
Standards and Guidelines for the Accreditation of Educational Programs in Pedorthics

These accreditation **Standards and Guidelines** are the minimum standards of quality used in accrediting programs that prepare individuals to enter the pedorthic profession. Standards are the minimum requirements to which an accredited program is held accountable. Guidelines are descriptions, examples, or recommendations that elaborate on the Standards. Guidelines are not required, but can assist with interpretation of the Standards.

Standards are printed in regular typeface in outline form. *Guidelines* are printed in italic typeface in narrative form.

Preamble

The National Commission on Orthotic and Prosthetic Education (NCOPE) and Committee on Accreditation of Pedorthic Education (CAPE) cooperate to establish, maintain and promote appropriate standards of quality for educational programs in pedorthics and to provide recognition for educational programs that meet or exceed the minimum standards outlined in these accreditation **Standards and Guidelines**. Lists of accredited programs are published for the information of students, employers, educational institutions and agencies, and the public.

These **Standards and Guidelines** are to be used for the development, evaluation, and self-analysis of pedorthic programs. On-site review teams assist in the evaluation of a program's relative compliance with the accreditation Standards.

Description of the Profession - Pedorthics is the application of pedorthic devices to patients for the prevention or amelioration of painful and/or disabling conditions of the foot and ankle. A physician's order is required for any pedorthic device or modification provided by a pedorthist.

I. Sponsorship

A. Sponsoring Educational Institution

A sponsoring institution must be a post-secondary academic institution accredited by an institutional accrediting agency that is recognized by the U.S. Department of Education, and must be authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of a certificate at the completion of the program.

This may include private institutions as well.

B. Consortium Sponsor

1. A consortium sponsor is an entity consisting of two or more members that exists for the purpose of operating an educational program. In such instances, at least one of the members of the consortium must meet the requirements of a sponsoring educational institution as described in I.A.
2. The responsibilities of each member of the consortium must be clearly documented in a formal affiliation agreement or memorandum of understanding, which includes governance and lines of authority.

C. Responsibilities of Sponsor

The Sponsor must ensure that the provisions of these **Standards and Guidelines** are met.

II. Program Goals

Description of the Program

The Pedorthic Educational Program (*Program*) refers to the actual course(s) of study that is (are) intended to give the student a sufficient body of knowledge and skills to make him/her competent to enter the field of Pedorthics.

NCOPE does not function as an institutional accreditor; its function is programmatic accreditor for Pedorthic Education.

A. Program Goals and Outcomes

There must be a written statement of the program's goals and learning domains. These must be consistent with and responsive to the needs and expectations of the communities of interest served by the educational program. The communities of interest that are served by the program must include, but are not limited to graduates, faculty, sponsor administration and employers.

Program-specific statements of goals and learning domains provide the basis for program planning, implementation, and evaluation. Such goals and learning domains must also be compatible with the mission of the sponsoring institution(s). Goals and learning domains are based upon the substantiated needs of health care providers and employers, and the educational needs of the students served by the educational program.

B. Appropriateness of Goals and Learning Domains

The program must regularly assess its goals and learning domains. Program personnel must identify and respond to changes in the needs and/or expectations of its communities of interest.

An advisory committee, which is representative of at least each of the communities of interest named in these **Standards**, must be designated.

This committee is charged with the responsibility of assisting Program and Sponsor personnel in formulating and periodically revising appropriate goals and learning domains, monitoring needs and expectations, and ensuring program responsiveness to change. The meetings of this committee do not have to be face to face; an electronic means of meeting are acceptable.

C. Minimum Expectations

The program must have the following goal defining minimum expectations: "To prepare competent entry-level pedorthists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains."

Programs adopting educational goals beyond entry-level competence must clearly delineate this intent and provide evidence that all students have achieved the basic competencies prior to entry into the field.

III. Resources

A. Type and Amount

Program resources must be sufficient to ensure the achievement of the program's goals and outcomes. Resources must include, but are not limited to: faculty; clerical and support staff; curriculum; finances; offices; classroom, laboratory and ancillary student facilities; clinical affiliates; equipment; supplies; computer resources; reference materials, and faculty/staff continuing education.

B. Personnel

The sponsor must appoint sufficient faculty and staff with the necessary qualifications to perform the functions identified in documented job descriptions and to achieve the program's stated goals and outcomes.

1. Program Director

(a) Responsibilities

The Program Director must assure achievement of the program's goals and outcomes, and is responsible for all aspects of the program, including the organization, administration, continuous review, planning, development and general effectiveness of the program. The Program Director must provide supervision, administration and coordination of the instructional staff of the educational program.

