original appointment prior to the scheduled exam date, if they have made one (see Changing Your Examination Appointment on page 5 for more details). Please note that the rescheduling fee is based on cost and is not punitive in nature.

Examinations fees can only be transferred once, so please plan carefully. Candidates who cannot test during their new testing window will need to reapply and pay the full examination fee.

If a candidate is unable to attend the examination on the date for which they registered and a timely request to transfer is not made, the application will be closed and all fees will be forfeited.

There will be no refund of fees.

EXAMINATION ADMINISTRATION

The Certification Examination for Physicians in Wound Medicine and Surgery is administered during an established two-week testing period on a daily basis, Monday through Saturday, excluding holidays, at computer-based testing facilities managed by PSI, Inc. PSI has several hundred testing sites in the United States, as well as Canada. Scheduling is done on a first-come, first-serve basis. To find a testing center near you, visit <http://www.ptcny.com/cbt/sites.htm> or call PSI at (800) 733-9267. Please note: Hours and days of availability vary at different centers. **You will not be able to schedule your examination appointment until you have received a Scheduling Authorization from PTC.**

ONLINE PRACTICE TEST FOR PHYSICIANS IN WOUND MEDICINE AND SURGERY

WHAT IS IT: A practice test consisting of 50 questions with a testing time of 2 hours taken over the Internet

WHEN: Available now

WHY TAKE IT: To experience taking a computerized exam, to review content included in Physicians in Wound Medicine and Surgery, and to learn more about question format, style, and level of difficulty.

SCORE REPORT: After completing the online practice test, you will receive an instant score report showing test performance in each of the content areas. The score report does not provide correct answers or indicate which questions were answered correctly and incorrectly. Once the practice test is scored, you cannot return to the test to review the questions.

NOTE: The online practice test is an optional tool candidates may use as they prepare for the certification examination. While the practice test may help candidates identify areas of strengths and weakness, it should not be used as the only means to determine candidate preparedness or readiness to test. Since the practice test is NOT intended to be a study guide nor the sole source of preparation for the actual certification examination, candidates are NOT provided with the answer key, rationales for each question, nor notification of which specific items were answered correctly or incorrectly.

Though the specific questions that are on the practice test will not appear on the actual certification examination, it allows candidates to become familiar with the style of questions that may be asked. The instant score report received after practice test submission shows overall test performance as well as performance in each of the content areas. Candidates may find this information useful in determining future study needs. Once the practice test is scored, candidates cannot return to the test to review the questions. Performance on the practice test does not guarantee similar performance on the actual certification examination.

The PTC Online Testing System does not demonstrate the testing software used during the certification examinations. Those who purchase the online practice test should be aware that they will use a different testing platform when they take certification examinations at designated proctored testing centers.

The practice test is not a requirement for certification eligibility nor does it contribute in any way to success on the certification examination. There are many ways candidates should prepare for the certification examination. Candidates should use a variety of resources and consider their own education and experiences. Review the content outline and reference materials listed in the handbook for additional exam-related information.

CONTENT INCLUDED

- I. Basic Wound Science
- II. Clinical and Diagnostic Evaluation
- III. Treatment
- IV. Risk Factors
- V. Wound Etiology
- VI. Practice Management

FEE: \$100 by credit card

APPLY: Go to www.ptcny.com and select Online Practice Test for Physicians in Wound Medicine and Surgery

FURTHER INFO: Visit www.ptcny.com or call Professional Testing Corporation at 212-356-0660

TESTING SOFTWARE TUTORIAL

A testing tutorial can be viewed, free of charge, online. Please visit www.ptcny.com/cbt/demo.htm. This document can give you an idea about the features of online testing.

SCHEDULING YOUR EXAMINATION APPOINTMENT

Once your application has been received and processed and your eligibility verified, you will be sent a notice from PTC confirming receipt of payment and acceptance of application. Within six weeks prior to the first day of the testing period, you will be sent a Scheduling Authorization via email from notices@ptcny.com. Please ensure you enter your correct email address on the application and add the 'ptcny.com' domain to your email safe list. If you do not receive a Scheduling Authorization at least three weeks before the beginning of the testing period, contact the Professional Testing Corporation at (212) 356-0660.

