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The National Alliance of Wound Care & Ostomy<sup>®</sup> (NAWCO<sup>®</sup>) is a non-profit organization that is dedicated to the advancement and promotion of excellence in wound care through the certification of wound care practitioners in the United States. The Certification Committee of the NAWCO is the governing body of the DWC<sup>®</sup> credential.

The aspiration of the NAWCO is to unify wound care providers & practitioners from different educational backgrounds along the health care continuum in an effort to streamline the delivery of quality wound care.

The NAWCO offers the "Diabetic Wound Certification Examination" to measure the academic and technical competence of eligible candidates in the area of Diabetic Wound Management beyond their basic wound care certification credential. The DWC credential is performed in accordance with legislation code and practice guidelines as determined by each respective professional state regulatory/licensing board. Therefore, DWC certification alone does not determine a practitioner's scope of practice.

NAWCO does not discriminate against any individual on the basis of race, color, creed, age, sex, national origin, religion, disability, marital status, parental status, ancestry, sexual orientation, military discharge status, source of income or any other reason prohibited by law. Individuals applying for the examination will be judged solely on the published eligibility requirements.

This handbook contains information regarding the Diabetic Wound Certification examination process of the National Alliance of Wound Care and Ostomy.

The information contained in this Candidate Handbook is the property of National Alliance of Wound Care and Ostomy, and is provided to candidates who will be taking the certification examination. Copies of this handbook may be downloaded for single personal use, but no part of this handbook may be copied for preparing new works, distribution or for commercial use. NAWCO does not provide permission for use of any part of the handbook.

To avoid problems in processing your application, it is important that you follow the guidelines outlined in this handbook and comply with our required deadlines. If you have any questions about the policies, procedures, or processing of your application after reading this handbook, please contact the National Alliance of Wound Care and Ostomy. Additional copies of the handbook may be obtained from our website: www.nawccb.org.

# WE RECOMMEND YOU KEEP THIS CANDIDATE HANDBOOK FOR REFERENCE THROUGHOUT THE APPLICATION AND EXAMINATION PROCESS.

Updated 9/2014



National Alliance of Wound Care and Ostomy®

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## The Need

Worldwide, there are more than 246 million people living with diabetes, with 23 million in the US alone.<sup>1</sup> Without effective prevention and control programs, projections estimate that the number of people with diabetes will continue to increase globally to 438 million by 2030.<sup>2</sup>

In developed countries, one in every six people with diabetes will develop a foot ulcer during their lifetime.<sup>3</sup> 85% of those with a foot ulcer will succumb to the ultimate consequence of limb amputation.<sup>3</sup> More than one and half million diabetes-related amputations are performed annually.<sup>3</sup> Research by the International Diabetes Association shows that up to 85% of amputations resulting from diabetic foot disease are preventable.<sup>3</sup>

Without action, global rates of diabetic foot disease, and the amputations associated with its poor management, will increase alongside this forecasted rise in the prevalence of diabetes. To meet the need for specialized clinicians dedicated to the treatment and prevention of diabetic foot complications, the National Alliance of Wound Care and Ostomy (NAWCO) is sponsoring the Diabetic Wound Certification (DWC).

1 National Institute of Diabetes and Digestive and Kidney Diseases. National Diabetes Statistics, 2007 fact sheet. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, 2008.

2 "International Diabetes Federation. IDF Diabetes Atlas, 4th edn. Brussels, Belgium: International Diabetes Federation, 2009."

3 International Diabetes Foundation: Position Statement-The diabetic foot: amputations are preventable, May 2005

## **Objectives of DWC Certification**

The objective of DWC certification is to provide assurance to the public by promoting the delivery of safe and effective diabetic wound and skin management by:

- 1. Recognizing formally those individuals who demonstrate proficiency and mastery of knowledge, expertise, and skills in diabetic wound management above basic wound care certification.
- 2. Providing a standard of knowledge required for certification based upon American Diabetes Association (ADA)clinical practice recommendations and other evidence based practice and research in the field of diabetic wound management.
- 3. Establishing and measuring the level of knowledge required for certification in diabetic skin and wound management.
- 4. Promoting continued professional growth in diabetic skin and wound management.

## **Scope of Practice**

The role of the DWC is based upon expert evidence based clinical knowledge and skills that are practiced in acute, outpatient, long-term care, and home care settings.

The focus of the DWC is on high quality care to achieve optimum patient outcomes and cost control in diabetic wound management and prevention of complications.

In order to assure appropriate and thorough diabetic wound management, a holistic comprehensive approach is utilized. All factors affecting healing, including considerations of systemic, psychosocial, and local factors are reviewed. The DWC provides direct patient care, necessary patient education, and prevention measures through comprehensive assessment, referrals, and continuing evaluation of high risk diabetic patients and all types of diabetic wounds.

Diabetic wound management requires the skills of the interdisciplinary team that includes the DWC, physician, nurse, dietitian, physical therapist, occupational therapist, social worker, and other health care disciplines or providers depending upon each individual patient assessment.