(b) Qualifications

The Program Director must:

- (1) Be credentialed in the profession of pedorthics by a national credentialing organization that is accredited by the National Commission for Certifying Agencies (NCCA) or hold a professional license in pedorthics as is required by the state in which he/she is employed;
- (2) Have a minimum of three years of professional work experience (clinical and/or administrative) in pedorthics or related field; and
- (3) Have a minimum of two years of teaching experience in program content area or related field

A related field may be orthotics, physical therapy, podiatry, or similar.

2. Faculty and/or Instructional Staff

(a). Responsibilities

In classrooms, laboratories, and each location where students are assigned for didactic or clinical instruction or supervised practice, there must be (a) qualified individual(s) designated to provide instruction, supervision, and timely assessments of the students' progress in achieving program requirements.

(b) Qualifications

Instructors must be: appropriately credentialed for the content area being taught; knowledgeable in subject matter through training and experience; effective in teaching their assigned subjects; and exhibit professional behavior in student/teacher interaction.

C. Curriculum

The curriculum must ensure the achievement of program goals and learning domains. Instruction must be an appropriate sequence of classroom, laboratory, and clinical experience. Instruction must be based on clearly written course syllabi that include course description, course objectives, methods of evaluation, topic outline, and competencies required for graduation.

1. Content and Competencies

The program must demonstrate that the curriculum meets or exceeds the content of the current edition of the *Core Curriculum for Pedorthist*. (Appendix B)

Appropriate course sequencing is defined as a logical progression of learning.

To accomplish the requisite integration of knowledge, theory and application of the clinical and technical aspects of pedorthics, it is recommended that a variety of instructional methods be employed, including instructor presentations and demonstrations, interactive experiences, internet-based assignments, self-directed activities, structured laboratory experiences and supervised clinical experiences. Program length should be sufficient to ensure student achievement of the Core Curriculum.

2. Clinical Experience

Clinical experiences performing psychomotor and affective competencies must be completed prior to graduation. If the experiences are out of the classroom, on-site supervision of the student must be provided by an individual who has knowledge of the pedorthic profession.

This could be met prior to admission or could be completed during the program. These experiences can be simulated or direct patient care. It is the responsibility of the program to verify that these competencies have been met.

D. Resource Assessment

The program must, at least annually, assess the appropriateness and effectiveness of the resources described in these **Standards**. The results of resource assessment must be the basis for ongoing planning and appropriate change. An action plan must be developed when deficiencies are identified in the program resources. Implementation of the action plan must be documented and results measured by ongoing resource assessment.

Other dimensions of the program may merit evaluation as well, such as the admission criteria and process, the curriculum design, and the purpose and productivity of the Advisory Committee.

The format for resource assessments should be: purpose statement, measurement systems, dates of measurement, results, analyses, action plans, and follow-up.

IV. Student and Graduate Evaluation/Assessment

A. Student Evaluation

1. Frequency and purpose

Evaluation of students must be conducted on a recurrent basis and with sufficient frequency to provide both the students and program faculty with valid and timely indications of the students' progress toward and achievement of the competencies and learning domains stated in the curriculum.

The evaluation system should provide each student and the program with analysis of the student's knowledge, performance-based strengths and areas for improvement, and progress toward attainment of the competencies and objectives stated in the curriculum.

Faculty should demonstrate that the evaluation methods chosen are consistent with the competencies and objectives being tested. Methods of assessment should be carefully designed and constructed to measure stated objectives at the appropriate level of difficulty. Methods used to evaluate clinical skills and behaviors should be consistent with stated performance expectations and designed to assess competency attainment accurately and reliably in the cognitive, affective and psychomotor domains.

The program should be able to demonstrate inter-rater reliability among those individuals who perform evaluations.

In order to ensure their effectiveness, evaluation methods should undergo frequent reappraisal. The program should demonstrate appropriate updating and revision of the methods employed, or in the formulation of more effective methods.

Students should have adequate time to correct identified deficiencies in knowledge and/or performance. Guidance should be available: to help students understand course content; to comply with program practices and policies; to provide counseling or referral for problems that may interfere with their progress through the program. Students should be eligible for all services offered by the educational institution.

2. Documentation

Records of student evaluations must be maintained in sufficient detail to document learning progress and achievements.

These records should remain on file until after the student has successfully completed all degree or certificate plan requirements for graduation.

B. Outcomes

1. Outcomes Assessment

The program must periodically assess its effectiveness in achieving its stated goals and learning domains. The results of this evaluation must be reflected in the review and timely revision of the program.

Outcomes assessments must include, but are not limited to: national credentialing examination(s) performance, programmatic retention/attrition, graduate satisfaction, employer satisfaction, positive job placement, and programmatic summative measures. The program must meet the outcomes assessment thresholds established by NCOPE.

