



American Board for Certification in Orthotics, Prosthetics & Pedorthics, Inc.  
Serving the OP&P profession since 1948

# PRACTITIONER

## Book of Rules & Candidate Guide

Eligibility Requirements • Application Process • Exam Content







American Board for Certification in Orthotics, Prosthetics & Pedorthics, Inc.

# Practitioner Book of Rules & Candidate Guide

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# Overview

**F**OUNDED IN 1948 as a not-for-profit organization, the American Board for Certification in Orthotics, Prosthetics and Pedorthics Inc., commonly known as ABC, is a credentialing body established by the orthotic and prosthetic profession to identify those practitioners who satisfy minimum qualifications to render essential public health services in these disciplines. ABC conducts examinations to test the competency of those persons engaged in the practice of orthotics and/or prosthetics who voluntarily apply for the examination process.

Practitioner certification in orthotics and/or prosthetics is awarded as an attestation of competency for the public, those who require orthotic and/or prosthetic services and those in other health professions. The awarding of ABC certification provides the certified practitioner with an appropriate and meaningful recognition of professional competence.

Practitioners whose education and clinical training meet existing ABC requirements may sit for the ABC examinations which are designed to evaluate knowledge of current orthotic/prosthetic treatment modalities as well as ability to assess patients, formulate a treatment plan, implement that treatment plan and manage the total care of patients in need of orthotic and/or prosthetic interventions. Those who successfully complete the examination process are awarded certification in orthotics, prosthetics or both. The awarding of these certificates recognizes that the individual has demonstrated a minimum level of competence.

The ABC practitioner certification programs are accredited by the National Commission for Certifying Agencies (NCCA), an organization that establishes standards on examination validity, reliability and safeguards to the public

for credentialing programs. ABC certification is recognized by various state agencies and third-party payers for insurance reimbursements and is considered the standard among orthotic, prosthetic and pedorthic professionals, both nationally and internationally.

ABC certification is also highly regarded by orthopaedic surgeons, physical and occupational therapists, amputee support groups and other members of the rehabilitation community.

## Orthotic and Prosthetic Practitioners

An ABC Certified Orthotist or Prosthetist is a healthcare professional who has demonstrated their qualifications and competency through a thorough and detailed examination process. This individual has been specifically educated and trained to manage comprehensive orthotic and/or prosthetic patient care. This includes patient assessment, formulation of a treatment plan, implementation of the treatment plan, follow-up and practice management.

Orthotic care may include, but is not limited to, patient evaluation, orthosis design, fabrication, fitting and modification to treat a neuromusculoskeletal disorder or acquired condition.

Prosthetic care may include, but is not limited to, patient evaluation, prosthesis design, fabrication, fitting and modification to treat limb loss for purposes of restoring physiological function and cosmesis.

The *Orthotic, Prosthetic and Pedorthic Scope of Practice* is located on the ABC website at [abcop.org](http://abcop.org) or by calling the ABC office at 703-836-7114.

## Professional Credentials

Practitioners aspiring to become ABC Certified Orthotists or Prosthetists (CO or CP) must successfully meet the board mandated prerequisites for credentialed individuals. These include submitting the appropriate documentation of education and residency training, successfully passing the comprehensive written, written simulation and the hands-on Clinical Patient Management examinations. These in-depth examinations are designed to cover the domains, tasks and skills of the profession as well as the clinical decision-making and problem-solving skills involved in patient care.

Successful completion of the rigorous requirements and examinations is confirmation that you have the education, knowledge, experience and skills required of an ABC Certified Orthotist and/or Prosthetist.

The credential of Certified Prosthetist-Orthotist (CPO) is conferred to practitioners whose responsibilities conform to those of both orthotist and prosthetist and who successfully fulfill all of the requirements in both disciplines.

## Governance of ABC

The affairs of ABC are governed by the board of directors. Therefore, the board is responsible for the policies and procedures governing certification, and the board has the authority under its bylaws to modify the rules, regulations and policies as it deems appropriate. The board is comprised of ABC Certified Orthotists, Prosthetists, Pedorthists and public representatives.

## Proprietary Ownership of ABC Credentials

Certification is a privilege, not a right. The ABC Board of Directors maintains legal authority to award its certification credentials and may withhold, suspend or revoke any certification credential in accordance with the established policies, rules and regulations.

## Code of Professional Responsibility

Upon approval for candidate status, candidates are subject to the ABC *Code of Professional Responsibility*. Adherence to the Code is required throughout the candidacy and continues once certification is granted.

The ABC *Code of Professional Responsibility* is located on the ABC website at [abcop.org](http://abcop.org) or you can obtain a copy by calling the ABC office at 703-836-7114. A copy of the ABC *Code of Professional Responsibility* will be provided to candidates in their eligibility packet.

# Eligibility Requirements for Certification

Orthotic and prosthetic practitioners may qualify to be examined upon completion of specific education and experience requirements established by ABC. The education and experience requirements are summarized in the chart on page 8.

## Education of Orthotists and Prosthetists

Education must be from a regionally accredited institution of higher learning in the United States or its territories unless otherwise specified. In addition, all specialized education in orthotics and prosthetics must have been acquired from a program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

## Foreign Education/ Certification

Individuals who have received their baccalaureate, masters and/or orthotic and prosthetic education in a foreign country must have their education evaluated by the World Education Services (WES), P.O. Box 5087, New York, NY 10274-5087, 212-966-6311, [wes.org](http://wes.org). WES is a professional education evaluation service that equates foreign education to programs in the United States.

Graduates of the University of Strathclyde's National Centre for Training and Education in Prosthetics and Orthotics are not required to submit a transcript evaluation from WES. An official transcript indicating degree conferral must be submitted with the application for ABC certification.

If an applicant is certified and currently in good standing by the Canadian Board for Certification of Prosthetists and Orthotists (CBCPO), ABC will waive the educational and experience eligibility criteria. Candidates must submit a letter from CBCPO verifying good standing dated within two months of the application for ABC certification. Practitioners certified by the CBCPO must take the ABC examinations.

