

CANADIAN BOARD FOR THE CERTIFICATION
OF
PROSTHETISTS AND ORTHOTISTS

METHOD FOR THE ACCREDITATION

OF

ORTHOTIC/PROSTHETIC PROGRAM

CLINICAL PROGRAM

March 2006 Edition

Objectives

Accreditation of the clinical prosthetic/orthotic education program serves to:

- i) Ensure a high and uniform national standard of education for the graduates of all the Canadian Orthotics/Prosthetics Schools.
- ii) Ensure the acceptance of the graduates as part of the health care team.
- iii) Provide a basis for acceptance of the graduates into advanced academic programs in research, education and administration, and
- iv) Maintain the highest level of patient care in orthotic/prosthetic practice.

Process for Orthotics/Prosthetics Program Accreditation

1. Program requests accreditation or accreditation renewal from the Education Chair of CBCPO.
2. Relevant documents are sent to the program by the CBCPO including:
 - i) Program Accreditation Criteria (appendix A)
 - ii) Curriculum Guidelines for Orthotics/Prosthetics Education Program (appendix B)
3. The program completes the Documentation for Program Accreditation and returns it to CBCPO (Appendix C).
4. Education Chair selects members of the Accreditation Survey Team and arranges the date of the on site visit.
5. Education Chair forwards the completed Documentation for Program Accreditation to the Accreditation Survey Team.
6. On Site visit using the following protocol:

SITE VISIT PROCEDURE

Team Composition

Site visit team shall include the following individuals:

1. CBCPO Education Chair
2. CBCPO Association Manager
3. Clinical Program: 2 CBCPO certifees – elected directors or CBCPO fellows
Technical Program: 2 CBCPO certifees or registered technicians

Certifees or registered technicians must be non-partial individuals who are not directly involved in the education process of the school being accredited.

Pre visit responsibilities of the site visit team:

1. To review the school accreditation document
2. To review all documentation received from the school pertaining to the accreditation process
3. Conduct a preliminary meeting prior to the visit to co-ordinate process and procedures to be followed
 - a. To review the site visit schedule
 - b. To identify areas that based on the documentation provided require thorough review during the site visit
 - c. Determine specific roles of the team members during the site visit

Site Visit Agenda

The school hosting the accreditation site team shall set aside 4-6 hours for the visit to take place.

During the day the following meetings will be carried out (to be set up by the program director prior to visit):

Preliminary meeting

1. with the program director and faculty members to state and review the purpose of the meeting and the accreditation process
2. to review the schedule of interviews

Program Director Meeting

1. Review program curriculum and course objectives
2. to review operational procedures for course grading and evaluations (of the courses and students)
3. to review student selection procedures and enrollment
4. overview of any changes that are occurring in the program
5. to review faculty members – clinical instructors and support staffing

Tour of Facility

1. review of the student support services – library, computer labs, etc
2. visit the classrooms, clinical areas and technical areas and other areas utilized by the students during components of the program

Interviews

1. Faculty members – to discuss course content, instructional methods and objectives, evaluation mechanisms
2. Students – to obtain reactions to all phases of the program through a group meeting or private interviews, without faculty members present

Concluding meeting with the Program Director:

1. to obtain additional information
2. to clarify points of information acquired during the day, and
3. to share the general findings of the site visit report.

It is important that the chair of the site visit team express appreciation for the courtesies extended during the visit and appreciation for the program's contribution to the review process. At this point in time, it is important to reiterate the remaining steps of the accreditation process to the program director so that they realize the results and recommendation will be forthcoming from the Board.

Post visits responsibilities of the site visit team

1. To provide a written report outlining findings from the site accreditation visit
 - a. Include the principal strengths of the program
 - b. Identification of any deficiencies in the program's compliance to the accreditation document
2. To provide summary recommendations and conclusions to the CBCPO Board of Directors for ratification of the final decision

The Board of Directors of CBCPO will inform the school of the decisions rendered.

Length of Accreditation

The two types of accreditation are full and provisional.

Full accreditation is awarded for an initial period of three years. After this three year period, any major changes that have occurred in the program must be submitted to CBCPO. If the members of the board are satisfied that the accreditation is still valid, then a further three year accreditation is granted. Following the second of the three year term, the school must initiate the formal accreditation process and an on-site visit will be initiated.

Provisional accreditation is granted for one year incremental time periods when deficiencies outlined by the accreditation team have not been met. The accreditation will be extended to the full three year period when the criteria have been reestablished.