The DWC scope of practice is performed in accordance with legislative code and scope of practice as determined by each respective professional state licensing board.

## **Eligibility Requirements**

Applicants for the NAWCO DWC certification must meet all of the following criteria:

- 1. Hold a current, unrestricted license as an LPN/ LVN, RN, NP, PT, PTA, OT, MD, DPM, DO or PA.
- 2. Successfully complete an NAWCO approved "Diabetic Skin and Wound Management Course".
- 3. Must meet **ONE** of the following:
  - a. Currently hold an accredited certification in wound care. (WCC<sup>°</sup>, CWS<sup>°</sup>, CWCN<sup>°</sup>, CWON<sup>°</sup>, CWOCN<sup>°</sup>) - OR-

b. Document active involvement in the care of diabetic patients, or in management, education or research directly related to diabetes while actively licensed for at least two (2) years full-time/four (4) years part-time within the past five (5) years.

- 4. Completion of application and required supporting documentation.
- 5. Payment of required fees.
- 6. Receive passing score on the NAWCO DWC Examination.

## NAWCO Approved Diabetic Wound Management Training Courses

Wound Care Education Institute 877-462-9234 www.wcei.net

WCEI offers the Diabetic Wound Management Training Course online and live at select locations all around the United States. For detailed listings and an application, visit www.wcei.net.

## Credentials

Upon successful completion of the Diabetic Wound Certification examination, candidates may use the initials DWC, Diabetic Wound Certified, to designate their status. Credentials are awarded for a five (5) year period following obtaining a passing score on the examination.

Upon expiration of credentialing term, the DWC is required to recertify with the NAWCO to maintain their credentials.

"DWC" has been registered with the United States Patent and Trademark Office as the official certification mark of the Diabetic Wound Certification sponsored by the National Alliance of Wound Care and Ostomy.

#### **Certificate of Certification**

The NAWCO will award an official numbered certificate to all candidates upon passing the NAWCO Diabetic Wound Certification examination, denoting status as DWC, Diabetic Wound Certified.

#### **Credential Verification**

To ensure public safety and ethical practices, the National Alliance of Wound Care and Ostomy provides credential verification. Interested parties, including the general public, can verify DWC credentials using the credential verification search feature located at <u>www.nawccb.org</u>.

## **Examination Administration**

The Diabetic Wound Certification Examination is sponsored by the National Alliance of Wound Care and Ostomy and is maintained by the independent NAWCO Certification Committee. A passing score of 70% is required to become certified.

The DWC examination is administered at computer based testing facilities managed by PSI Services, LLC. PSI has testing sites in the United States and other countries. A listing of available testing centers may be viewed at <a href="http://cert.psiexams.com/locateall.html">http://cert.psiexams.com/locateall.html</a>.

Paper and pencil administrations of this examination will be offered periodically on site at the Diabetic Wound Management Certification Training courses. For locations and information, visit <u>www.wcei.net</u>.

## **Content of Examination**

The Diabetic Wound Certification examination is an objective, multiple choice test consisting of up to 110 questions with a total testing time of two (2) hours.

The questions for the Diabetic Wound Certification examination are prepared by teams of Subject Matter Experts (SMEs). The examination questions are written to assess cognitive levels of knowledge, comprehension, application and analysis related to diabetic wound management.

## **Examination Content Outline**

- 1. Anatomy/Physiology
  - a. Anatomy of the Foot Skin, Bones, Nails
  - b. Wound Healing
- 2. Etiology
  - a. Epidemiology Diabetes, Diabetic Foot Ulcers, Amputations
  - b. Pathogenesis Diabetic Foot Ulcers Neuropathy (Motor, Sensory, Autonomic), Peripheral Vascular Disease, Peripheral Arterial Disease, Trauma/Infection, Associated Risk Factors
- 3. Diagnostics
  - a. Perfusion Pulses, Capillary Refill, Rubor Dependency Test, Toe Brachial Pressure Index, tcpO2, Dermal Thermometry, Toe photoplethysmography
  - b. Sensory Testing Semmes Weinstein Monofilament, Tuning Fork, Ankle Reflexes
  - c. Biomechanics Gait evaluation, Muscle group strength, Plantar pressure measurement, Joint mobility Range of motion, Harris Mat Test, Forefoot Test
  - d. Labs CBC, serum electrolytes, urea, creatine, blood glucose, HbA1c, serum cholesterol, triglycerides, C Reactive protein, TSH, Serum B12
  - e. Radiology
  - f. Skills Total Contact Casting, Nail Trimming, Sharp Debridement, Toe Brachial Pressure Index, Dermal Thermometry , Toe photoplethysmography, Stump wrapping
- 4. Examination
  - a. History Overall medical history, Presenting complaint, Past foot history, Diabetic History, Drug history, Family history, Psychosocial history