## Clinical Experience

All graduates of a CAAHEP accredited orthotics or prosthetics baccalaureate, masters, or certificate program must obtain their clinical experience by completing a National Commission on Orthotic and Prosthetic Education (NCOPE) accredited residency program. This is a 12-month program, per discipline, or an 18-month dual discipline program in which a resident is tracked through the program with specific clinical experience, research and other requirements. Residents must successfully complete the residency program in order to meet the certification eligibility requirements.

## Extension of Credential (CPO)

Certified practitioners seeking to extend their credential to CPO (seeking certification in the second discipline) must meet the education and experience requirements in effect at the time of their application and described in this publication.

Additionally, applicants must be in good standing with the primary certification. Upon extension of credential, the newly credentialed CPO will receive a new certification, continuing education effective and expiration date.

## Education and Experience Requirements

PATHWAY	EDUCATION	EXPERIENCE
1	Bachelors or Masters degree in orthotics or prosthetics from a CAAHEP accredited program.	A 12-month (per discipline) or 18-month dual discipline NCOPE accredited residency program.
2	Bachelors or Masters degree in any major, plus an orthotic or prosthetic certificate from a CAAHEP accredited program.	A 12-month (per discipline) or 18-month dual discipline NCOPE accredited residency program.
3	Foreign degree equivalent to a Bachelors or Masters in orthotics and prosthetics.	A 12-month (per discipline) or 18-month dual discipline NCOPE accredited residency program.
	Foreign degree equivalent to a Bachelors in any major; plus, an orthotic or prosthetic certificate from a CAAHEP accredited program.	A 12-month (per discipline) or 18-month dual discipline NCOPE accredited residency program.

# The Application Process

Individuals who have met the eligibility requirements may submit an application for approval as a candidate for certification.

The process for applying is:

- 1) Submit the application, and
- 2) Register for the examination(s). Registration for at least one of the three examinations must be submitted with the application.

## General Application Information

1. **Application Forms:** Individuals seeking certification may obtain an application from ABC. Applications are available on the ABC website, [abcop.org](http://abcop.org), or by calling the ABC office at 703-836-7114.

2. **Submission of Application:** Applications must be complete in all respects to be processed and approved. Incomplete applications will not be processed until all required documents and fees are submitted. Such processing delays will cause the applicant to be excluded from a desired examination date and location. The three examinations are independent of one another and may be taken in any sequence.

3. **Fees and Documentation Required:** (carefully read the application for instructions and requirements)

- Completed application form
- Official degree transcript\*
- Copy of the certificate of completion from the approved orthotic or prosthetic course(s)
- The examination fees
- The non-refundable application fee

*\*Official transcripts may be mailed or emailed directly to ABC from the school or you may submit them with your application. For those extending their credential, the previous file will be referenced should the applicant reapply within a period of seven years following the expiration of his or her original eligibility.*

## 4. Written and Written Simulation Exam Deadlines:

<b>JANUARY SESSION</b>	Application deadline: Nov. 1
	Residency deadline: Dec. 1
<b>MARCH SESSION</b>	Application deadline: Jan. 1
	Residency deadline: Feb. 1
<b>MAY SESSION</b>	Application deadline: March 1
	Residency deadline: April 1
<b>JULY SESSION</b>	Application deadline: May 1
	Residency deadline: June 1
<b>SEPTEMBER SESSION</b>	Application deadline: July 1
	Residency deadline: Aug. 1
<b>NOVEMBER SESSION</b>	Application deadline: Sept. 1
	Residency deadline: Oct. 1

## 5. Clinical Patient Management Exam Deadlines:

<b>SPRING EXAMS</b>	Application deadline: Feb. 1
	Residency deadline: March 1
<b>FALL EXAMS</b>	Application deadline: June 1
	Residency deadline: July 1
<b>WINTER EXAMS</b>	Application deadline: Oct. 1
	Residency deadline: Nov. 1

## Certification Process Timeline

<b>APPLICATION RECEIVED</b>		
<b>4 WEEKS</b>		<b>8 WEEKS</b>
Eligibility letters emailed and mailed	CBT logistical information emailed and mailed	CPM eligibility packet emailed and mailed

<b>EXAM COMPLETED</b>	
<b>4-6 WEEKS</b>	<b>8 WEEKS</b>
Exam Score Reports emailed and mailed	New certificant package mailed

**6. Notification of Application Decision:**

Applicants will be notified in writing of their eligibility decision approximately four weeks after receipt of their application.

*Clinical Patient Management (CPM) exams:*

Although every effort is made to accommodate all eligible candidates, ABC reserves the right to limit the number of registrants should space be restricted. Applications and registrations will be accepted on a first-come, first-served basis.

**7. Statement of Non-Discrimination:** ABC does not discriminate among applicants on the basis of age, sex, race, religion, national origin, disability or marital status.

**8. Applicant Ineligibility:** An applicant will be determined ineligible for the following reasons:

- Insufficient documentation to assess eligibility
- Documentation provided does not meet eligibility requirements
- Lack of required fees

If it is determined that the information provided is inadequate to assess eligibility, the applicant will be notified and given a deadline to respond with necessary documentation. If documents are not received by the given deadline, the application will be denied. The application may be reconsidered during a later examination cycle. Information regarding the next examination cycle must be requested by the applicant. One subsequent application will be processed under the original fee. If the applicant is denied eligibility a second time, a new application and fee will be required.

**9. Eligibility Period:** Applicants for practitioner certification who have been evaluated and deemed to have satisfied all eligibility requirements are assigned candidate status. The approved candidate will be granted a three-year eligibility period in which to take and pass the examinations. The candidate will be granted no more than four attempts at each exam within their eligibility period to pass each examination.

**10. Re-Examination:** Any candidate who is unsuccessful on one of the three examinations may retake the examination provided the candidate is within his or her eligibility period and has not exhausted the allotted four attempts at the examination. All other scores will stand throughout the eligibility period. To register for the next available examination, the candidate must request and submit the current registration form and fees.