The Scheduling Authorization will indicate how to schedule your examination appointment as well as the dates during which testing is available. Appointment times are first-come, first-serve, so schedule your appointment as soon as you receive your Scheduling Authorization in order to maximize your chance of testing at your preferred location and on your preferred date. You will not be able to schedule your examination until you receive your Scheduling Authorization email. These emails can end up in junk/spam mail folders. Please add notices@ptcny.com to your email contacts or email safe sender list.

Your current driver's license, passport, or U.S. Military ID must be presented in order to gain admission to the testing center. Temporary, paper licenses will not be accepted at the testing center. PTC also recommends you bring a paper copy of your Scheduling Authorization and your PSI appointment confirmation with you to the testing center.

After you make your test appointment, PSI will send you a confirmation email with the date, time and location of your exam. Please check this confirmation carefully for the correct date, time and location. Contact PSI at (800) 733-9267 if you do not receive this email confirmation or if there is a mistake with your appointment.

- **It is your responsibility as the candidate to call PSI to schedule the examination appointment.**
- **It is highly recommended that you become familiar with the testing site.**
- **Arrival at the testing site at the appointed time is the responsibility of the candidate. Please plan for weather, traffic, parking, and any security requirements that are specific to the testing location. Late arrival may prevent you from testing.**

SPECIAL TEST CENTERS OUTSIDE OF THE UNITED STATES AND PARTS OF CANADA

Candidates outside of the United States and Canada must complete and submit the Request for Special Testing Center Form found on the www.ptcny.com homepage. This form must be uploaded to your application no later than 8 weeks prior to the start of the chosen testing period. Fees for testing at an international computer test center (outside of the United States and Canada) are \$100.00 in addition to the examination fee. PTC will arrange a computer based examination at an international test center for you.

Please note that all examinations are administered in English.

SPECIAL NEEDS

ABWMS and PTC support the intent of and comply with the Americans with Disabilities Act (ADA). PTC will take steps reasonably necessary to make certification accessible to persons with disabilities covered under the ADA. Special testing arrangements may be made upon receipt of the Application, examination fee, and a completed and signed Request for Special Needs Accommodations Form, available from www.ptcny.com or by calling PTC at (212) 356-0660. This Form must be uploaded with the online application at least EIGHT weeks before the testing period begins. Please use this Form if you need to bring a service dog, medicine, food or beverages needed for a medical condition with you to the testing center.

Only those requests made and received on the official Request for Special Needs Accommodations Form (found at www.ptcny.com) will be reviewed. Letters from doctors and other healthcare professionals must be accompanied by the official Form and will not be accepted without the Form.

Information supplied on the Request for Special Accommodations Form will only be used to determine the need for special accommodations and will be kept confidential.

CHANGING YOUR EXAMINATION APPOINTMENT

If you need to cancel your examination appointment or reschedule to a different date within the two-week testing period, you must contact PSI at (800) 733-9267 no later than noon, Eastern Standard Time, of the second business day PRIOR to your scheduled appointment. **Please note: PSI does not have the authority to authorize refunds or transfers to another testing period.** If you fail to arrive for your appointment or cancel without giving the required notice, you will forfeit your testing fee.

RULES FOR THE EXAMINATION

1. All Electronic devices that can be used to record, transmit, receive, or play back audio, photographic, text, or video content, including but not limited to, cell phones, laptop computers, tablets, Bluetooth devices; wearable technology such as smart watches; MP3 players such as iPods; pagers, cameras and voice recorders are not permitted to be used and cannot be taken in the examination room.
2. No books, papers, or reference materials may be taken into or removed from the testing room.
3. Simple, nonprogrammable calculators are permitted with the exception of calculators as part of cellular phones, Blackberries, etc. A calculator is also available on screen if needed.
4. No questions concerning content of the examination may be asked during the examination session. The candidate should read carefully the directions that are provided on screen at the beginning of the examination session.
5. Candidates are prohibited from leaving the testing room while their examination is in session, with the sole exception of going to the restroom.
6. Bulky clothing, such as sweatshirts (hoodies), jackets, coats and hats, except hats worn for religious reasons, may not be worn while taking the examination.
7. All watches and "Fitbit" type devices cannot be worn during the examination. It is suggested that these items are not brought to the test center.