- b. Dermatologic examination Skin appearance, Color , Texture, Corns/Callus, Sub-callous hemorrhage, Anhydrosis, Xerosis, Fissures, Turgor, Thick Waxy skin
- c. Dermatologic complications Necrobiosis Lipoidica Diabeticorum, Diabetic Dermopathy, Diabetic Bullae, Granuloma Annulare
- d. Nail Examination Structure, Onychauxis, Atrophic, Color, Onychocryptosis , Paronychia, Onychomycosis , Onychogryphosis ,
- e. Structure/Deformities of foot Pes Cavus, Hammer Toes, Claw Toes, Hallux valgus, Fibrofatty padding depletion, Charcot Foot
- f. Footwear Fit, Type/Style, Heel, Wear pattern, Insole inspection, Socks
- g. Diabetic Foot Ulcer Assessment Location, Wound Base Characteristics, Classification Systems (Meggitt-Wagner, University of Texas, PEDIS)
- h. Psychosocial Assessment
- 5. Prevention
  - a. Risk Classification International Working Group on the Diabetic Foot Risk Definitions and Treatment Recommendations
  - b. Foot Ulcer/Amputation Prevention Interventions Annual Foot screening, Footwear Selection, Patient Education
  - c. Patient Self Care Self exams, Hygiene, Toenail care, Nutrition, Glucose Control
- 6. Treatment
  - a. Diabetic Foot Ulcer Treatment
    - 1) Infection Diagnosis, Definition, Classifications, Osteomyelitis, Treatment
    - 2) Debridement
    - 3) Dressings Local Wound Care
    - 4) Adjunctive Therapies Bio-engineered products, Negative Pressure Therapy, Growth Factors, Hyperbaric Oxygen, Electrical Stimulation
  - b. Offloading Total Contact Casting, Shoe Modifications, Therapeutic Footwear, Orthotics/Inserts
  - c. Skin Treatment
  - d. Nail Treatment
  - e. Callus Treatment
  - f. Nutrition
  - g. Pain Interventions
  - h. Unsalvageable foot
    - 1) Surgical Aspects Goals, Psychosocial Factors, Pre-op Care, Post-Op Care
    - 2) Amputee Rehabilitation
- 7. Multidisciplinary Care
  - a. Team Model
  - b. Overall Diabetic Foot Management Goals Limb preservation, Patient education
  - c. Patient Education Adult learning principals, Teen/Pediatric, Cultural considerations
  - d. Legal Aspects Non-adherent patients, Standards of Practice
  - e. Referrals

#### **Examination Results**

Candidates will receive their results immediately following the completion of the computerized examination. Exam results will indicate either "pass" or "fail". Hard copy results will be sent via US mail to candidates within 4 weeks of the examination. No candidate exam results will be given by telephone or facsimile for any reason.

#### **Review of Examinations**

For security reasons, examination materials are not available for review. Neither the testing corporation nor the NAWCO will discuss specific questions on any of the examinations. Comments about questions should be directed in writing to the NAWCO Certification Committee. The NAWCO will review comments relating to the exam but will not make a written response to comments.

Candidates who believe their examination results were improperly recorded or their examination graded inaccurately may request that their examination be hand scored. To request examination hand scoring, candidates should complete a signature form available from the NAWCO website. This request must be postmarked no later than 100 days after the test administration date.

#### **Examination Disclosure**

The examination questions remain solely the property of the NAWCO. These materials are confidential and are not to be shared with any person or agency for any reason.

## **Retesting Policy**

If you are unsuccessful in passing the examination, you will receive instructions and a re-examination application by email from the National Alliance of Wound Care and Ostomy.

Candidates who take the Diabetic Wound Certification examination and are unsuccessful may retake the examination for a total of three (3) additional re-examination attempts within two (2) years of the first examination date. After four (4) attempts within two (2) years, you would be required to wait for a period of one (1) year prior to taking the exam again.

Candidates who allow the two (2) year time limit to expire, but who do not exhaust the four (4) exam attempts, are not required to wait one (1) year prior to reapplying to take the exam again. However, all unsuccessful candidates must meet all eligibility requirements under one of the existing certification pathways in order to retake the examination. Candidates are encouraged to self-study or attend a diabetic wound management training course during this time. Unsuccessful candidates are not eligible for any refunds.

## Fees

Processing Fee* Non-refundable with each application submission	\$ 30.00
Examination Fee* Initial Certification Recertification Re-examination	\$300.00 \$300.00 \$300.00

\*If you are attending the Diabetic Wound Management Certification Course provided by the Wound Care Education Institute, your initial examination and processing fee is included in their tuition cost.

For re-examination or recertification make check or money order payable to: National Alliance of Wound Care and Ostomy. If for any reason you are deemed ineligible to sit for the exam, the \$300 examination fee will be refunded within two weeks.

## **Application Process**

## Initial (First Time) DWC Certification Application

The DWC certification examination application is included with the Diabetic Wound Management Certification Course registration packet provided by the Wound Care Education Institute. The registration packet can be accessed at <u>www.wcei.net</u>.

Upon receipt of the completed application, the certification office will review the information and determine the applicant's eligibility to sit for the examination.