**11. Reapplying for Eligibility:** Once the candidate has exhausted his or her eligibility period, he or she may reapply for eligibility by submitting a new application, subject to the prevailing Candidate Guide, complete with supporting documentation and application fee. Passing scores from the previous eligibility period will not carry over to the new eligibility period. The previous file will be referenced only for the official degree transcripts should the applicant reapply within a period of seven years following the expiration of his or her original eligibility.

**12. Address Changes:** The home and/or email address provided on the application will be used for mailing the letter of eligibility, examination confirmation and results. Individuals are responsible for informing ABC immediately in writing of any address changes.

13. **Authority:** ABC reserves the right to ask applicants to furnish such information or make such inquiries as may be deemed appropriate to identify the nature and extent of the applicant's education, experience, competency, moral character and reputation.

14. **Criminal History Disclosure:** Applicants must disclose criminal history information if the applicant has been convicted by a court of competent jurisdiction or pleaded nolo contendere to a felony or any crime involving moral turpitude or is currently under indictment for such a crime. Applicants must submit a signed written statement and full explanation along with supporting documents to accompany the application. Examples of supporting documents may include, but are not limited to, official court documents, probation documents, police reports, etc.

15. **Testing Accommodations:** It is the policy of ABC to administer certification examinations in a manner that does not discriminate against an otherwise qualified applicant. ABC offers reasonable and appropriate accommodations for the examinations for those persons with documented disabilities, as required by the Americans with Disabilities Act (ADA).

Applicants requesting any accommodations must submit a separate Testing Accommodations Application with the application/registration form by the application deadline for their desired examination cycle. This is to provide adequate time to resolve any documentation and/or examination logistic issues that may arise. ABC will review each request on an individual basis and make decisions relative to appropriate accommodations. Requests received after the application deadline and/or without the additional required documentation will be denied. The Testing Accommodation Policy and Application are available from the ABC office.

16. **Falsification:** Discovery that an applicant has falsified any information on the application shall lead to any or all of the following actions:

- Rejection of the application
- Barring the applicant from examination
- Revocation of any existing ABC certification status of the applicant
- Reference of the incident to the Professional Discipline Committee
- Any act of falsification shall be made a part of that individual's permanent record.

17. **Application Appeals:** Applicants whose applications have been denied by the Applications Review Committee on the basis that the applicant has failed to demonstrate the minimal eligibility requirements may appeal their denial. Applicants must submit appeals in writing to the ABC Board of Directors.

Appeals must:

- Be in writing, signed by the applicant and sent to ABC by Certified Mail
- State the specific reasons for appeal
- Be accompanied by evidence or other pertinent information refuting original findings
- Be postmarked no later than 30 calendar days after the date on the notification letter

**Appeals Decision:**

Applicants submitting an appeal to the board of directors will receive notification of the decision within 45 days of receipt of the request. The Board of Directors' decision is final.

# Examination Policies and Information

**1. Confirmation of Examination Dates/ Location(s):** Candidates for the written and written simulation examinations will receive an Authorization-To-Test (ATT) letter by mail and email from ABC, which provides an explanation of the test site selection process. It is the responsibility of the candidate to adhere to the instructions in the letter to secure an examination date, time and location.

All candidates registered for the Clinical Patient Management examination will receive written confirmation and logistical information for the examination dates approximately 45 days prior to the scheduled examination.

**2. Examination Admittance** To be admitted for testing for any examination, candidates must arrive at the assigned location at least 30 minutes prior to their scheduled exam time, present their ATT letter and have their identity confirmed by photo identification.

Candidates will be required to show one current form of identification, which must be an unexpired government-issued photo identification document with signature (e.g., driver's license or passport). The name on the identification document must match the name on the ATT letter. **Candidates will not be permitted to test without the required identification. No exceptions will be made.**

**3. Cancellation/Refund Policies:** Any candidate who is unable to take an examination for which he or she has registered must notify ABC. Cancellations are effective the date they are received by ABC.

### ***Written and Written Simulation Exams:***

Cancellations received 31 days or more preceding the candidate's scheduled examination date will be eligible for a refund of the examination fee(s).

Cancellations received 30 days or less preceding the candidate's scheduled examination date will be subject to a cancellation fee. Therefore, cancellations should be carefully considered. Candidates should reference their ATT letter for a full explanation of the cancellation and/or rescheduling policy.

Candidates failing to schedule an appointment with the contract testing service for the registered examination cycle will result in a forfeiture of the examination fee(s). The eligibility period will not be extended.

### ***Clinical Patient Management Examination***

Receipt of notification at least 30 days prior to the examination entitles the candidate to a refund of the examination fee. Any registered candidate who notifies ABC in writing in less than 30 days prior to the examination will forfeit the entire fee. The eligibility period will not be extended.

Extenuating circumstances may be considered. Such requests must be in writing, signed by the candidate, addressed to ABC and include the reasons for the request and supporting documentation.

4. **Test Center Closings:** If a test center must be closed before a test date, all candidates for the affected center will be offered options that may include having their examinations rescheduled to an alternate date determined jointly by ABC, the contract testing service, and the candidate; or receiving full refunds of examination fees. When an administrative cancellation is required, refunds and rescheduling options will apply only to candidates scheduled to report to the affected center.

5. **Hazardous Weather:** If you are unable to travel to your testing center due to hazardous weather, you must notify ABC at 703-836-7114 within three days after the examination date to be eligible for refund or rescheduling options. ABC will determine whether or not conditions warrant a full refund of examination fees. Neither ABC or the contract testing service will make any reimbursements for any expenses (other than examination fees) incurred by candidates unable to reach their test centers due to hazardous weather.

6. **Space Limitation for CPM Examination:** Due to the logistical requirements of the CPM examinations, limitations on the number of candidates who can be accepted for testing may apply. In this event, candidates will be notified of a deferral to the next available date. Examination fees will be deferred to the next examination, unless otherwise instructed in writing by the candidate.

7. **Language:** The examinations are offered in English only. No translators or translation devices will be allowed during the examination.