Programs that have not graduated a class, or have graduated only one class, may not be able to demonstrate compliance with this Standard. However, mechanisms and tools for conducting ongoing program evaluation and outcomes assessment should be in place.

Programmatic summative measures should contribute to assessing effectiveness in specific learning domains.

In an effort to keep programmatic attrition below the established NCOPE threshold, the program should provide objective, success-related admissions standards, and/or prerequisites, and effective methods of assessing basic academic skills for all prospective students. Prospective students should be admitted to the program after having demonstrated at least a minimum acceptable level of academic skills performance.

“Positive Placement” means that the graduate is employed full or part-time in a related field; and/or continuing his/her education; and/or serving in the military.

Programs not meeting the thresholds established by NCOPE will begin a dialogue with NCOPE (through CAPE) to develop an appropriate plan of action to respond to the identified shortcomings.

2. Outcomes Reporting

The program must periodically submit the program goal(s), learning domains, evaluation systems (including type, cut score, and appropriateness), outcomes, its analysis of the outcomes, and an appropriate action plan based on the analysis.

V. Fair Practices

A. Publications and Disclosure

1. Announcements, catalogs, publications, and advertising must accurately reflect the program offered.
2. At least the following must be made known to all applicants and students: the sponsor's institutional and programmatic accreditation status as well as the name, mailing address, web site address, and phone number of the accrediting agencies; admissions policies and practices, including technical standards (when used); policies on advanced placement, transfer of credits, and credits for experiential learning; number of credits required for completion of the program; tuition/fees and other costs required to complete the program; policies and processes for withdrawal and for refunds of tuition/fees.
3. At least the following must be made known to all students: academic calendar, student grievance procedure, criteria for successful completion of each segment of the curriculum and for graduation, and policies and processes by which students may perform clinical work while enrolled in the program.

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4. The sponsor must maintain, and provide upon request, current and consistent information about student/graduate achievement that includes the results of one or more of the outcomes assessments required in these **Standards**.

The sponsor should develop a suitable means of communicating to the communities of interest the achievement of students/graduates.

B. Lawful and Non-discriminatory Practices

All activities associated with the program, including student and faculty recruitment, student admission, and faculty employment practices, must be non-discriminatory and in accord with federal and state statutes, rules, and regulations. There must be a faculty grievance procedure made known to all paid faculty.

C. Safeguards

The health and safety of patients, students, and faculty associated with the educational activities of the students must be adequately safeguarded.

All activities required in the program must be educational and students must not be substituted for staff.

If back ground checks are required for students to participate in clinical experiences, then this requirement must be disclosed to the student prior to admissions.

D. Student Records

Satisfactory records must be maintained for student admission, advisement, counseling, and evaluation. Grades and credits for courses must be recorded on the student transcript and permanently maintained by the sponsor in a safe and accessible location.

E. Substantive Change

The sponsor must report substantive change(s) as described in Appendix A to NCOPE in a timely manner. Additional substantive changes to be reported to NCOPE within the time limits prescribed include:

- Changes to the institution's mission or objectives if these will affect the program;
- the institution's legal status or form of control;
- the addition or deletion of courses that represent a change in content or in method of delivery;
- the degree or credential level;
- clock hours to credit hours or vice versa;
- any change in clock or credit hours for successful completion of a program or in the length of a program.

F. Agreements

There must be a formal affiliation agreement or memorandum of understanding between the sponsor and all other entities that participate in the students' clinical experience that describes the relationship, roles, and responsibilities of the sponsor and that entity.

The signed affiliation agreement or memorandum of understanding should be regularly reviewed and if necessary, updated. The time period of the agreement should span no more than two years at a time. At the time for renewal, the agreement should be reviewed by both parties and new signatures should be obtained. Use of an addendum, with new dates/signatures attached to the original document, is acceptable when only a date or signature or name change has occurred.

APPENDIX A

Application, Maintenance and Administration of Accreditation

A. Program and Sponsor Responsibilities

1. Applying for Initial Accreditation

- a. The chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form and returns it to:

NCOPE
330 John Carlyle St., Suite 200
Alexandria, VA 22314

The "Request for Accreditation Services" form can be obtained from the National Commission on Orthotic and Prosthetic Education (NCOPE), CAPE, or the NCOPE website at www.ncope.org.

- b. The program undergoes a comprehensive review, which includes a written self-study report and an on-site review.

The self-study instructions and report form are available from the NCOPE and CAPE. The on-site review will be scheduled in cooperation with the program and CAPE once the self-study report has been completed, submitted, and accepted by CAPE.

2. Applying for Continuing Accreditation

- a. Upon written notice from NCOPE/CAPE, the chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form, and returns it to:

NCOPE
ATTN: CAPE
330 John Carlyle St., Suite 200
Alexandria, VA 22314

- b. The program may undergo a comprehensive review in accordance with the policies and procedures of NCOPE and CAPE.