An application is considered complete only if all information requested is complete, legible, and accurate. Within approximately 1-2 weeks of receipt of the Certification Examination application, a confirmation notice of eligibility with a unique authorization number will be sent to the candidate via email. Detailed instructions for course attendance and scheduling of your certification exam will be included with the eligibility notice.

Applicants who are determined to be ineligible to sit for the exam may appeal the decision by submitting a written letter of appeal to the NAWCO Certification Committee within 30 days of the eligibility decision. Applicants may request a copy of the appeal policy from the NAWCO.

#### **Re-examination Application**

- 1. The NAWCO is notified by the testing company of all non-passing scores.
- 2. The National Alliance of Wound Care and Ostomy will contact you by email with instructions and an application for re-examination.
- 3. Each re-examination application submitted must be accompanied by \$330 fee.
- 4. Re-examination application forms should be submitted at least one month prior to requested examination date.

## **Computer Examination Procedures**

#### **Scheduling Your Examination Appointment**

Included with your confirmation notice of eligibility is a toll-free telephone number for scheduling your examination with PSI Services, LLC.

When calling PSI to schedule your appointment:

- 1. Be prepared to confirm a date and location for testing. A listing of available testing centers with detailed maps may be viewed at www.psiexams.com.
- 2. Provide your unique NAWCO eligibility authorization number that was included with your notice of eligibility. Without this number, you will not be able to schedule your examination.

To gain admission to the testing center:

- 1. Present a current US Government issued photo ID that includes your current name and signature.
  - Acceptable IDs include: driver's license, valid passport, military ID card with photo, state issued photo ID.
  - Unacceptable ID's include employment ID, student ID, etc.
- 2. Present your confirmation notice of eligibility letter that contains your unique NAWCO authorization number.

#### **Accommodation Procedures**

An applicant may request a change in examination procedures or process due to disability, handicap, or other ADA related reason. The forms "Request for Special Accommodations" and "Documentation of Disability Needs" (located toward the back of this handbook) must be completed and received at least six weeks prior to the requested examination date. The request must be specific as to the nature of the problem. The applicant is responsible for demonstrating that the request should be granted.

#### **Reschedule of Examination Appointments**

If you need to cancel your examination appointment or reschedule to a different date, you must contact PSI at (800) 211-2754 no later than 24 hours prior to your scheduled time. If your appointment falls either on a

Monday or the day after a holiday, you must call the last business day prior to your appointment to reschedule. If you fail to arrive for your appointment or cancel without giving the required notice, you will be subject to forfeiture of your testing fee.

#### Security

NAWCO and PSI maintain test administration and test security standards that are designed to assure that all candidates are provided the same opportunity to demonstrate their abilities. The assessment center is continuously monitored by surveillance equipment for security purposes.

#### **Practice Test**

Prior to attempting the examination, you will be given the opportunity to practice taking a test on the computer. The time you use for this practice test is NOT counted as part of your examination time. When you are comfortable with the computer testing process, you may quit the practice session and begin the timed examination. An online test tutorial may also be accessed prior to the examination at the PSI website: <a href="https://www.psiexams.com">www.psiexams.com</a>.

#### **Timed Examination**

Following the practice test, you will begin the actual examination. Before beginning, instructions for taking the examination are provided on-screen. Two (2) hours are allotted to complete the examination.

#### **Examination Results**

After you finish the examination, you are asked to complete a short evaluation of your testing experience. Upon completion of the evaluation, you are instructed to report to the testing supervisor to receive your examination results. Your exam report will indicate "pass" or "fail".

Successful candidates may begin using the "DWC" credential immediately and will receive their DWC certification certificate via US mail within 4-6 weeks. A \$15 fee will be assessed for requested duplication of credentials.

## **Revocation of Certification**

NAWCO may revoke individual DWC Certification upon the occurrence of any one or more of the following events:

- 1. Applicant fails to adhere to the NAWCO code of ethics. (located at www.Nawccb.org)
- 2. Any Government agency, licensing board or court finds that any services as provided by DWC are defective or improper in any way, manner or form.
- 3. Use of certification credentials and/or failure to notify NAWCO within 10 business days subsequent to revocation, suspension, probation, or expiration of primary professional license of the DWC.
- 4. Applicant fails to maintain basic wound care certification.
- 5. Applicant fails to meet recertification criteria prior to expiration date of their DWC credentials.
- 6. Falsification of application materials.
- 7. Actual or potential adverse publicity, false advertising or other information, emanating from a third party or parties, about Applicant, the services provided by Applicant, or the use of the Marks by Applicant causes NAWCO, in its sole judgment, to believe that reputation of the NAWCO will be adversely affected.

## Recertification

Certification is awarded for a five (5) year period following successful passing of the examination. Upon expiration of the credentialing term, the DWC is required to recertify with the NAWCO to maintain their credentials. A DWC may recertify by examination, training, continuing education or by the Continuing

Education & Outreach Program (CEOP). Details of the options will be mailed to successful candidates within one year of expiration of credential. They may also be accessed at the NAWCO website: www.nawccb.org.

