



Celebrating 38
Years of Excellence

PROSTHETIC & ORTHOTIC UPDATE

A Publication of Nobbe Orthopedics, Inc.

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Function Isn't (Quite) Everything

When rehabilitation professionals get together to discuss prosthetics—whether in general or for a specific patient—functional restoration usually dominates the conversation. Aesthetic considerations as a rule don't command

much attention.

That's generally the case with prosthetic literature as well, as the typical professional paper or promotional article devotes little space to how a patient will look in the prosthesis.

To be sure, restoring lost ambulation or manipulation capability is the most dramatic, and arguably the most important, function of modern prosthetics.

But for many limb-deficient individuals, the *appearance* of their replacement component, from a partial finger prosthesis to an entire leg, is a major lifestyle concern...in some cases the *primary* concern.

Because this aspect of the prosthetic art receives so little attention and because many recent advances in cosmetic finishing have been achieved, we are devoting most of this issue to the topic.

We hope you find the discussion informative and welcome your comments and questions.



Cosmesis—The Finishing Touch

In the rehabilitation community's dedication to restore an amputee to a state of wholeness, function is king...as it should be: Enabling a lower limb-deficient patient to walk anew or an upper-limb amputee to grasp and manipulate again is a marvelous accomplishment.

But another aspect of modern prosthetic management is similarly essential to many patients, one that still emphasizes the "art" of prosthetics in an era generally dominated by scientific advances.

Prosthetics Today

Cosmesis, the external appearance of a prosthetic system, is for the typical amputee an integral ingredient—for some the most significant attribute—of restored wholeness. Some, in fact, consider projecting an image of completeness to be an even more important outcome than functional restoration.

In general, younger, vigorous amputees are more concerned with aesthetics than the larger population of older,

dysvascular patients. For many, a basic level of cosmetic finishing will suffice; however, others with special vocational or lifestyle needs may require advanced shaping, pigmentation and detailing of the external surface. Here, the traditional artistry and craftsmanship of the experienced prosthetist can still be found.



Courtesy Alatheia Prosthetic
Rehabilitation Center

Nobbe Orthopedics Inc. is pleased to announce that it has received a three-year re-accreditation award from the American Board for Certification in Orthotics and Prosthetics (ABC). This award represents the highest level of accreditation in the O&P disciplines. Our practice was recognized in all areas of evaluation including organizational management, professional staff, patient care, quality assurance, facilities and safety management.

Nobbe Orthopedics Inc. has been providing orthotic/prosthetic services in Santa Barbara since 1963 and in Santa Maria since 1994. Our comprehensive fabrication capabilities and thoroughly trained staff allow provision of all facets of O&P services.

The ABC, a not-for-profit organization headquartered in Alexandria, Va., has provided credentials for practitioners and organizations since 1948.

For additional information about Nobbe Orthopedics Inc. or the ABC, call our offices in Santa Barbara at (805) 687-7508 or Santa Maria at (805) 925-8290.

Standards of Our Profession — Cr

The term “professional,” regardless of the field, elicits certain expectations—advanced, specialized education; demonstrated skill; proven experience. Professionals are measured by specific standards that help define their capabilities and proficiency for those they serve and with whom they interact. This condition is every bit as true for orthotics and prosthetics (O&P) as for other health care professions.

In 1993, the American Medical Association recognized orthotics and prosthetics as an allied health profession, culminating a steady evolution of the twin disciplines from medical-related craftsman trade to true patient care specialty over the past half-century.



Yet O&P has not been subject to mandatory regulation in the U.S. until recently: During the past decade, eight states have passed licensure requirements, and several more have started down that path. (See page 3.)

Licensure carries the force of law—state agencies determine who may legally provide O&P services to their citizens. In time, many more states may adopt licensure, particularly those with a large elderly population and many O&P practitioners. But for now, the large majority of states does not require a licence to practice this specialty.

For this remainder of the country, the profession’s aggressive self-regulation effort centered around individual and facility credentialing will continue to certify O&P knowledge, competence and experience for physicians, other health professionals, patients and insurers.