If it is determined that there were significant concerns with the on-site review, the sponsor may request a second site visit with a different team.

After the on-site review team submits a report of its findings, the sponsor is provided the opportunity to comment in writing and to correct factual errors prior to CAPE forwarding a recommendation to NCOPE.

3. Administrative Requirements for Maintaining Accreditation

- a. The program must inform NCOPE and CAPE within a reasonable period of time (as defined by NCOPE policies) of changes in chief executive officer, dean of health professions or equivalent position, and required program personnel.
- b. The sponsor must inform the NCOPE and CAPE of its intent to transfer program sponsorship. To begin the process for a Transfer of Sponsorship, the current sponsor must submit a letter (signed by the CEO or designated individual) to NCOPE and CAPE that it is relinquishing its sponsorship of the program. Additionally, the new sponsor must submit a "Request for Transfer of Sponsorship Services" form. The NCOPE and CAPE has the discretion of requesting a new self-study report with or without an on-site review. Applying for a transfer of sponsorship does not guarantee that the transfer of accreditation will be granted.

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- c. The sponsor must promptly inform the NCOPE and CAPE of any adverse decision affecting its accreditation by recognized institutional accrediting agencies and/or state agencies (or their equivalent).
 - d. Comprehensive reviews are scheduled by the NCOPE and CAPE in accordance with its policies and procedures. The time between comprehensive reviews is recommended to NCOPE by CAPE and based on the program's on-going compliance with the Standards, however, all programs must undergo a comprehensive review at least once every ten years.
 - e. The program and the sponsor must pay any NCOPE and CAPE fees within a reasonable period of time, as determined by NCOPE and CAPE respectively.
 - f. The sponsor must file all reports in a timely manner (self-study report, progress reports, annual reports, etc.) in accordance with NCOPE and CAPE policy.
 - g. The sponsor must agree to a reasonable on-site review date that provides sufficient time for NCOPE to act on a CAPE accreditation recommendation prior to the "next comprehensive review" period, which was designated by NCOPE at the time of its last accreditation action, or a reasonable date otherwise designated by CAPE.

Failure to meet any of the aforementioned administrative requirements may lead to administrative probation and ultimately to the withdrawal of accreditation. NCOPE will immediately rescind administrative probation once all administrative deficiencies have been rectified.

4. Voluntary Withdrawal of an NCOPE- Accredited Program

Voluntary withdrawal of accreditation from the NCOPE may be requested at any time by the Chief Executive Officer or an officially designated representative of the sponsor writing to NCOPE indicating: the last date of student enrollment, the desired effective date of the voluntary withdrawal, and the location where all records will be kept for students who have completed the program.

5. Requesting Inactive Status of an NCOPE- Accredited Program

Inactive status may be requested from NCOPE at any time by the Chief Executive Officer or an officially designated representative of the sponsor writing to NCOPE indicating the desired date to become inactive. No students can be enrolled or matriculated in the program at any time during the time period in which the program is on inactive status. The maximum period for inactive status is two years. The sponsor must continue to pay all required fees to NCOPE and CAPE to maintain its accreditation status.

To reactivate the program the Chief Executive Officer or an officially designated representative of the sponsor must notify NCOPE of its intent to do so in writing to both NCOPE and CAPE. The sponsor will be notified by CAPE of additional requirements, if any, that must be met to restore active status.

If the sponsor has not notified NCOPE of its intent to re-activate a program by the end of the two-year period, NCOPE will consider this a "Voluntary Withdrawal of Accreditation."

B. NCOPE and CAPE Responsibilities – Accreditation Recommendation Process

1. After a program has had the opportunity to comment in writing and to correct factual errors on the on-site review report, the CAPE forwards a status of public recognition recommendation to the NCOPE Board of Directors. The recommendation may be for any of the following statuses: initial accreditation, continuing accreditation, transfer of sponsorship, probationary accreditation, withhold accreditation, or withdraw accreditation.

The decision of the NCOPE Board of Directors is provided in writing to the sponsor immediately following the NCOPE meeting at which the program was reviewed and voted upon.

2. Before the CAPE forwards a recommendation to NCOPE that a program be placed on probationary accreditation, the sponsor must have the opportunity to request reconsideration of that recommendation or to request voluntary withdrawal of accreditation. The CAPE's reconsideration of a recommendation for probationary accreditation must be based on conditions existing both when the committee arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the

sponsor. The NCOPE Board of Directors' decision to confer probationary accreditation is not subject to appeal.