## **Appeals**

Individuals may appeal decisions regarding eligibility, examination results, and disciplinary matters made by the NAWCO certification program by submitting a written letter of appeal to the NAWCO Certification Committee within 30 days of the NAWCO decision or action that is being appealed. Certificants may request a copy of the appeal policy by contacting the NAWCO office.

## **Complaints & Discipline**

Complaints against a DWC may be submitted by any individual or entity. Complaints should be reported to the Certification Committee in writing to either the NAWCO office, or email to edirector@nawccb.org, and should include the name of the person submitting the complaint, the name of the person the complaint is regarding along with other relevant identifying information, a detailed description of factual allegations supporting the charges, and any relevant supporting documentation. Information submitted during the complaint and investigation process is considered confidential and will be handled in accordance with the Certification Committee's Confidentiality policy. Inquiries or submissions other than complaints may be reviewed and handled by the Certification Committee or its staff members at its discretion. For full policy, please see the NAWCO website homepage: www.nawccb.org, under "Want to Provide Feedback?"

## **Confidentiality**

NAWCO strictly protects the security of your personal information and honors your choices for its intended use. We carefully protect your data from loss, misuse, unauthorized access or disclosure, alteration, or destruction. Though we make every effort to preserve user privacy, we may need to disclose personal information when required by law wherein we have a good-faith belief that such action is necessary to comply with a current judicial proceeding, a court order, or legal process. If we are required by law to release your confidential information, you will be notified by email at the address we have on file, unless prohibited by law. Otherwise, your personal information is never shared outside the company without your permission. Inside the company, data is stored in password-controlled servers with limited access. NAWCO does not release information to anyone as to whether a particular candidate has applied or what their exam results were. Anyone may obtain basic certification information including name, city, state, original certification date, current certification date, certification expiration date, and certification status by using the credential verification feature on the home page of our website: www.nawccb.org. If a certificant wishes NAWCO to verify his or her certification status in writing for an employer, a request signed by the certificant must first be received by the NAWCO office.

## **Preparation for the Examination**

Examination questions are not based on any sole source for content. NAWCO suggests that applicants closely review the examination content outline as a guideline for study preparation. Review of current wound care journals, wound care text books, and reference materials will help prepare for the test.

## **References for Study**

The following reference list may be helpful in preparing for the examination. This list does not attempt to include all the acceptable references available, nor is the examination based solely on these sources. The NAWCO does not sponsor or endorse any one reference over another. Some of the references can be

accessed online, while others are available at local book stores.

American Diabetes Association, "Preventive Foot Care in Diabetes" *Diabetes Care* 2004 27: 63-64 American Diabetes Association. Standards of Medical Care in Diabetes—2010, Diabetes Care, January 2010 33:S11-S61

American Diabetes Association. Consensus Development Conference on Diabetic Foot Wound Care. *Diabetes Care*. 1999; 22(8):1354-1360.

Armstrong DG, Lavery LA (eds): Clinical Care of the Diabetic Foot. Second Edition Alexandria, VA, American Diabetes Association, 2010.

Bowker JH, Pfeifer MA, editors. Levin and O'Neals 'The diabetic foot'. 6<sup>th</sup> edition. St Louis: CV Mosby, 2001.

Edmonds M, Foster AVM, Sanders L. A practical manual of diabetic foot care. 2<sup>nd</sup> edition. Oxford: Blackwell Science, 2008.

International Working Group on the Diabetic Foot (1999) International Consensus on the Diabetic Foot Practical Guidelines. International Working Group on the Diabetic Foot, Amsterdam, The Netherlands

Hurt. Mix, Godfrey. The Salon Professional's Guide to Foot Care. Milady Salon Innovations Publishing. 1999.

Ousey, Karen, McIntosh, Caroline. Lower Extremity Wounds A Problem-Based Approach. West Sussex: John Wiley & Sons. 2008.

Sidawy, Anton N. Diabetic foot: lower extremity arterial disease and limb salvage 1st ed. Philadelphia : Lippincott Williams & Wilkins, 2006.

Sussman, Carrie, Bates-Jensen, Barbara, Wound Care: A Collaborative Practice Manual, Third Edition, PA: Lippincott Williams & Wilkins: 2007.

Wound, Ostomy, and Continence Nurses Society (WOCN). Guideline for management of wounds in patients with lower-extremity neuropathic disease. Glenview (IL): Wound, Ostomy, and Continence Nurses Society (WOCN); 2004.