The American Board for Certification in Orthotics and Prosthetics (ABC)

After extensive limb-loss and -injury casualties in World War II lit a fire under what had been a slow-developing field in the U.S. for most of the 20th century, a group of concerned orthotists, prosthetists and orthopedic surgeons in 1948 joined forces to create a credentialing organization to protect the public against unqualified practitioners.



The stated mission of the American Board for Certification in Orthotics & Prosthetics (ABC) is to:

- encourage and promote the highest standards of professionalism in the delivery of O&P services;
- advance the competency of practitioners;
- promote the quality and effectiveness of orthotic and prosthetic care; and
- maintain the integrity of the profession.

ABC administers exacting credentialing programs for individual practitioners (certification) and facilities (accreditation).

Certification. ABC’s practitioner credentialing process is open to orthotists, prosthetists and technicians who meet well-defined educational and experience requirements. To earn the ABC credential of C.O. (certified orthotist), C.P. (certified prosthetist) or CPO (certified prosthetist-orthotist), a practitioner must first have earned a baccalaureate degree in O&P or a baccalaureate degree in any major and one-year postgraduate education certificate in O&P. These requirements are recognized by both the AMA and CAA-HEP, the Commission on Accreditation of Allied Health Education Programs.

Candidates must then pass a rigorous written examination, written simulation, and three-day clinical exam designed to evaluate their understanding of anatomy, physiology, biomechanics and

kinesiology and their competence in clinical assessment, patient management, technical implementation, practice management, and professional responsibility.

Every five years, ABC-certified practitioners must renew their credentials by meeting continuing education requirements, through which they demonstrate knowledge of the latest developments in technology and patient management.

Certification Requirements—A Comparison

COMPONENTS	EDUCATIONAL REQUIREMENTS	REQUIRED EXPERIENCE
ABC Path 1	Baccalaureate degree in orthotics or prosthetics from a program accredited by CAAHEP*	12-month NCOPE-accredited residency program
	Baccalaureate degree in orthotics or prosthetics from a program accredited by NCOPE**	1900 hours (one year) clinical experience supervised by an ABC-certified practitioner
ABC Path2	Baccalaureate degree in any major, plus an orthotic and/or prosthetic certificate from a CAAHEP-accredited program	12-month NCOPE-accredited residency program
	Baccalaureate degree in any major, plus an orthotic and/or prosthetic certificate from a NCOPE-accredited program	1900 hours (one year) clinical experience supervised by an ABC-certified practitioner
www.opoffice.com		
BOC	Bachelor’s degree with major in orthotics/prosthetics, OR Associate degree in a related field, OR Two or more years of O&P education, training and/or supervised work experience including intensive study.	Documented minimum two years (3800 hours) of additional experience providing orthotic-prosthetic services to patients
www.bocusa.org		

* Commission on Accreditation of Allied Health Education Programs ** National Commission on Orthotic and Prosthetic Education

Credentialing and Licensure in O&P

In addition, certificants must adhere to ABC's detailed Canons of Ethical Conduct.

ABC administers a separate credentialing program for prosthetic and orthotic technicians.

Accreditation. ABC's facility accreditation program evaluates candidate practices against standards relating to governance, administration, staff qualifications, patient care, quality assessment, facility management, and safety. Notable accreditation requirements include a full-time certified orthotics-prosthetics practitioner on staff and adherence to safety and cleanliness standards.



The Board for Orthotist/Prosthetist Certification (BOC)

ABC remained the sole source for O&P credentialing in America until the 1984 founding of the Board for Orthotic Certification, later to become the Board for Orthotist/Prosthetist

Certification. Both programs are respected in the industry, but ABC is generally regarded to have the more demanding certification requirements. Most states with O&P licensure laws require ABC certification or passing ABC examinations to qualify.



Like ABC, the BOC both accredits facilities and certifies practitioners. Its individual credentials include BOC orthotist, BOC prosthetist, COF (certified orthotic fitter), and CMF (certified mastectomy fitter). Requirements for entry into the BOC program differ for each credential, but all require specified education and experience levels. (See table for orthotist-prosthetist requirements.)