A validation contract accepting the accreditation and any conditions will be signed by the program director of the accredited program.

APPENDIX A

**CANADIAN BOARD FOR THE CERTIFICATION OF
PROSTHETISTS AND ORTHOTISTS**

PROGRAM ACCREDITATION CRITERIA

CLINICAL PROGRAM

A. Facility Criteria

1. Location and Affiliation:

- (1) Prosthetic/Orthotic clinical schools shall be established in the following locations:
 - a. Universities with appropriate clinical/hospital affiliations
 - or
 - b. Colleges and Institutes of Technology with appropriate clinical/hospital affiliations
- (2) A mechanism for communication shall exist between the full time faculty and the clinical instructors at the affiliated clinical/hospital facilities.
- (3) The program shall provide the students with opportunities for practice in the affiliated clinical/hospital facilities.

2. General Facilities (Space, Equipment, Administrative Staff)

- (1) There shall be library and learning resources available either as part of the facility, or readily accessible to the students and faculty. It shall be supplied with current books, journals, computer access, tapes, slides and films in accordance with course requirements designated by the faculty.
- (2) There shall be a sufficient number of patient fitting, waiting and training areas, lecture rooms, and administrative offices to permit easy flow of the timetables without the necessity of scheduling lectures at unusual hours.
- (3) Laboratory space shall be provided so each student has his own laboratory station. The laboratory facilities shall include a machine tool area, plastics area, plaster area, sewing area, storage and supply area.
- (4) The laboratory area shall be equipped with the machines needed for the fabrication of the all the orthotics/prosthetics devices.
- (5) All laboratory and clinical facilities shall be wheelchair accessible.
- (6) The program shall provide the student with a list of the required tools needed for the fabrication of the orthotic/prosthetic devices.

B. Administration

1. Financial Requirements:

Resources for continued support of the program shall be assured through regular budgets, gifts, grants and/or endowments.

2. Program Requirements:

(1) A detailed record of each student's progress shall be maintained. Confidentiality of the student records must be maintained as per provincial regulations.

(2) Files containing all descriptive material on all courses, i.e. written course objectives, course outlines, reading and assignment lists, copies of examinations, shall be readily accessible to all faculty.

(3) Regularly scheduled meetings of the program faculty shall be held to facilitate the exchange of information, to assess the overall strengths and weaknesses of the program, to evaluate individual student performance and to deal with immediate faculty and/or student problems.

C Faculty Criteria

1. Orthotics/Prosthetics Program Director

The Orthotics/Prosthetics Program Director shall:

(1) be an orthotist/prosthetist certified by the Canadian Board for the Certification of Prosthetists and Orthotists. Constraints imposed by the educational institutions may make this difficult and these constraints shall be evaluated during the accreditation process.

(2) have a minimum of five years of either teaching, clinical, research and/or administrative experience in the field of orthotics and prosthetics

(3) possess an advanced academic degree (masters or doctoral) or special professional qualifications.

(4) demonstrate competence in educational administration and curriculum planning.

(5) participate in national/provincial professional organizations

2. Clinical Orthotics/Prosthetics Instructors

Orthotics/Prosthetics Instructors (full time and part time) shall:

(1) be orthotists and/or prosthetists certified by the Canadian Board for the Certification of Orthotists and Prosthetists.

Orthotics/Prosthetics Instructors (full time and part time) shall:

(1) possess advanced academic degrees and/or special professional qualifications (to be evaluated by CBCPO)

(2) instructors teaching the main clinical content of the programme (ie. casting, fitting, assessment, etc.) must have at least three years experience as a Certified Orthotist and/or Prosthetist. Assistant faculty may have less provided they work under the supervision of these senior instructors.

(3) be familiar with basic educational theory and method of planning educational activities.

(4) be provided with time and funds to participate in professional conferences and meetings as a method of extending their own knowledge and skills.

(5) participate in the academic and administrative functioning of the programme.

(6) be involved in some investigative activity designed to contribute to the expansion of knowledge in the profession.

(7) instructors must continue to be involved with direct clinical patient management. It is recommended that where possible the instructors continue to work part time in a clinical setting. Where this is not possible, it is strongly suggested that the instructors participate in sufficient clinical activities outside of the school environment to maintain clinical skills.

3. Support Faculty

(1) Support faculty members shall have expertise in those areas of the curriculum for which they are responsible.

(2) Support faculty members shall include physicians and surgeons, physical and occupational therapists, engineers, and specialists in the psycho-social areas.