3. Before the CAPE forwards a recommendation to NCOPE that a program's accreditation be withdrawn or that accreditation be withheld, the sponsor must have the opportunity to request reconsideration of the recommendation, or to request voluntary withdrawal of accreditation or withdrawal of the accreditation application, whichever is applicable. The CAPE's reconsideration of a recommendation of withdraw or withhold accreditation must be based on conditions existing both when the CAPE arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The NCOPE Board of Directors' decision to withdraw or withhold accreditation may be appealed. A copy of the "Appeal of Adverse Accreditation Actions" is enclosed with the NCOPE letter notifying the sponsor of either of these actions. At the completion of due process, when accreditation is withheld or withdrawn, the sponsor's Chief Executive Officer is provided with a statement of each deficiency. Programs are eligible to re-apply for accreditation once the sponsor believes that the program is in compliance with the accreditation *Standards*. Any student who completes a program that was accredited by NCOPE at any time during his/her matriculation is deemed by NCOPE to be a graduate of a NCOPE-accredited program.

APPENDIX B

Pedorthic Curriculum

A.1.0 ENTRY-LEVEL COMPETENCIES

The graduate entering the profession must effectively demonstrate competence in the following constructs.

- A.1.1 Understand and demonstrate the role of the pedorthist in providing ethical patient-centered care by applying the appropriate Code of Professional Responsibilities.
- A.1.2 Use sound judgment in regard to safety of self and others, and adhere to safety procedures throughout the delivery of pedorthic services.
- A.1.3 Have an awareness of the humanity and dignity of all patients within a diverse multicultural society.
- A.1.4 Understand and demonstrate the collaborative role of the pedorthist along with the other members of the interdisciplinary rehabilitation team in providing patient-centered care.
- A.1.5 Demonstrate skill in clinical and technical procedures necessary for pedorthic practice.

Professional Curriculum

The professional curriculum portion is the academic “core” of the curriculum and is designed to provide the student with the knowledge, skills and behaviors required for entry into the practice of pedorthics.

All learning experiences, didactic and clinical, must be accompanied by instructional objectives. These objectives must clearly outline the educational expectations in measurable outcomes while delineating the responsibilities of the learning facilitator and the student participant.

B.1.0 BASIC SCIENCES

The following basic sciences are needed as a foundation for the pedorthist. Therefore, the basic science curriculum must include appropriate content in:

- B.1.1 Human anatomy and physiology
- B.1.2 Biomechanics/Kinesiology
- B.1.3 Gait analysis (normal and pathological gait)
- B.1.4 Clinical pathology as it relates to pedorthics

Each sponsoring educational institution may determine whether these content areas will be incorporated into their professional curriculum or whether they will be required prior to entry into the program.

C.1.0. CURRICULUM CONTENT AREAS

The following content areas *related to pedorthics* must be included in the curriculum:

- C.1.1 Material science
- C.1.2 Shoe theory and fitting
- C.1.3 Orthotic theory as it relates to foot and ankle
- C.1.4 Practice/Business management
- C.1.5 Pedorthic Professional Issues, i.e., organizations, licensure, accreditation and certification

The student must demonstrate the ability to complete the following essentials of the patient evaluation process competently.

C.2.0 PATIENT EVALUATION/ASSESSMENT

- C.2.1 Perform a comprehensive assessment of the patient using standardized assessment tools and skills to obtain an understanding of patient's pedorthic needs. These include:
 - a. History
 - b. Patient Assessment
 - 1. Manual Muscle Testing (MMT)
 - 2. Range of Motion (ROM)
 - 3. Sensory testing
 - 4. Joint stability
 - 5. Observational gait analysis
 - 6. Cognitive ability
 - 7. Skin integrity
 - 8. Proper foot size measurements
 - 9. Leg measurement (length and circumference)
 - 10. Plantar foot pressure analysis
 - c. Consultation with other health care professionals and caregivers
- C.2.2 Determine appropriateness and method for referring patient to other health care professionals.
- C.2.3 Document services using established record-keeping techniques to record patient assessment and treatment plans, communicate manufacturing requirements and meet standards for reimbursement and regulatory agencies.
- C.2.4 Effectively communicate with the patient and/or caregiver regarding recommended pedorthic treatment plan.

C.3.0 FORMULATION OF A TREATMENT PLAN

- C.3.1 Interpret evaluation findings to formulate a pedorthic treatment plan.
- C.3.2 Develop a comprehensive pedorthic treatment plan to meet the needs and goals of the patient.
- C.3.3 Discuss the indications for and uses of pedorthic devices.
- C.3.4 Identify design, materials and components to support the pedorthic treatment plan.
- C.3.5 Demonstrate the ability to educate the patient, caregiver and family in the use and care of pedorthic devices.
- C.3.6 Effectively interact through written, oral and nonverbal communication with the patient, family, caregiver and other health care professionals in a professionally appropriate manner.