8. **Misconduct at the Examinations:** It is improper for examination candidates to engage in any of the following activities:

- Failing to observe any rules of conduct as outlined by the test proctor
- Copy in writing or otherwise record or transmit to others any examination questions or answers or other aspects of the nature or content of the examination
- Bring any answering agent of any nature (i.e., books, notes) to the examination site or school grounds
- Remove from the test site any used scratch paper or notes taken during the exam
- Offer, assist or solicit assistance from other candidates, examiners or those responsible for the administration of the examination
- Engage in any other conduct or inappropriate behavior that is injurious to the integrity of the examination or to any of its participants

9. **Dismissal Policies:** Any candidate who is observed engaging in any of the above listed activities will be subject to dismissal from the examination, may be barred from future examinations for a period ranging from one year to permanent dismissal and may be required to forfeit his or her current examination fees and a period of eligibility. Prior to determination regarding future permission to take the examination, the candidate is entitled to request a review by written appeal, provided the written appeal is received by ABC within 30 days of dismissal. The written appeal must cite reasons refuting the decision for dismissal.

Following a review of the written appeal, the board of directors will make a determination regarding future permission to take the examination. The candidate will be notified of the board's decision within 45 days of receipt of the appeal. The board of directors' decision is final.

10. **Examination Results:** Preliminary score reports are provided at the conclusion of the written and written simulation exams. The contract testing service will email official score reports directly to the candidates approximately four to six weeks following the written examinations. CPM score reports will be emailed approximately six weeks following the examination. Score reports will be mailed to the home address and emailed to the email address on the application unless otherwise instructed, in writing, by the candidate.

11. **Scoring Procedures:** Answer documents for all examinations are scored by the contract testing service. CPM scores within three percent of the passing score are always re-verified as part of standard quality control procedures.

12. **Examination Scoring:**

**Scoring of the written examination:** The passing score for the written examination has been recommended by a geographically diverse panel of practicing certified practitioners with both clinical and educational backgrounds individually selected by the board of directors. This panel, under the guidance of testing experts from the contract testing service, computes a passing score representing the minimum level of knowledge that must be demonstrated to pass the examination. All examinations are administered and scored by a computer-based system.

**Scoring of the written simulation examination:**

Each simulation problem contains options that are scored as clearly indicated in competent practice or clearly contraindicated. The problems also contain options that are appropriate (without being clearly indicated), neutral and inappropriate (without being clearly contraindicated). All problems are scored individually by comparing the candidate's responses with those identified as optimal by content experts. The scores for each problem are then combined to calculate the total score. Candidates achieving the optimal score select the path identified as the optimal path, avoiding options that detract from the score by being contraindicated or clearly contraindicated in competent practice. The passing point, as determined by expert judges, is fixed to assure that all passing candidates achieve at least the minimally acceptable score.

**Scoring of the Clinical Patient Management examination:**

ABC calculates CPM scores using a formula that weighs each response relative to how critical that item is judged to be. This judgment is developed by a panel of certified practitioners. Clinical examiners evaluate a candidate's performance on each task. The passing point is referenced to a criterion with clear, predetermined standards.

13. **Hand Scoring:** If a failing score is received, the results may be verified through hand scoring. However, the scoring methods used by ABC and the contract testing service are highly reliable and accurate and rarely does hand scoring produce a change in a score. Written requests for hand scoring must be received within two weeks of

receipt of the test scores and must include the fee in the form of a check or money order made payable to ABC. The fee for hand scoring the written examination is \$75. The fee for hand scoring each written simulation examination is \$225. Results of the hand scoring process are mailed approximately eight weeks after receipt.

14. **Examination Appeals:** Candidates may not appeal a failing score, however may request a review of a specific item or questions presented on the examination, or may appeal a particular incident or circumstance in relation to an examination.

**Review of Examination Question or Item:** All requests for review of items, questions or tasks appearing on an examination must be submitted in writing. All requests will be forwarded to the ABC Exam Team Committee or its designees for review. The written request for review must be:

- Completed by the candidate and submitted within 30 days following the examination date
- Accompanied by thorough clinical documentation to support the basis of the challenge

**Review of Incident or Administrative Procedure:** Candidates may request a review of a specific incident or procedure relative to the examination process or administration if it is felt the incident or procedure impeded the candidate's opportunity for successful completion of the examination. The written request for review must be:

- Completed by the candidate and submitted within 14 days of the examination date
- Accompanied by necessary evidence or other pertinent information

**Appeals Decision:** Candidates submitting a request for review to ABC shall receive notification of the results within 45 days of receipt. Should the candidate not be satisfied with the decision rendered, the candidate may submit a written appeal to the board of directors within 14 days. Candidates will be notified of the board's decision within 45 days of receipt of the request. The board of directors' decision is final.

15. **Privileged Information:** The nature, format, content and results of examinations administered by ABC are considered privileged information. Due to the importance of test security and item banking, neither test booklets nor answer keys will be disclosed or made available for review by candidates or any other unauthorized third party.

16. **Release of Information:** ABC is committed to protecting the confidentiality of candidates' records and has adopted policies to ensure their privacy. Information about candidates and their examination results is not released to any third party, other than state licensure boards, if required. Additionally, candidates' test scores are not released by telephone.

17. **Data Compilation:** ABC may develop and publish statistical data regarding the examinations providing the identities of the candidates are not divulged.

# The ABC Practitioner Examinations

## General Description of the Examinations

Candidates are required to successfully pass three examinations that are designed to evaluate knowledge and clinical competencies in orthotics and prosthetics practice. The examinations and the passing scores are reviewed and revised annually.

The written and written simulation examinations are administered by computer-based testing (CBT). CBT is a method of administering tests in which the responses are electronically recorded. As the name implies, computer-based testing makes use of a computer instead of a traditional pen and paper examination. These two examinations are offered bi-monthly at approximately 300 locations around the country.

The Clinical Patient Management (CPM) examinations are hands-on practical examinations. The CPM examinations are offered three times a year in one specific location.