(3) Orthotics and prosthetics technical support faculty shall be registered where possible.

4. Student Capacity

- (1) In the clinical environment, student capacity shall be set in relation to the desired ratio of one instructor for 15 students in the laboratory.

D Clinical Requirements Involving Patient Involvement

Guidelines developed by the CBCPO Education Committee ensure that all graduates of clinical programs in Canada have similar clinical experiences. The following list of orthotic and prosthetic devices is deemed to be the minimum number to provide a comprehensive clinical education. These devices are fit on actual patients, not students, and are done under the supervision of a certified orthotist or prosthetist.

Devices listed as Essential must be fit during the duration of the clinical program. It is recommended by CBCPO that students also fit devices listed as Preferred. In the event that a student is short on a few of the essential devices but has fit several of the preferred devices, they will likely be regarded as having met these guidelines. Where a device is listed as Assorted, it is at the discretion of the clinical program as to the appropriate device to satisfy their curriculum.

Orthotic Recommendations

<u>Device</u>	<u>Description</u>	<u>Quantity</u>	<u>Essential</u>	<u>Preferred</u>
Ankle Foot Orthosis	Flexible	1	X	
	Jointed	1	X	
	Ground Reaction	1	X	
	Assorted	1	X	
Knee Ankle Foot Orthosis	Assorted	2	X	
Foot Orthosis	Assorted	4	X	
Wrist Hand Orthosis	Assorted	2	X	
Thumb Post	Assorted	1	X	
Spinal	ThoracoLumboSacral Orthosis (TLSO), LSO, or Cervical Orthosis	1	X	
		2		X
Wrist Hand Orthosis	Leather	1		X
Wrist Hand Finger Orthosis	High Temp. Resting	1		X

Knee Orthosis	Assorted	1	X
Hip Knee Ankle Foot Orthosis	Assorted	1	X
Fracture Cast	Assorted	1	X
Torticollis	Assorted	1	X
Pavlik Harness	Assorted	1	X
Serial Casting	Assorted	1	X
Gators (Zimmer)	Assorted	1	X

It is strongly encouraged that the students see pediatric and geriatric patients where appropriate to provide diverse clinical situations. Patient models shall present with a variety of different pathologies including and not limited to the following:

- CVA, Paraplegia, spina bifida, cerebral palsy, muscular dystrophy, multiple sclerosis, arthritis, fractures, sports injuries, scoliosis, poliomyelitis.

In order for the students to become proficient in assessment, casting, and fitting, it is encouraged to fabricate and fit as many orthotic devices for each other as permits in the timelines of each school program.

Prosthetic Recommendations

<u>Device</u>	<u>Description</u>	<u>Quantity</u>	<u>Essential</u>	<u>Preferred</u>
Transtibial	Assorted	6	X	
Transfemoral	Assorted	4	X	
Disarticulations (Partial Foot, Symes, Knee and Hip D/A)	Assorted	2	X	
Transradial	Conventional	1	X	
	Myoelectric	1	X	
Transhumeral	Conventional	1	X	
Disarticulation (Wrist, Elbow, Shoulder)	Assorted	1		X

When choosing patient models for the above devices it is essential that the students are provided with a wide variety of different patients from pediatrics and adults. Whenever possible, the patient models shall exhibit the characteristics common to the type of amputation, such as:

- congenital, trauma, dysvascular, burn.

Under the supervision of a certified prosthetist, the student will assess, cast, and fit the patient models with a variety of different socket designs, components, interfaces, and materials.

E. Student Criteria

1. Student Admission

- (1) Admission of the student to the program shall be based on the entrance requirements and regulations of the college or university where the program is offered. In addition the Admission criteria shall be based on the demand of the program.
- (2) The course offerings in the orthotic/prosthetic curriculum shall be a part of the regularly published "course descriptions" of the college.

2. Student Selection

Candidates for the clinical orthotics/prosthetics programs shall be selected by a panel of interviewers which shall include at least one practicing certified orthotist, one practicing certified prosthetist and one graduate student (certified) from the P&O course in addition to the college staff representatives.

F. Curriculum Criteria

1. Curriculum Design

- (1) Courses shall be based on the current Curriculum Guidelines for Orthotics/Prosthetics Education Programs (Appendix B).
- (2) The program shall have a mechanism for curriculum planning, implementation, evaluation and revision.
- (3) That portion of the curriculum devoted to medical subjects shall be formulated and conducted in collaboration with physicians and health care professionals who represent the major medical specialties involved in the education of the orthotists and prosthetists.
- (4) Student participation in curriculum evaluation and development shall be considered and implemented on a yearly basis. Instructor evaluation through student critiques shall be included.