REPORT OF RESULTS

Candidates will be notified in writing by the American Board of Wound Medicine and Surgery approximately four weeks after the close of the testing window whether they have passed or failed the examination. Scores on the major areas of the examination and on the total examination will be reported. Successful candidates will also receive certificates from the American Board of Wound Medicine and Surgery.

REEXAMINATION

The Certification Examination for Physicians in Wound Medicine and Surgery may be taken as often as desired upon filing of a new Application and fee. There is no limit to the number of times the examination may be repeated.

CONFIDENTIALITY

1. The American Board of Wound Medicine and Surgery will release the individual test scores ONLY to the individual candidate.
2. Any questions concerning test results should be referred to the Professional Testing Corporation at (212) 356-0660.

CONTENT OF EXAMINATION

1. The Certification Examination for Physicians in Wound Medicine and Surgery is a computer-based examination composed of a maximum of 200 multiple-choice, objective questions with a total testing time of four (4) hours.
2. The content for the examination is described in the Content Outline on page 8.
3. The questions for the examination are obtained from individuals with expertise in wound medicine and surgery and are reviewed for construction, accuracy, and appropriateness by the American Board of Wound Medicine and Surgery.
4. The American Board of Wound Medicine and Surgery prepares the examination with the advice and assistance of the Professional Testing Corporation.
5. The Certification Examination for Physicians in Wound Medicine and Surgery will be weighted in approximately the following manner:

I.	Basic Wound Science	10%
II.	Clinical and Diagnostic Evaluation	20%
III.	Treatment	30%
IV.	Risk Factors.....	10%
V.	Wound Etiology	25%
VI.	Practice Management.....	5%

CONTENT OUTLINE

I. Basic Wound Science

- A. Vascular and Skin Anatomy and Function
- B. Physiology of Wound Healing
- C. Pathology
- D. Pathophysiology of Wounds
- E. Physiology of Oxygen in Wound Healing
- F. Embryology, Genetics, and Development
- G. Epidemiology

II. Clinical and Diagnostic Evaluation

- A. History and Physical
- B. Wound Evaluation
 - 1. Wound Bed
 - 2. Wound Edge
 - 3. Slough and Eschar
 - 4. Exudate
 - 5. Undermining and Tunneling
 - 6. Periwound Skin
 - 7. Wagner Scale
 - 8. University of Texas
 - 9. NPUAP
 - 10. Rule of Nines
 - 11. Classification of Osteomyelitis
 - 12. Laboratory Studies
 - 13. Wound Measurement
- C. Diagnostic Imaging
 - 1. Plain Film
 - 2. CT
 - 3. MRI/MRA
 - 4. Ultrasound
 - 5. Nuclear
 - 6. Invasive Vascular Testing
- D. Swab and Tissue Cultures
- E. Noninvasive Testing
 - 1. Oxygen Testing
 - 2. Vascular Testing
- F. Referral Criteria
 - 1. Burns
 - 2. HBO
 - 3. Vascular
 - 4. ENT
 - 5. Endocrine
- G. Evaluation for Protective Sensation
- H. Biopsy
 - 1. Infection
 - 2. Malignancy

III. Treatment

- A. Medical Therapy
 - 1. Pharmacologic
 - 2. Pain Management
 - 3. Diabetes Management
 - 4. Nutrition Management
- B. Topical Wound Therapy
 - 1. Enzymatic Debridement
 - 2. Topical Anti-infectives
 - 3. Hydrogels
 - 4. Alginates
 - 5. Hydrocolloids
 - 6. Honey
 - 7. Foam
 - 8. Cleansers
- C. Surgical Therapy
 - 1. Surgical Debridement
 - 2. Bioburden and Biofilm
 - 3. Skin Grafts and Flaps
 - 4. Incision and Drainage
 - 5. Amputation
 - 6. Delayed Primary Closure
 - 7. Surgical Emergencies
 - 8. Foreign Body
 - 9. Revascularization Options
- D. Infection Management
 - 1. Antibiotic Therapy
 - 2. Isolation Indications
 - 3. Topical Antimicrobial
- E. Advanced Therapies
 - 1. Collagen Based Products
 - 2. Allografts and Xenografts
 - 3. Bioengineered Skin Substitutes (Dermagraft/Apligraf)
 - 4. Growth Factors (Becaplermin, PRP)
 - 5. Negative Pressure Wound Therapy (NPWT)
 - 6. Hyperbaric Oxygen Therapy
 - 7. E-Stim
 - 8. Low-Frequency Ultrasound
 - 9. Regenerative Medicine
- F. Compression Therapy
- G. Offloading Techniques
- H. Side Effects