## The Written Examination

The written examination is a three-hour, multiple-choice examination consisting of 165 questions designed to measure a candidate's general knowledge of basic principles of patient and practice management. General knowledge assessed on the written examination may include anatomy, kinesiology, componentry, materials and practice management. Sample written examination test items may be found in Appendices II and III.

## The Written Simulation Examination

The written simulation examination assesses candidates' problem-solving skills through an interactive format. The simulations imitate lifelike situations an orthotist or prosthetist might encounter in daily clinical practice. The written simulations include seven problems. Candidates will have three hours for completion of the written simulation examination.

For orthotics, the problems may include scoliosis/kyphosis, spinal cord injuries, fractures, treatment of stroke, upper extremity management, hip and knee pathologies, cervical spine and neuromuscular disease.

The prosthetics simulation may include management of the transradial and transhumeral amputee, upper extremity amputee, partial foot amputee and immediate postoperative fitting procedures.

## The Clinical Patient Management Examination

The Clinical Patient Management (CPM) examination is a four hour exam designed to assess the practical skills considered by experts to be necessary in the competent performance of orthotics and prosthetics. The CPM requires candidates to demonstrate practical ability in a clinical environment. Skills in such areas as patient evaluation, prescription criteria, measurement technique, fitting, alignment and appropriate handling of patients are evaluated.

## Examination Content

The development of valid examinations begins with a practice analysis, which gives a clear and concise definition of the knowledge, skills and abilities needed for competent job performance.

Experts have identified the critical job components in the orthotic and prosthetic profession using a process that includes interviews, surveys, observation and group discussions.

ABC conducted a *Practice Analysis of the Certified Practitioners in the Disciplines of Orthotics and Prosthetics* that identified performance domains for both orthotists and prosthetists. Within each performance domain, several identified tasks provide the basis for questions in the examinations. The practice analysis also identified associated knowledge and skills related to the practice of orthotics and prosthetics. The domains, tasks, knowledge and skills are in Appendix I.

ABC seeks to replenish the ABC exam item bank on a regular basis with questions written by practitioners from the field. Item development activities are conducted as needed to ensure that an adequate supply of new questions are available for the ABC exams.

ABC Subject Matter Experts are selected by ABC. The committee is generally represented by practitioners and educators who are drawn from a diverse range of practice settings and geographical locations.

The Subject Matter Experts pay particular attention to exam security expectations, item validation and sensitivity/bias review procedures, the content category classification system for ABC and the use and interpretation of item analysis data. After reviewing the first draft, time is devoted to any final item replacements and preparation of second drafts of the exams.

An additional round of psychometric and grammatical editing occurs, and then final drafts of each exam are sent for review and approval by a subcommittee. At the conclusion of these review activities by the subcommittee, the contract testing service prepares the exams for administration.

## Examination Preparation

ABC has numerous resources available in Appendices I–IV and on the ABC website at [abcop.org](http://abcop.org) for candidates as they prepare to sit for their ABC Practitioner Certification Exams. These include the Practice Analysis, Test Content Outlines and sample exam questions. ABC encourages candidates to review these documents in preparation for their examinations.

# Scope Of Practice

**A**n ABC Certified Orthotist and/or Prosthetist is a health care professional who is specifically educated and trained to manage comprehensive orthotic and/or prosthetic patient care. This includes patient assessment, formulation of a treatment plan, implementation of the treatment plan, follow-up and practice management. Orthotic care may include, but is not limited to, patient evaluation, orthosis design, fabrication, fitting and modification to treat a neuromusculoskeletal disorder or acquired condition. Prosthetic care may include, but is not limited to, patient evaluation, prosthesis design, fabrication, fitting and modification to treat limb loss for purposes of restoring physiological function and/or cosmesis.

The orthotist and/or prosthetist certified by ABC is bound by the ABC *Code of Professional Responsibility*, which is enforced by a Professional Discipline program. The certified orthotist/prosthetist is obligated to support and conform to professional responsibilities that promote and assure the overall welfare of the patient and the integrity of the profession. The time limited certification expires without compliance with requirements of the ABC Continuing Education program.

The *Orthotic, Prosthetic and Pedorthic Scope of Practice* is located on the ABC website at [abcop.org](http://abcop.org) or by calling the ABC office at 703-836-7114.

# Initial Certification

Practitioners successfully completing the certification examinations will receive a congratulatory letter, a certificate, a certification number, a lapel pin, the *ABC Guide to Maintaining Your Certification* and information regarding the proper use of the ABC credential and logo. Newly certified practitioners will receive an invoice for that year's certification fees at a prorated amount.

Certified practitioners in good standing will receive the *O&P Almanac, Mark of Merit* newsletter, and be listed in the ABC online directory.

A directory of all ABC credentialed individuals and organizations is maintained online and available at [abcop.org](http://abcop.org).

# Maintaining Certification

All certificatees are required to maintain certification by remitting annual fees, participating in ABC's Continuing Education program and adhering to the *Code of Professional Responsibility*.

The purpose of recertification is to ensure that the individual is committed to professional development and demonstrates a current level of professional knowledge, skill and ability as a competent practitioner. Achieving recertification with ABC proves the certificatee's dedication to the highest standards of clinical performance in orthotic and prosthetic care.

The Board of Directors, as part of its standard operating procedures, reviews the five-year recertification interval on a regular basis. As part of that review, other NCCA accredited allied health organizations are surveyed to establish the certification industry norm as well as identify certification trends.

## Professional Conduct

Practitioners are required to abide by the *Code of Professional Responsibility* to maintain good standing. The Code was adopted to promote acceptable standards of moral and professional conduct. Certified practitioners must abide by the rules and policies of the board and must otherwise conduct themselves in a fashion that brings credit to the profession, including, if necessary, the exposure of illegal, improper and/or unethical conduct of others that can assist the board in maintaining

the standards of the profession. Complaints alleging violations of the Code are referred to the Professional Discipline Committee for review.

## Continuing Education

The following requirements have been established for maintaining continuing education. Please consult the *ABC Guide to Maintaining Your Certification* for additional information on this program.