#### Sample Examination Questions

- 1. The single greatest risk factor for diabetic foot ulcers is:
  - a. Venous stasis
  - b. Peripheral neuropathy
  - c. Myopathy
  - d. Congestive heart failure
- 2. Diabetic foot ulcers are commonly found
  - a. Around the ankle
  - b. Over the sacrum
  - c. On the dorsal surface of the foot
  - d. On the plantar surface of the foot
- 3. All of the following provide information valuable in assessing neuropathic risk in a patient with diabetes EXCEPT:
  - a. Vibration perception
  - b. Von Willebrand Factor
  - c. Monofilament testing
  - d. Duration/control of disease

- 4. A diabetic patient presents with well-circumscribed papules ranging from 1cm to 3-cm on the pretibial area. The papules have an active border that has become waxy, atrophic, with round plaques centrally. Initially, these plaques are red-brown in color but progressively became more yellow and atrophic in appearance. These would be described as:
  - a. Granuloma Annulare
  - b. Diabetic Bullae
  - c. Necrobiosis lipoidica diabeticorum
  - d. Contact dermatitis
- 5. A patient with a meggitt Wagner Ulcer Classification of 5 has:
  - a. Charcot deformity
  - b. Gangrene
  - c. Osteomyelitis
  - d. Superficial ulcer
- 6. Which Toe Brachial Pressure Index indicates that arterial flow is sufficient to heal a foot ulcer?
  - a. 0.3
  - b. 0.5
  - c. 0.8
  - d. 1.8
- 7. The goal of total contact casting for diabetic foot ulcers is:
  - a. Applying pressure directly to wound bed.
  - b. Distributing pressure over the entire surface of the leg and foot.
  - c. Limiting pressure to just the wound margins.
  - d. Transferring pressure from the heel to the ball of the foot.
- 8. Which of the following statements does not reflect current standards of diabetic foot care?
  - a. All individuals with diabetes should receive an annual foot examination to identify high-risk foot conditions. This examination should include assessment of protective sensation, foot structure and biomechanics, vascular status, and skin integrity.
  - b. Individuals with neuropathy or evidence of increased plantar pressure may be adequately managed with well-fitted walking shoes or athletic shoes that cushion the feet and redistribute pressure.
  - c. Individuals with diabetes and high-risk foot conditions should be educated regarding their risk factors and appropriate management.
  - d. Glycemic control is fundamental to the management of diabetes. The American Diabetes Association recommends that individuals with diabetes maintain hemoglobin A1C levels to 10% or greater to reduce microvascular and neuropathic complications of type 1 and type 2 diabetes.
- 9. The American Diabetes Association recommends that individuals with diabetes maintain LDL cholesterol:
  - a. Under 50 mg/dL
  - b. Under 100 mg/dL
  - c. Under 150 mg/dL
  - d. Under 200 mg/dL
- 10. Ambulatory 63-year-old male with type II diabetes mellitus presents with Charcot arthropathy of the left foot and a left midfoot plantar ulcer of 12 months duration. Examination reveals granulation tissue

moderate serous exudate and significant callus build up around wound edges. There is no odor, pain, or sign of infection. Management interventions should focus on:

- a. Debridement of callus
- b. Patient education and offloading
- c. Glucose management
- d. All of the above

Answers: 1-b, 2-d, 3-b, 4-c, 5-b, 6-c, 7-b, 8-d, 9-b, 10-d

#### Purpose

National Alliance of Wound Care and Ostomy (NAWCO) is dedicated to the advancement and promotion of excellence in the delivery of diabetic wound management to the consumer. NAWCO has established a formally documented program under which individuals may take examinations to demonstrate competence relating to their proficiency in diabetic wound management. This program includes the DWC professional Diabetic Wound Certified certification credentials. Successful participants in this program may become authorized to use the DWC certification credentials.

#### Definitions

**Applicant** means the individual who, in consideration for being allowed to take the diabetic wound certification examinations offered by NAWCO, agreed to the terms of this NAWCO Diabetic Wound Certification Program Candidate Agreement ("Agreement"). **Marks** means the service mark and logo pertaining to the certification credential DWC that the Applicant has completed.

#### Nondisclosure

Applicant shall not disclose to any third party or use any information concerning any certification examination of NAWCO, including, but not limited to questions, form of questions, or answers. The foregoing obligations of nondisclosure and nonuse are binding on Applicant until such time, if ever, as the specific information covered by the obligations are made generally available to the public. The foregoing obligations of nondisclosure and nonuse shall survive termination or expiration of this agreement and all NAWCO certification programs for any reason. Further, any reported incidence of disclosure of exam item content will be fully investigated by the NAWCO as a Breach of Contract and Copyright Infringement, and shall result in immediate termination of the individual's DWC Credential.