IV. Risk Factors

- A. Diabetes
- B. Obesity
- C. Neuropathy
- D. Smoking
- E. Immunosuppressive Agents
- F. Malnutrition
- G. Renal Failure
- H. Behavioral Issues
- I. Wound Chronicity
- J. Arteriosclerosis
- K. Aging
- L. Pharmacologic
- M. Colonization
- N. Risk Prevention

V. Wound Etiology

- A. Diabetic Foot Ulcer
 - 1. Charcot
 - 2. Neuropathic
- B. Venous Leg Ulcers
 - 1. Venous Hypertension and Reflux
 - 2. Post-phlebotic Syndrome
 - 3. Fibrin Cuff Theory
 - 4. Hemosiderin Deposition
- C. Arterial Ulcers
- D. Pressure Ulcers
 - 1. Pressure
 - 2. Shear
 - 3. Friction
 - 4. Moisture
 - 5. Staging
 - 6. Prevention
- E. Neoplastic Ulcers
- F. Infectious
- G. Autoimmune
- H. Traumatic
- I. Burn
- J. Lymphatic
- K. Factitious
- L. Insect and Animal Bites
- M. Atypical Wounds
- N. Institutionally Acquired
- O. Osteomyelitis

VI. Practice Management

- A. Medical Ethics and Palliative Care
- B. Confidentiality
- C. Legal Issues
- D. Documentation
- E. Adherence/Compliance Issues
- F. Clinical Trials

SAMPLE EXAMINATION QUESTIONS

In the following questions, choose the one best answer.

1. Hyperbaric oxygen therapy is **CONTRAINDICATED** in patients who have

- 1. pulmonary embolism.
- 2. arterial gas embolism.
- 3. untreated pneumothorax.
- 4. history of seizure disorder.

2. Which of the following dressings is **NOT** safe in the hyperbaric environment?

- 1. Hydrogel
- 2. Cotton gauze
- 3. Calcium alginate dressing
- 4. Petroleum based dressing

3. The remodeling phase of wound healing is most likely to be identified by

- 1. erythema.
- 2. hemostasis.
- 3. scar formation.
- 4. collagen formation.

4. Which of the following pathophysiologies is common to many types of chronic wounds?

- 1. Ischemia-reperfusion
- 2. Autoimmune disease
- 3. Nitric oxide synthetase deficit
- 4. Superoxide dismutase deficiency

CORRECT ANSWERS TO SAMPLE QUESTIONS

1. **3** 2. **4**; 3. **3**; 4. **1**

REFERENCES

The following references may be of some help in preparing for the examination. The list does not attempt to include all acceptable references nor is it suggested that the Certification Examination for Physicians in Wound Medicine and Surgery is necessarily based on these references. The American Board of Wound Medicine and Surgery does not endorse any reference or resource as an official study guide for the certification examination.

Clinics in Plastic Surgery, Elsevier

Hyperbaric Medicine Practice, Third Edition, Kindwall and Whelan, Best Publishing Company, 2008

Hyperbaric Oxygen Therapy Indications, 12th Edition, Gesell, The Undersea and Hyperbaric Medical Society, 2008

MasterMinding Wounds, First Edition, Straus, Aksemov and Miller, Best Publishing Company, 2010

Schwartz's Principles of Surgery, Ninth Edition, Brunicki et.al., McGraw-Hill Professional, 2009

Skin and Wound Care, Sixth Edition, Hess, Lippincott Williams & Wilkins, 2007

The Epidermis in Wound Healing, Rovee and Maibach, CRC Press, 2004

Wound Care, Fourth Edition, Sussman and Bates-Jensen, Aspen Publishers, 2012

Wound Care Essentials, Third Edition, Baronowski and Ayello, Lippincott Williams & Wilkins, 2011

Wound Care Made Incredibly Simple, Second Edition, Burghardt, Lippincott Williams & Wilkins, 2006

Wound Care Practice, Second Edition, Sheffield, Smith and Fife, Best Publishing Company, 2007