ABC requires that individuals maintain their certification through appropriate learning activities relevant to their ABC credential. Although ABC will acknowledge content outside of their scope of practice, **individuals are required to earn the majority of their continuing education credits on content specifically related to their ABC certification.**

### Single Discipline Orthotist or Prosthetist— CO or CP

- A total of 75 credits must be earned during the 5-year cycle.
- A minimum of 50 credits must be Category I Scientific.
- A maximum of 25 credits may be Business and/or Category II Scientific.
- Business credits can be earned in either Category I or II, but do not count toward satisfying the 50 Category I Scientific credits.

### **Dual Discipline Orthotist Prosthetist—CPO**

- A total of 100 credits must be earned during the 5-year cycle.
- A minimum of 75 credits must be Category I Scientific.
- A maximum of 25 credits may be Business and/or Category II Scientific.
- Business credits can be earned in either Category I or II, but do not count toward satisfying the 75 Category I Scientific credits.
- When extending a credential from CO or CP to CPO, the certification date of the most recent credential will determine the 5-year continuing education cycle. For example, if the orthotic certification was awarded in 2009 and the prosthetic certification was awarded in 2012, the effective date for the 5-year cycle will be 2012.

Continuing education statements are mailed twice per year and are also available online at [abcop.org](http://abcop.org).

### **Annual Renewal Fees**

Certified practitioners must remit annual renewal fees to maintain good standing with ABC. Annual renewal notices are mailed in mid-September and must be paid by December 1. Upon certification, newly certified practitioners will receive a prorated invoice for that year's certification fees. Subsequent renewal notices will be sent automatically.

# Appendix I

## Certified Orthotist and Prosthetist Domain, Tasks, Knowledge and Skills

### Domain 1: Patient Assessment

#### Tasks:

- Review patient's prescription/referral
- Take a comprehensive patient history, including demographic characteristics, family dynamics, previous use of an orthosis/prosthesis, diagnosis, work history, avocational activities, signs and symptoms, medical history (including allergies to materials, current medications), reimbursement status, patient expectations, patient compliance with ancillary care and results of diagnostic evaluations
- Perform a diagnosis-specific functional clinical and cognitive ability examination that includes manual muscle testing, gait analysis and evaluation of sensory function, range of motion, joint stability and skin integrity
- Consult with other healthcare providers and caregivers, when appropriate, about patient's condition in order to formulate a treatment plan
- Verify patient care by documenting history, ongoing care and follow-up using established record-keeping techniques
- Refer patient, if appropriate, to other healthcare providers for intervention beyond orthotic/prosthetic scope of practice

### Domain 2: Formulation of the Treatment Plan

#### Tasks:

- Evaluate the findings to determine an orthotic/prosthetic treatment plan
- Formulate treatment goals and expected orthotic/prosthetic outcomes to reduce pain, increase comfort, provide stability, prevent deformity, address aesthetic factors and promote healing to enhance function and independence
- Consult with physician, referral source or appropriately licensed healthcare provider to modify, if necessary, the original prescription and/or treatment plan
- Identify design, materials and components to support treatment plan
- Develop a treatment plan based on patient needs, including patient education and follow-up
- Communicate to patient and caregiver about the recommended treatment plan and any optional plans, including disclosure of potential risks and benefits in orthotic/prosthetic care
- Document treatment plan using established record-keeping techniques
- Ensure patient or responsible parties are informed of their financial responsibilities (for example, insurance verification and authorization, deductibles, co-pays) as they pertain to proposed treatment plan

### Domain 3: Implementation of the Treatment Plan

#### Tasks:

- Inform patient, family and caregiver of the orthotic/prosthetic procedure, possible risks and time involved in the procedure
- Provide patient with preparatory care for orthotic/prosthetic treatment (e.g., diagnostic splint, compression garment)

- Select appropriate materials and techniques in order to obtain a patient model and image
- Prepare patient for procedure required to initiate treatment plan (e.g., measure, take impression, delineate, scan, digitize)
- Perform procedure (e.g., measure, take impression, delineate, scan, digitize)
- Refer to manufacturer's specifications and other technical resources regarding components and materials
- Select appropriate materials and components for orthosis/prosthesis based on patient criteria to ensure optimum strength, durability and function (e.g., ankle or knee joints, feet, knee units, lamination layouts)
- Prepare delineation, impression and template for modification and fabrication (e.g., prepare impression or reverse delineation, digitize)
- Rectify and prepare patient model and image for fabrication
- Fabricate or assemble orthosis/prosthesis in order to prepare for initial or diagnostic fitting and delivery
- Assess device for structural safety and ensure manufacturers' guidelines have been followed prior to patient fitting and delivery (e.g., torque values, patient weight limits)
- Assess and align orthosis/prosthesis for accuracy in sagittal, transverse and coronal planes in order to provide maximum function and comfort
- Ensure materials, design and components are provided as specified in the treatment plan
- Complete fabrication process after achieving optimal fit and function of orthosis/ prosthesis (e.g., convert test socket to definitive orthosis/ prosthesis)
- Educate patient and caregiver about the use and maintenance of the orthosis/prosthesis (e.g., wearing schedules, other instructions)

- Reassess orthosis/prosthesis for structural safety prior to patient delivery
- Document treatment using established record-keeping techniques to verify implementation of treatment plan
- Refer patient to appropriate healthcare providers (e.g., nurse practitioners, therapists) for necessary ancillary care

## Domain 4: Follow-up Treatment Plan

### Tasks:

- Obtain feedback from patient and caregiver to evaluate outcome (e.g., wear schedule and tolerance, comfort, perceived benefits, perceived detriments, ability to don and doff, proper usage and function, overall patient satisfaction)
- Assess patient's function and note any changes
- Assess patient's skin condition (e.g., integrity, color, temperature, volume) and note any changes
- Assess patient's general health, height and weight and note any changes
- Assess patient's psychosocial status (e.g., family status, job or caregiver) and note any changes
- Assess fit of orthosis/prosthesis with regard to strategic contact (e.g., multiple force systems, total contact) to determine need for changes relative to initial treatment goals
- Assess fit of orthosis/prosthesis with regard to anatomical relationships to orthosis/ prosthesis (e.g., trimlines, static and dynamic alignments) to determine need for changes relative to initial treatment goals
- Assess patient's achievement of planned treatment outcomes
- Formulate plan to modify orthosis/prosthesis based on assessment of outcomes and inform patient and caregiver of plan to modify orthosis/ prosthesis as necessary