#### Certification

Applicant's certification credential is based on Applicant's successful completion of the required testing and Applicant's compliance with this Agreement and the requirements described in the corresponding NAWCO trademark guidelines, the terms of which are incorporated herein by reference and which may be changed from time to time by NAWCO in its sole discretion. Applicant acknowledges that NAWCO has the right to change at any time the requirements for obtaining or maintaining any certification and/or to discontinue any certification is NAWCO's sole discretion. Once certification is granted, Applicant may maintain Applicant's certification by completing, within the time frame specified by NAWCO, all continuing certification requirements, if any, that correspond with Applicant's DWC credential. Applicant is responsible for keeping Applicant informed of NAWCO's continuing certification requirements and for maintaining Applicant's certification. If Applicant does not complete the continuing certification requirements within the time frame specified by NAWCO, Applicant's certification for that credential will be revoked without further notice, and all rights pertaining to that certification (including the right to use the applicable Marks) will terminate. Applicant retains Applicant's certification status if Applicant leaves Applicant's current employment and/or begins working with a new organization. However, Applicant may not transfer Applicant's certification status to another person. Applicant agrees to make claims regarding certification only with respect to the scope for which the certification has been granted. Applicant agrees to discontinue use of the WCC credential and promotion of the certification immediately upon expiration, suspension or withdrawal of certification. Applicant further swears to notify the NAWCO in writing within 10 business days if they learn they are no longer eligible to hold the WCC credential, such as in the event of suspension, placement of restrictions upon or revocation of the primary professional license. In the event of revocation of the credential, the applicant agrees to return the Certificate of Certification via postal mail to the NAWCO address listed on the website at www.nawccb.org.

NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, NAWCO HAS THE RIGHT NOT TO GRANT, CONTINUE, OR RENEW APPLICANT'S CERTIFICATION IF NAWCO REASONABLY DETERMINES THAT APPLICANT'S CERTIFICATION OR USE OF THE CORRESPONDING MARKS WILL ADVERSELY AFFECT THE NAWCO. THIS AGREEMENT APPLIES TO DWC CERTIFICATION OBTAINED BY APPLICANT.

## **Grant and Consideration**

Subject to the terms and conditions of this Agreement, NAWCO grants to Applicant a non-exclusive, personal and nontransferable license to use the Marks solely in connection with providing services corresponding to the certification credential Applicant has achieved. Applicant may use the Marks on such promotional, display, and advertising materials as may, in Applicant's reasonable judgment, promote the services corresponding to Applicant's certification credential and which are permitted by the terms of the NAWCO's trademark guidelines corresponding to the certification credential. Applicant may not use the Marks for any purposes that are not directly related to the provision of the services corresponding to Applicant's particular certification. Applicant may not use the Marks of DWC unless Applicant has completed the certification requirements for the DWC certification credential and has been notified by NAWCO in writing that Applicant has achieved certification status of DWC. NAWCO reserves the right to revise the terms of this Agreement from time to time. In the event of a revision, Applicant's signing or otherwise manifesting assent to a new agreement may be a condition of continued certification.

## **Term and Termination**

Term-This Agreement will commence immediately upon Applicant's acceptance of the terms and conditions of this Agreement prior to taking a certification examination. Either party may terminate this Agreement without cause by giving thirty (30) days or more prior written notice to the other party. Termination by NAWCO - Without prejudice to any other rights it may have under this Agreement or in law, equity, or otherwise, NAWCO may terminate this Agreement upon the occurrence of any one or more of the following events ("Default"):

- (i) If Applicant fails to perform any of Applicant's obligations under this Agreement;
- (ii) If any Government agency or court finds that any services as provided by Applicant are defective or improper in any way, manner or form; or
- (iii) If actual or potential adverse publicity or other information, emanating from a third party or parties, about Applicant, the services provided by Applicant, or the use of the Marks by Applicant causes NAWCO, in its sole judgment, to believe that NAWCO's reputation will be adversely affected. In the event of a Default, NAWCO will give Applicant written notice of termination of this Agreement.

(iv) Applicant fails to meet recertification criteria prior to expiration date of their credentials. In the event of a Default under (ii) or (iii) or above, NAWCO may immediately terminate this Agreement with no period for correction and without further notice. In the event of a Default under (i) or (iv) above, or at NAWCO's option under (ii) or (iii) above, Applicant will be given thirty (30) days from receipt of notice in which to correct any Default. If Applicant fails to correct the Default within the notice period, this Agreement will automatically terminate on the last day of the notice period without further notice.

## **Effect of Termination**

Upon termination of this Agreement for any reason, Applicant will immediately cease all display, advertising, and other use of the Marks and cease all representations of current certification. Upon termination, all rights granted under this Agreement will immediately and automatically revert to NAWCO.

## **Conduct of Business**

Applicant shall: exercise its independent business judgment in rendering services to Applicant's customers; avoid deceptive, misleading, or unethical practices which are or might be detrimental to NAWCO or its products; and refrain from making any representations, warranties, or guarantees to customers on behalf of NAWCO. Without limiting the foregoing, Applicant agrees to not misrepresent Applicant's certification status or Applicant's level of skill and knowledge related thereto.

#### **Indemnification by Applicant**

Applicant agrees to indemnify and hold NAWCO harmless against any loss, liability, damage, cost or expense (including reasonable legal fees) arising out of any claims or suits made against NAWCO by reason of Applicant's performance or nonperformance under this Agreement; arising out of Applicant's use of the Marks in any manner whatsoever except in the form expressly licensed under this Agreement; and/or for any personal injury, product liability, or other claim arising from the promotion and/or provision of any products or services by Applicant. In the event NAWCO seeks indemnification under this Section, NAWCO will notify Applicant in writing of any claim or proceeding brought against it for which it seeks indemnification under this Agreement. In no event may Applicant enter into any third party agreements which would in any manner whatsoever affect the Rights of, or bind, NAWCO in any manner, without the prior written consent of NAWCO. This Section shall survive termination or expiration of this Agreement and all NAWCO certification programs for any reason.