C.4.0 IMPLEMENTATION OF A TREATMENT PLAN

- C.4.1 Demonstrate the ability to use appropriate techniques to obtain accurate impressions and measurements.
- C.4.2 Perform the necessary procedures using accepted techniques, tools and equipment to provide appropriate pedorthic services.
- C.4.3 Demonstrate an understanding of indications/contraindications of current pedorthic components and materials.

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- C.4.4 Select appropriate materials and components for the pedorthic device based on patient needs.
 - C.4.5 Modify the positive model using accepted practices and techniques.
 - C.4.6 Describe the possible interaction between the device and the patient with respect to corrective and accommodative treatment.
 - C.4.7 Use mechanical principles such as mechanical advantage, multiple point force systems, and torque to address pathomechanical problems in pedorthic device design.
 - C.4.8 Demonstrate current and accepted fabrication and assembly procedures in order to prepare for fitting and delivery of pedorthic device.
 - C.4.9 Review quality and structural stability of the pedorthic device based on the needs and goals of the patient.
 - C.4.10 Evaluate the fit and function of the pedorthic device as used by the patient and adjust as necessary to obtain optimal function.
 - C.4.11 Demonstrate knowledge in the use of ground reaction force vectors during ambulation with and without the pedorthic device.
 - C.4.12 Use appropriate and safe patient transfer methods during sessions.
 - C.4.13 Provide appropriate instruction to patients, families and caregivers on care, use, maintenance, donning and doffing procedures, skin care and wearing schedules for pedorthic interventions.
 - C.4.14 Document services using established record-keeping techniques and meeting standards for reimbursement and regulatory agencies.
 - C.4.15 Document patient and caregiver understanding of instructions.

C.5.0 FOLLOW-UP TREATMENT PLAN

- C.5.1 Develop a long-term follow-up plan for comprehensive pedorthic care that includes: periodic evaluation for pedorthic interventions and modifications as needed to maintain optimal fit and function.

C.6.0 PRACTICE/BUSINESS MANAGEMENT

- C.6.1 Demonstrate proper documentation and billing techniques.
- C.6.2 Demonstrate knowledge of common business policies and procedures for pedorthic practice. (i.e., facility accreditation, premise/product/professional liability insurance, inventory management)
- C.6.3 Demonstrate awareness and an understanding of federal regulations pertaining to pedorthic practices.

SECTION D: SPECIFIC PEDORTHIC CONTENT AREAS

D.1.0 Common Pathologies in Pedorthic Practice

Students must identify the clinical aspects of common diseases, pathologies and deformities that involve the foot and ankle. These must include, but are not limited to:

1. Abnormal pronation
2. Abnormal supination
3. Convex pes valgus
4. Talipes calcaneovalgus
5. Posterior tibial tendon dysfunction
6. Metatarsalgia
7. Metatarsus adductus
8. Hallux rigidus
9. Hallux abducto valgus
10. Hallux adducto varus
11. Metatarsus adductus
12. Forefoot varus
13. Rearfoot varus
14. Forefoot valgus
15. Rearfoot valgus
16. Plantar flexed first ray
17. First ray insufficiency
18. Toe deformities
19. Tarsal coalitions
20. Plantar fasciitis
21. Morton's neuroma
22. Hindfoot osteoarthritis
23. Midfoot osteoarthritis
24. Diabetic ulcerations
25. Musculoskeletal: fractures, post-surgical procedures
26. Neuromuscular: hereditary sensory motor disorders, spinal cord injuries, polio
27. Charcot changes in the diabetic neuropathic foot
28. Rheumatoid arthritis
29. Overuse syndromes
30. Pediatric disorders
31. Diabetes mellitus
32. Peripheral vascular disease
33. Trauma
34. Pediatric and congenital etiologies
35. Osteoarthritis in the foot and ankle

Treatment Modalities

D.2.0 Over-the-counter (OTC) Shoes

The student must demonstrate the ability to:

- a. Perform the expected performance criteria outlined in **Section C.2.0-C.6.0**
- b. Perform a lower limb assessment (refer to C.2.1) including a detailed foot assessment (rearfoot and forefoot alignment, subtalar and midtarsal stability and function) to obtain information for formulating a treatment plan.
- c. Apply knowledge of normal anatomy, normal and abnormal biomechanics of the lower limb in combination with a foot assessment to develop a treatment plan.
- d. Identify the clinical considerations for use of off the shelf shoes for managing relevant pedorthic pathologies. (refer to D.1.0).
- e. Explain the indications and contraindications for use of the commonly used shoe designs and materials with relation to patient diagnosis and clinical presentation.
- f. Demonstrate competency in footwear material and design selection and fit assessment and improvement.