- Make or supervise modifications to orthosis/prosthesis (e.g., relieve pressure, change range of motion, change alignment, change components, add pressure-sensitive pad)
- Assess modified device for structural safety
- Evaluate results of modifications to orthosis/prosthesis, including static and dynamic assessment
- Reassess patient knowledge of goals and objectives to ensure proper use of orthosis/prosthesis relative to modifications
- Document all findings and actions and communicate with physicians, referral sources and appropriately licensed healthcare providers to ensure patient status is updated
- Develop long-term follow-up plan

## Domain 5: Practice Management

### Tasks:

- Plan, implement, evaluate and document policies and procedures in compliance with all applicable federal and state laws and regulations and professional and ethical guidelines (e.g., CMS, HIPAA, FDA, ADA, OSHA, ABC Code of Professional Responsibility)
- Develop and implement personnel policies and procedures (e.g., benefits, training, incentives, staff recognition, regular performance evaluations)
- Establish procedures for patient care that comply with current medical and legal requirements
- Demonstrate proper documentation of patient history and financial records using established record-taking techniques
- Create a professional, cooperative working environment to improve patient care

## Domain 6: Promotion of Competency and Enhancement of Professional Practice

### Tasks:

- Participate in continuing education and provide such education for other healthcare providers, orthotic and prosthetic practitioners, pedorthists, assistants, fitters, technicians and office staff (e.g., publications, seminars, case studies)
- Participate in education of residents, students and trainees
- Conduct or participate in product development research, clinical trials and outcome studies
- Participate in the development, implementation and monitoring of public policy regarding orthotics/prosthetics (e.g., provide testimony and information to legislative and regulatory bodies, serve on professional committees and regulatory agencies)
- Participate in consumer organizations and nongovernmental organizations in order to promote competency and enhancement of orthotic/prosthetic profession

## Knowledge Statements

### The certified practitioner should demonstrate the following knowledge:

- Musculoskeletal anatomy, including upper limb, lower limb, spinal
- Neuroanatomy and neurophysiology
- Anatomical landmarks (surface anatomy)
- Kinesiology, including upper limb, lower limb, spinal
- Normal human locomotion
- Gait training

- Pathological gait
- Tissue characteristics/management
- Volumetric control
- Planes of motion
- Biomechanics
- Pathologies (e.g., muscular, neurologic, skeletal, vascular)
- Basic pharmacology
- Medical terminology
- Referral documents
- Procedures to record data
- Policies and procedures regarding privileged information
- Roles and responsibilities associated with other healthcare professions
- Reimbursement protocols (e.g., CMS, DMERC)
- Material safety procedures and standards (e.g., OSHA, MSDS)
- Universal precautions, including sterile techniques and infection control
- Ethical standards regarding proper patient management, including ABC Code of Professional Responsibility
- Scope of practice related to orthotic/prosthetic credentials
- Boundaries of the scope of practice (i.e., when to refer a patient to other healthcare providers and caregivers)
- Orthotic/prosthetic design
- Orthotic/prosthetic fitting criteria
- Clinical examination techniques, (e.g., range of motion [ROM]), manual muscle tests, sensation, proprioception)
- Impression-taking techniques, materials, devices and equipment
- Rectification/modification procedures as they relate to specific orthotic/prosthetic designs
- Measurement tools and techniques
- Orthotic/prosthetic forms (e.g., assessment, orthometry, measurement, evaluation, outcomes)
- Materials science
- Componentry
- Alignment devices and techniques
- Hand and power tools
- Mechanics (e.g., levers and force systems)
- Care and maintenance of orthoses/prostheses
- Computer-aided design and manufacturing (CAD/CAM)
- Item warranty and warranty limitations
- Loss control (e.g., risk management, inventory control)
- Research methodology and literature
- Human development and aging, ranging from pediatric to geriatric, as they relate to orthotic/prosthetic treatment
- The psychology of the disabled
- Patient educational materials
- Federal and state rules, regulations and guidelines (e.g., FDA, ADA, HIPAA)
- ABC Facility Accreditation Standards
- NCOPE Residency Standards

## Skill Statements

### The certified practitioner should demonstrate the following skills:

- Interpreting referral documents, (e.g., prescriptions, orders)
- Interpreting radiological images
- Communicating with patient/family/caregiver
- Communicating with referral sources and appropriately licensed healthcare providers
- Performing physical examinations
- Identifying gross surface anatomy
- Interpretation of physical findings (e.g., recognizing skin pressures, dermatological conditions)
- Analysis of normal and pathological gait/motion
- Analysis of orthotic/prosthetic gait/motion
- Managing patients relative to their diagnosis or condition
- Impression-taking/ measuring for orthoses/prostheses
- Using mechanical measuring devices
- Using electrical measuring devices
- Using computer-based measuring devices
- Patient delineation rectification and/or patient model modification
- Orthotic/prosthetic fabrication
- Use of safety equipment
- Use of hand and power tools
- Use of materials and components
- Use of alignment devices
- Aesthetic finishing
- Evaluating fit and function of an orthosis/prosthesis
- Adjusting and modifying orthoses/prostheses
- Maintaining and repairing orthoses/prostheses
- Restoring optimal fit and function of orthoses/prostheses
- Solving patient's problems related to ADLs
- Documentation

# Appendix II

## Sample Orthotic Written Examination

*Following are sample questions that are similar to those you will find on the orthotic written examination.*