2. Academic Content

- (1) Each course shall have written objectives. The course shall be designed to meet these objectives and the students shall be informed of the objectives.
- (2) Determination of academic credits must be consistent with the policy of the college/technical institute/university in which the program is located.
- (3) Each course shall relate to the overall curriculum plan.

3. Clinical/Practical Content

- (1) The students must participate in clinical experiences under the supervision of a Certified Orthotist and/or Prosthetist. Students must complete a balance of Prosthetic and Orthotic training during the work terms when they are included as a portion of the formal program (summer placements are not included).
- (2) Each segment of clinical experiences shall have written objectives and ensure a consistency of experiences for all students so the required minimal competencies are delivered in both disciplines. The student shall be acquainted with these objectives.
- (3) The clinical experiences shall be coordinated with the course content.
- (4) The students shall have clinical experiences in the assessment of patients with neurological and musculoskeletal problems requiring orthotic and/or prosthetic management.

(5) The students shall complete measurements, castings, fabrication and fitting of a variety of orthoses and prostheses based on the Curriculum Guidelines of the Canadian Board for the Certification of Prosthetists and Orthotists.

APPENDIX B

**CANADIAN BOARD FOR THE CERTIFICATION OF
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CLINICAL CURRICULUM GUIDELINES

FOR

ORTHOTICS/PROSTHETICS EDUCATION PROGRAM

SUPPORT COURSES

1. Clinical (the human system)

- 1.1 Anatomy and Physiology
- 1.2 Biomechanics/Pathomechanics
- 1.3 Normal and Pathological Gait
- 1.4 Pathology
- 1.5 Psychology/Sociology
- 1.6 Research Design

2. Practical (the device system)

- 2.1 Mechanics of Materials
- 2.2 Materials Testing
- 2.3 Selection of Materials
- 2.4 Electronics

APPLIED THEORY

3. Clinical (patient assessment)

- 3.1 Applied Anatomy, Pathomechanics
- 3.2 Patient History
- 3.3 Neuromuscular/Musculoskeletal Testing
- 3.4 Pathological Gait Assessment
- 3.5 Orthotic/Prosthetic Selection
- 3.6 Fitting and Functional Evaluation

4. Practical (orthosis/prosthesis fabrication)

- 4.1 Measurement, Casting & Cast Modification
- 4.2 Orthotic/Prosthetic Materials Applications
- 4.3 Fabrication Techniques

ORTHOTIC/PROSTHETIC MANAGEMENT

5. Pathological Applications

Orthotic Case Studies

- 5.1 spina bifida
- 5.2 cerebral palsy
- 5.3 multiple sclerosis
- 5.4 paraplegia
- 5.5 poliomyelitis

- 5.6 Duchenne's muscular dystrophy
- 5.7 Legg Perthes
- 5.8 arthritis
- 5.9 fractures
- 5.10 sport injuries
- 5.11 scoliosis
- 5.12 CVA

Prosthetic Case Studies

- 5.14 PVD
- 5.15 tumor
- 5.16 infection
- 5.17 trauma
- 5.18 diabetes
- 5.19 congenital anomalies

APPENDIX C

DOCUMENTS FOR PROGRAM ACCREDITATION

The following information must be forwarded to the CBCPO Education Chair via CBCPO Head office:

1. Documents to confirm the facility and administration criteria including:
 - availability of library facilities
 - floor plan of the school facility
 - example of students records
2. Documents to confirm the faculty criteria including:
 - curriculum vitae of the director of the school
 - curriculum vitae of the full time orthotics/prosthetics instructors
 - a listing of the part time instructors and support staff indicating their professional status
 - the ratio of students to instructors in the laboratory
3. Documents to confirm the student criteria including:
 - student admission requirements to the orthotics/prosthetics programme
 - method of student selection including a listing of the members that constitute the interview team
4. Documents to confirm the curriculum criteria including:
 - a listing of all the core and support courses indicating the terminal objectives, total hours of instruction, and the instructors' name for each course
 - a listing of all orthotic/prosthetic devices considered in the curriculum from the last completed year indicating for each:
 - i) the terminal objectives.
 - ii) instruction in theory only, demonstration only, or fabricated by the student.
 - ii) if the orthosis/prosthesis is fabricated by the student indicate the number of devices fabricated, was it fabricated on a student or patient model.