D.3.0 Over-the-Counter (OTC) Arch Supports and Foot Care Products

The student must demonstrate the ability to:

- a. Perform the expected performance criteria outlined in **Section C.2.0-C.6.0**

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- b. Perform a lower limb assessment (refer to C.2.1) including a detailed foot assessment (rearfoot and forefoot alignment, subtalar and midtarsal stability and function) to obtain information for formulating a pedorthic treatment plan.
 - c. Apply knowledge of normal anatomy, normal and abnormal biomechanics of the lower limb in combination with a foot assessment to develop a pedorthic treatment plan.
 - d. Identify the clinical considerations for use of OTC arch supports and foot care for relevant pedorthic pathologies. (refer to D.1.0).
 - e. Explain the indications and contraindications for use of the common designs and materials with relation to patient diagnosis and clinical presentation.
 - f. Demonstrate competency in device selection, measurement acquisition, and material and component selection for various functional and accommodative designs.
 - g. Demonstrate competency in fit assessment and improvement of these devices.
 - h. Understand the clinical indications and uses of both prefabricated and custom foot orthoses to enhance function and mobility.
 - i. Use knowledge of shoe wear and modifications in the pedorthic treatment plan to optimize outcomes.

D.4.0 Custom Foot Orthoses

The student must demonstrate the ability to:

- a. Perform the expected performance criteria outlined in **Section C.2.0-C.6.0**
- b. Perform a lower limb assessment (refer to C.2.1) including a detailed foot assessment (rearfoot and forefoot alignment, subtalar and midtarsal stability and function) to obtain information for formulating a pedorthic treatment plan.
- c. Apply knowledge of normal anatomy, normal and abnormal biomechanics of the lower limb in combination with a foot assessment to develop a pedorthic treatment plan.
- d. Identify the clinical considerations for use of custom foot orthoses for relevant pedorthic pathologies. (refer to D.1.0).
- e. Explain the indications and contraindications for use of the common designs and materials with relation to patient diagnosis and clinical presentation.
- f. Demonstrate competency in device selection, impression and measurement acquisition (casting, foam impression), material and component selection and current fabrication processes for various functional and accommodative designs.
- g. Demonstrate competency in fit assessment and improvement of custom foot orthoses.
- h. Understand the clinical indications and uses of both prefabricated and custom foot orthoses to enhance function and mobility.
- i. Use knowledge of shoe wear and modifications in the pedorthic treatment plan to optimize outcomes.

D.5.0 Custom Molded Shoes

The student must demonstrate the ability to:

- a. Perform the expected performance criteria outlined in **Section C.2.0-C.6.0**
- b. Perform a lower limb assessment (refer to C.2.1) including a detailed foot assessment (rearfoot and forefoot alignment, subtalar and midtarsal stability and function) to obtain information for formulating a treatment plan.
- c. Apply knowledge of normal anatomy, normal and abnormal biomechanics of the lower limb in combination with a foot assessment to develop a treatment plan.
- d. Identify the clinical considerations for use of custom molded shoes for relevant pedorthic pathologies. (refer to D.1.0).
- e. Demonstrate competency in impression and measurement acquisition, and material and component selection.
- f. Demonstrate competency in fit assessment and improvement of custom molded shoes.

D.6.0 Shoe Modifications

The student must demonstrate the ability to:

- a. Perform the expected performance criteria outlined in **Section C.2.0-C.6.0**
- b. Perform a lower limb assessment (refer to C.2.1) including a detailed foot assessment (rearfoot and forefoot alignment, subtalar and midtarsal stability and function) to obtain information for formulating a treatment plan.
- c. Apply knowledge of normal anatomy, normal and abnormal biomechanics of the lower limb in combination with a foot assessment to develop a treatment plan.
- d. Identify the clinical considerations for use of shoe modifications for relevant pedorthic pathologies. (refer to D.1.0).
- e. Demonstrate competency in safe use of equipment, material and component selection and current fabrication processes for various shoe modifications.

D.7.0 UCBL Orthoses

The student must demonstrate the ability to:

- a. Perform the expected performance criteria outlined in **Section C.2.0-C.6.0**
- b. Perform a lower limb assessment (refer to C.2.1) including a detailed foot assessment (joint mobility, rearfoot and forefoot alignment, subtalar and midtarsal stability and function) to obtain information for formulating a pedorthic treatment plan.
- c. Apply knowledge of normal anatomy, normal and abnormal biomechanics of the lower limb in combination with a foot assessment to develop a pedorthic treatment plan.
- d. Explain the indications and contraindications for use of the common designs and materials with relation to patient diagnosis and clinical presentation.