1. The muscle that has the PRIMARY responsibility of rotating the thumb to touch the tips of the index and middle fingers is the:
  - A. Opponens pollicis
  - B. Flexor pollicis longus
  - C. Abductor pollicis brevis
  - D. Extensor pollicis longus
2. What is the MOST important factor in decreasing the vertical loading of the lumbar spine?
  - A. Application of a three-point pressure system for vertical stabilization.
  - B. Enhancement of the abdominal hydropneumatic mechanism
  - C. Strengthening of the gluteal and abdominal musculature
  - D. Immobilization of the thoracolumbar spine
3. In which of the following conditions is a Milwaukee TLSO contraindicated?
  - A. Skeletal immaturity
  - B. Idiopathic scoliosis
  - C. Thoracolumbar curves
  - D. Curves greater than 60 degrees
4. The measurement for a TLSO (anterior hypertension orthosis) should be taken with the patient in what position?
  - A. Standing erect
  - B. Sitting erect
  - C. Lying prone
  - D. Lying supine
5. Which of the following orthoses is designed to manage spondylolisthesis in an active teenager?
  - A. LSO (Corset)
  - B. LSO (Knight)
  - C. Jewitt
  - D. LSO (Anterior Overlap)
6. The trim lines of a ground reaction ankle foot orthosis should be anterior to the malleoli to serve as a:
  - A. Dorsiflexion assist
  - B. Plantarflexion assist
  - C. Dorsiflexion stop
  - D. Plantarflexion stop
7. The orthotic recommendation for treating a patient with an ulnar nerve lesion at the wrist is an opponens orthosis plus what component?
  - A. IP extension assist
  - B. Thumb post
  - C. MP stop
  - D. Opponens bar
8. When treating a patient with a knee flexion contracture, what is the MOST appropriate knee joint to use when designing a KAFO?
  - A. Dial lock joint
  - B. Polycentric joint
  - C. Extension stop knee joint
  - D. Bail lock joint
9. Facilities material safety data sheets should be:
  - A. Read by all staff that uses the materials.
  - B. Stored safely in the manufacturing business office.
  - C. Filed with the Food and Drug Administration.
  - D. Sent to the HCFA office in your region.

10. A patient who has relocated to your area comes in with a device fabricated at another orthotics and prosthetics facility. The patient is in your office because of discomfort and dissatisfaction with the overall fit. Upon evaluation you notice some minor fitting problems, but the main problem is that the assembly of the device is structurally unsound.

What should you do?

- A. Tell the patient that his device is no good, nor is his practitioner.
- B. Tell the patient to go back to where the device was fabricated.
- C. Offer to provide immediate structural repair and consult with the patient's physician to schedule a replacement.
- D. Discuss the fitting problems, but do nothing until the patient can pay for a new device.

### Orthotic Answer Key:

- 1. A
- 2. B
- 3. D
- 4. D
- 5. D
- 6. C
- 7. C
- 8. A
- 9. A
- 10. C

# Appendix III

## Sample Prosthetic Written Examination

*Following are sample questions that are similar to those you will find on the prosthetic written examination.*

- Which of the following muscles would be MOST suitable for myoelectric control of the elbow joint by a shoulder disarticulation amputee?
  - Rhomboid major and sternocleidomastoid
  - Rhomboid major and subscapularis
  - Pectoralis major and trapezius
  - Pectoralis major and coracobrachialis
- When the counter of the shoe fits too tightly on a SACH foot, which of the following problems can result?
  - Posterior lean of pylon
  - Less compression of the heel
  - Decrease in push-off resistance
  - Decrease in external rotation of the foot
- A 23-year-old, wrist disarticulation amputee intends to return to work as a carpenter. Which terminal device will offer the largest range of tool handling capabilities?
  - Dorrance 555
  - Dorrance 7
  - Dorrance 88X
  - Dorrance 12P
- The anterior trim line of the Symes prosthesis usually extends to the level of the patellar tendon in order to:
  - Provide a long lever arm to distribute force.
  - Achieve better suspension.
  - Decrease compression loads on the prosthesis.
  - Improve cosmetic appearance.
- Venous return of the blood to the heart is assisted by the:
  - Action of the skeletal muscles.
  - Positive pressure in the heart.
  - Independent contraction of the arterial walls.
  - Arterial blood pressure.
- A unilateral transradial prosthetic patient complains that the axilla loop of his harness is uncomfortable. The most common reason for this complaint is that the cross point is:
  - Too close to the amputated side.
  - Too close to the sound side.
  - Superior to C7.
  - Inferior to C7.
- A transtibial amputee has an anatomical A-P measurement of 95 mm (3-3/4). What is the correct A-P measurement of the positive model for a PTB hard socket?
  - 95 mm (3-3/4)
  - 97 mm (3-7/8)
  - 101 mm (4)
  - 103 mm (4-1/8)
- Records do not fulfill all of their purposes unless they:
  - Include a comprehensive medical history.
  - Are detailed and include a description of all symptoms and treatment.
  - Can be used for legal purposes.
  - Are maintained and up-to-date

9. A 75-year-old, quadruple-bypass, obese patient who is also a transfemoral amputee comes to you with a prescription for a suction socket with hydraulic knee unit and a dynamic response vertical shock pylon type prosthetic foot. You should:

- A. Call the physician and suggest an alternate prescription.
- B. Provide the prosthesis as ordered by the referring physician.
- C. Tell the patient to schedule an appointment at an amputee clinic.
- D. Refer patient to another practitioner for a second opinion.

10. What is the best course of action when a long-time patient asks to be referred to another practitioner?

- A. Offer your services for free.
- B. Provide him with a list of certified practitioners.
- C. Telephone his doctor and complain.
- D. Refer to a psychiatric practitioner.

### **Prosthetic Answer Key:**

- 1. C
- 2. B
- 3. B
- 4. A
- 5. A
- 6. B
- 7. C
- 8. D
- 9. A
- 10. B

# Appendix IV

## Examination Question References and Recommended Reading List

Examination development involves the use of many references and resources including, but not limited to:

### Orthotics and Prosthetics

American Medical Association. *American Medical Association Handbook of First Aid and Emergency Care*. Random House Reference, 2009.

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