Orthotic and Prosthetic Certified Technician
Revised Domains and Tasks

Domain 1: Medical and O&P Terminology

Review physical assessment data provided by practitioner (e.g., height, weight, activity level, amputation level, diagnoses, measurements, prior orthosis/prosthesis usage) to determine technical requirements for the orthosis/prosthesis

Consult with practitioner(s) about patient's condition/diagnosis

Confirm physical assessment data obtained (e.g., height, weight, activity level, measurements, prior orthosis/prosthesis usage; patient history)

Educate patient and/or caregiver about the use of the orthosis/prosthesis (e.g., donning and doffing, wearing schedules, other instructions)

Educate patient and/or caregiver about the maintenance and care of the orthosis and/or prosthesis (e.g., cleaning, lubrication)

Review patient's prescription/referral

Document treatment (i.e., patient care) using established record-keeping techniques

Domain 2: Anatomy

Review range of motion requirements (e.g., varus/valgus, flexion, extension) of the individual to determine patient's orthotic/prosthetic needs

Collect physical assessment data (e.g., height, weight, activity level, measurements, prior orthosis/prosthesis usage; patient history) to determine orthotic/prosthetic needs

Perform procedure to obtain patient model (e.g., identify anatomical landmarks, measure patient, take impression, delineate, scan)

Assess fit of orthosis and/or prosthesis with regard to anatomical relationships to orthosis and/or prosthesis (e.g., trimlines, musculoskeletal anatomy, static/dynamic alignment) to determine need for changes relative to initial treatment goals

Assess fit of orthosis and/or prosthesis to determine need for changes relative to initial treatment goals
Domain 3: Biomechanics

Verify functional outcome of orthosis and/or prosthesis (e.g., does it perform as required in all planes of motion, are three point pressure systems appropriate)

Determine fabrication requirements/technical criteria (e.g., static alignment of orthoses or prostheses)

Domain 4: Materials, Componentry and Design

Evaluate orthosis and/or prosthesis for structural changes (e.g., are the materials used in the fabrication appropriate in regards to characteristics and properties)

Adhere to manufacturer's conditions of use and/or specifications (e.g. identification of the need for repairs or replacement, warranties)
Consult with manufacturing professionals, as required (e.g., regarding componentry, design limitations, new materials)

Assess/align orthosis and/or prosthesis for accuracy in sagittal, transverse, and coronal planes in order to provide maximum function/comfort

Evaluate the assessment findings to determine an orthotic/prosthetic treatment plan (e.g., orthosis/prosthesis design such as solid ankle versus posterior leaf spring [PLS], supracondylar versus patella tendon bearing [PTB])

Identify design, materials, and components to support treatment plan

Determine orthosis/prosthesis design requirements (e.g., materials selection, component selection, structural requirements, device specific functional requirements)

Ensure that materials, design, and components are provided as specified in the treatment plan

Select materials/techniques necessary to obtain a patient model (e.g., fiberglass, plaster, scan)

Domain 5: Fabrication

Modify patient model/image for fabrication

Complete fabrication process after achieving optimal fit and function of orthosis and/or prosthesis (e.g., convert test socket to definitive orthosis and/or prosthesis)

Fabricate/assemble an orthosis and/or prosthesis to prepare for initial or diagnostic fitting and/or delivery
Document the fabrication requirements

Document fabrication process (e.g., lamination materials, plastic thickness) using established record-keeping techniques

Consult with practitioners regarding fabrication requirements

Assess device for structural safety and ensure that manufacturers' guidelines have been followed prior to patient fitting/delivery (e.g., torque values, patient weight limits)

Consult manufacturing guidelines, as required (e.g., regarding componentry, design limitations, materials)

**Domain 6: Follow-Up**

Modify/adjust orthosis and/or prosthesis, as necessary, to maintain optimal function

Repair orthosis and/or prosthesis, as necessary

Document modifications/adjustments/repairs

Develop and document long-term service plan

**Domain 7: Facility Management**

Maintain a safe and professional environment (e.g., ABC Facility Accreditation)

Perform scheduled machine maintenance and calibration

Document service of machines and equipment (e.g., maintenance logs)

**Domain 8: Professional Responsibility**

Adhere to applicable local, state and federal laws and regulations (e.g., OSHA, FDA)

Follow patient care guidelines and procedures (e.g., ABC's Code of Professional Responsibility, ABC Orthotic, Prosthetic and Pedorthic Scope of Practice, quality control program)
Orthotic and Prosthetic Technician

Knowledge and Skills

Knowledge of:
Musculoskeletal anatomy, including upper limb, lower limb, spinal
Anatomical landmarks (surface anatomy)
Normal human locomotion
Gait training
Pathological gait
Tissue characteristics/management
Volumetric control
Planes of motion
Biomechanics
Pathologies (e.g., muscular, neurologic, skeletal, vascular)
Medical terminology
Referral documents
Procedures to record data
Policies and procedures regarding privileged information
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/caregivers)
Orthotic/prosthetic design (e.g., trimlines)
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)
The psychology of the disabled
Patient educational materials
Federal and state rules, regulations, and guidelines (e.g., FDA, ADA, HIPPA)
ABC Facility Accreditation Standards

Skill in:
Interpreting referral documents, (e.g., prescriptions, orders)
Interpreting radiological images
Communicating with patient/family/caregiver
Communicating with referral sources (e.g., prescribing physician) and other 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 computer-based measuring devices
Patient model modification,
Delineating a tracing
Orthotic/prosthetic fabrication
Use of safety equipment
Using 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
Documentation