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- e. Demonstrate proficiency in design selection, casting and measurement acquisition, material selection and fabrication processes for UCBL's.
 - f. Demonstrate competency in fit assessment and improvement of UCBL's.
 - g. Understand the clinical indications and use of UCBL's to enhance function and mobility.
 - h. Use knowledge of shoe wear and modifications in the pedorthic treatment plan to optimize outcomes.

D.8.0 Subtalar Control Foot Orthoses (SCFO)

A SCFO is defined as a custom device designed to manage the function of the anatomy distal to the ankle joint by primarily controlling the ROM of the subtalar joint; the proximal height does not extend beyond the junction of the gastrocnemius and the Achilles tendon. A SCFO is a method of treatment for conditions related to the foot demanding additional surface area to control forces.

The student must demonstrate the ability to:

- a. Perform expected performance criteria outlined in Section C.2.0 through C.6.0.
- b. Select and employ appropriate evaluation methods to obtain accurate information for use in formulating a comprehensive pedorthic treatment plan.
- c. Apply knowledge of anatomy, biomechanics and pathomechanics to develop a comprehensive pedorthic treatment plan.
- d. Formulate comprehensive pedorthic treatment plans to meet patient needs using subtalar control foot orthoses
- e. Explain the indications and contraindications for use of the common SCFO designs and materials with relation to patient diagnosis and clinical presentation.
- f. Demonstrate competency in impression and measurement acquisition, material selection, and knowledge of fabrication processes for SCFO designs
- g. Demonstrate competency in fit assessment and improvement of SCFOs
- h. Understand the use of SCFOs for enhancing function and/or decreasing pain.
- i. Use knowledge of shoe wear and modifications in the pedorthic treatment plan to optimize outcomes.
- j. Understand and explain the limitations of the pedorthic Scope of Practice and how it relates to the use of SCFO's in pedorthic treatment.

D.9.0 Toe-filler / Partial Foot Prosthetic Inserts

The student must demonstrate the ability to:

- a. Perform expected performance criteria outlined in Section C.2.0 through C.6.0.
- b. Perform a lower limb assessment (refer to C.2.1) including a detailed residual limb assessment (subtalar and talocrural joint range of motion; length assessment of the gastrocnemius, soleus and tibialis posterior; skin integrity; pressure/load tolerant and intolerant tissues and structures), prosthetic device history and activity level (past, current and future expectations) for use in

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- formulating a pedorthic treatment plan.
- c. Apply knowledge of kinesiology, biomechanics and pathomechanics to describe the force between the patient and the prosthesis during loading and unloading throughout gait. Explain the biomechanical mechanism for development of an equinovarus deformity. Discuss biomechanical rationale for the addition of a rocker sole and shank to the shoe, including discussion of design principles for rocker placement. Compare and contrast the biomechanical differences between partial foot prosthesis designs that incorporate the ankle vs. designs that do not incorporate the ankle.
 - d. Demonstrate competency in impression and measurement acquisition, material and component selection, and knowledge of accepted techniques for the fabrication of the following partial foot designs (for transmetatarsal and more distal partial foot amputations):
 - 1. Partial foot orthosis / toe filler
 - 2. Rocker sole, sole stiffener and heel lift
 - e. Demonstrate competency in fit assessment and improvement of partial foot prosthetic inserts.
 - f. Explain the indications and contraindications for use of the common designs and materials relative to patient diagnosis and clinical presentation.
 - g. Use knowledge of shoe wear and modifications as part of the pedorthic treatment plan to optimize outcomes.

D.10.0 Prefabricated Ankle-Foot Orthoses (AFO)

The student must demonstrate the ability to:

- a. Perform expected performance criteria outlined in Section C.2.0 through C.6.0.
- b. Select and employ appropriate evaluation methods (MMT, ROM, sensory testing, gait analysis, postural evaluation) to obtain accurate information for use in formulating a comprehensive pedorthic treatment plan.
- c. Apply knowledge of anatomy, biomechanics and pathomechanics to develop a comprehensive pedorthic treatment plan.
- d. Formulate comprehensive pedorthic treatment plans to meet patient needs and achieve goals using the following prefabricated AFO devices (the goal of a pedorthic AFO device is the treatment of foot pathologies):
 - 1. Night splint
 - 2. Boot type AFO (pressure relief or pneumatic walker)
- e. Demonstrate competency in measurement acquisition and design and size selection for these specified AFO designs.
- f. Demonstrate competency in fit assessment and improvement of these devices.
- g. Understand and explain the clinical indications and use of these AFOs for enhancing function.
- h. Use knowledge of shoe wear and modifications in the pedorthic treatment plan to optimize outcomes.
- i. Understand and explain the limitations of the pedorthic Scope of Practice and how it relates to the use of AFO's in pedorthic treatment.