#### **Disclaimer of Warranties; Limitation of Liabilities**

NAWCO makes, and Applicant receives, no warranties or conditions of any kind, express, implied or statutory, related to or arising in any way out of any certification examination, any NAWCO certification program, or this Agreement. NAWCO specifically disclaims any implied warranty of merchantability, fitness for a particular purpose and non-infringement of any third party rights. In no event shall NAWCO be liable for indirect, consequential, or incidental damages (including damages for loss of profits, revenue, data, or use) arising out of this Agreement, any NAWCO certification program, or incurred by any party, whether in an action in contract or tort, even if NAWCO has been advised of the possibility of such damages. NAWCO's liability for damages relating to any certification examination, any NAWCO certification program, or this Agreement shall in no event exceed the amount of application fees actually paid to NAWCO by Applicant. Some jurisdictions do not allow limitations of the liability so certain of these limitations may not apply; however, they apply to the greatest extent permitted by law. Applicant acknowledges and agrees that NAWCO has made no representation, warranty, or guarantee as to the benefits, if any, to be received by Applicant from third parties as a result of receiving certification. This Section shall survive termination or expiration of this Agreement and all NAWCO certification programs for any reason.

#### **General Provisions**

Wisconsin law, excluding choice of law provisions, and the laws of the United States of America govern this Agreement. Failure to require compliance with a part of this Agreement is not a waiver of that part. If a court of competent jurisdiction finds any part of this Agreement unenforceable, that part is excluded, but the rest of this Agreement remains in full force and effect. Any attempt by Applicant to transfer or assign this Agreement or any rights hereunder is void. Applicant acknowledges and agrees that Applicant and NAWCO are independent contractors and that Applicant will not represent Applicant as an agent or legal representative of NAWCO. This Agreement and all documents incorporated herein by reference are the parties' complete and exclusive statement relating to their subject matter. This Agreement will not be supplemented or modified by any course of dealing or usage of trade. Any modifications to this Agreement must be in writing and signed by both parties. Applicant agrees to comply, at Applicant's own expense, with all statutes, regulations, rules, ordinances, and orders of any Governmental body, department, or agency which apply to or result from Applicant's rights and obligations under this Agreement.

## **Request for Special Examination Accommodations**

Please complete/return this form and the "Documentation of Disability-Related Needs" on the next page **at least six weeks prior to test date**, so your accommodation for testing can be processed efficiently. The information you provide and any documentation regarding your disability and your need for accommodation in testing will be considered strictly confidential and will not be shared with any outside source without your express written consent. If you have existing documentation of the same or similar accommodation provided for you in another test situation, you may submit such documentation instead of having the reverse side of the form completed by an appropriate professional.

#### **Applicant Information**

Last Name	First Name	Middle Name
Address		
City	State	Zip Code
Daytime Telephone	Fax	E-mail
Special Accommodations		
I request special accommodations for	or the / administ Month Year	ration of the NAWCO DWC examination.
Please provide (check all that applie Accessible testing site Special seating Large print test (available fo Circle answers in test bookle Extended testing time (avail Separate testing area (availa Other special accommodatio	r paper & pencil proctored exam et (available for paper & pencil p able for computer examination a able for PSI computer exams only	roctored examination only) at a PSI testing center- max 2 hours)
Comments:		
Signed:		Date:
Return this form with your examina National Alliance of Wound Care an		

717 Saint Joseph Dr Ste 297 Saint Joseph, MI 49085-2428

## **Documentation of Disability-Related Needs**

If you have a learning disability, a psychological disability, or other ADA disability that requires an accommodation in testing, please have this section completed by an appropriate professional (education professional, doctor, psychologist, psychiatrist) to certify that your disabling condition requires the requested test accommodation. If you have existing documentation of the same or similar accommodation provided for you in another test situation, you may submit such documentation instead of completing the "Professional Documentation" portion of this form.

#### **Professional Documentation**

I have known	since / /
(Applicant)	
in my capacity as	·
(Professional Title)	
	re of the test to be administered. It is my opinion that because of this she should be accommodated by providing the special arrangements commodation Form.
Comments:	
Signed:	Title:
Printed Name:	
Address:	
Telephone Number:	Email:
License #:	Date:
Return this form with your examination a	pplication and request for special examination accommodations to:

National Alliance of Wound Care and Ostomy 717 Saint Joseph Dr Ste 297 Saint Joseph, MI 49085-2428



National Alliance of Wound Care and Ostomy 717 Saint Joseph Dr Ste 297 Saint Joseph, MI 49085-2428 Fax: 800-352-8339