Testing for BOC certification includes a multiple choice exam, clinical simulation, and video practical exam to test applicants' working abilities. The BOC, like ABC, adheres to a strict Code of Ethics/Enforcement and requires continuing education credits.

Our Position

A primary tenet of our O&P practice is the critical importance of professionalism in every aspect of our day-to-day operation. We actively support credentialing and are proud to offer the services of board-certified practitioners to our patients, referral sources and third-party payers. We further recognize the role of state licensure in protecting the public against unqualified O&P providers.

For further information, including specifics of our staff credentials, we invite you to call our office.

O&P Licensure Inching Forward...State by State

The only difficulty with board credentialing programs is that they are voluntary.

For the great majority of O&P practitioners, the benefits and respect earned from certification far outweigh the time, effort and cost of the process. But for the non-motivated provider, bypassing any form of certification is still a viable option in 42 states.

In the states that have not yet adopted legislation regulating O&P practice through licensure, nothing prevents under-qualified individuals from treating patients...and the undesirable outcomes that may follow.

That picture is slowly changing. Eight states—Florida, Illinois, Mississippi, New Jersey, Ohio, Oklahoma, Texas and Washington—have now enacted licensure legislation requiring orthotists and prosthetists to meet state operating standards (although some have yet to implement their laws). In addition, New York has licensure legislation pending, and Alabama, California, Georgia, Louisiana, Massachusetts, Michigan, Pennsylvania, South Carolina, and Tennessee are actively studying the possibility.

While licensure replaces the self-regulation provided by O&P credentialing with mandatory regulation, the requirements for

obtaining an O&P license can be essentially the same. Three states—New Jersey, Mississippi and Illinois—specify ABC certification as a requirement of licensure. The remaining states with licensure maintain contracts with ABC to provide written and/or

written simulation examinations for their applicants.

Licensure also involves questions of grandfathering and reciprocity. Grandfathering allows already-practicing O&P professionals to be licensed without going through the newly instituted qualification process. Most states that allow grandfathering require a practice to have been in operation for at least five years to qualify. Reciprocity refers to a state's willingness to recognize a practitioner license issued by another state.

A problem with licensure is that the cost of administering the licensing program is usually paid by the practitioners themselves through licensing fees, which can become a significant burden in states with small numbers of practitioners to support the resulting bureaucracy.

On the other hand, the opportunity to prevent insufficiently qualified individuals from attempting to provide O&P services, by law, and thereby provide additional protection for consumers, has generated substantial support for licensure within our profession.



The Little Things

Rotational Adapters

It may seem incongruous for an above-knee amputee to want or need to cross his/her prosthetic limb over the contralateral knee, but this common sitting position (for non-amputees) does have at least one practical application: Placing the limb in this position puts the prosthetic foot within easy reach for changing or tying shoes or making other adjustments while the limb is being worn.



Though not typically incorporated in a basic A/K prosthesis, the capability of rotating the shin relative to the socket with the knee flexed can be added by placement of a rotation adaptor just above the knee. A release button on the adapter frees the shin for rotation, either medial or lateral, and the lock reengages automatically.



Photos courtesy Otto Bock Health Care.

Rotation capability is also helpful when the wearer is sitting in a confined or limited space, such as behind the wheel of an automobile.

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Prescription Notes

Aesthetic considerations when prescribing for a new amputee:

- New amputees are often as much concerned with their replacement limb's appearance as with its function. Cosmesis should be addressed early in prosthetic management.
- Cosmetic covers are seldom provided with a preparatory prosthesis (when used), due to configuration and cost changes as the patient's residual limb and prosthetic performance improve. Many new amputees do not understand that this situation is only temporary.
- A basic cosmesis is considered an integral component of the definitive prosthesis. The exact form and finish are typically determined by the prosthetist and patient together, though physician and/or therapist input is encouraged.
- In general, the cosmesis of endoskeletal systems provide a more lifelike look and feel than exoskeletal limbs. On the other hand, endo covers are less durable than exo shells and require more care—washing, etc. Except for “heavy-duty” applications, endoskeletal designs work well for most patients.
- Though generally not covered by insurance, highly individualized and detailed cosmetic finishes are available for special needs and when “price is no object.”

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