Job Class Profile: Prosthetist/Orthotist I

Pay Level: CG-36 Point Band: 790-813

						Accountability		Development	Environmental	
		Interpersonal				& Decision		and	Working	Total
Factor	Knowledge	Skills	Physical Effort	Concentration	Complexity	Making	Impact	Leadership	Conditions	Points
Rating	6	5	5	6	4	4	4	2	5	
Points	280	83	32	29	120	87	83	43	54	811

JOB SUMMARY

The Prosthetist/Orthotist I is responsible for managing a caseload, and the assessment and treatment of clients with physical disabilities through the design, fabrication and fitting of suitable devices (orthopaedic bracing) and to instruct technicians in the fabrication of orthopaedic devices. May also service clients through pedorthic modalities such as custom made footwear, customized orthopaedic footwear, or foot orthotics.

Key and Periodic Activities

- During initial assessment determines client range of motion, gait parameters, muscle strength and general physical condition and discusses orthotic intervention options.
- Casts, measures/traces a client's limb or torso for custom or pre-fabricated devices.
- Fits devices through trial and error and modifications to ensure a properly suited device for each client.
- Modifies plaster molds of limbs to custom make devices ensuring a proper fit.
- Fabricates devices from a variety of materials. Repairs/refurbishes devises.
- Manages a caseload; talks to clients and interdisciplinary team, visits clients during rehabilitation, orders supplies, completes clients charts, and writes referrals.
- Attends continuing education sessions and professional conferences.

SKILL

Knowledge

General and Specific Knowledge:

- Assessment techniques.
- Fabrication processes.
- Available materials to create devices.
- Continuing education to maintain certification.

Formal Education and/or Certification(s):

— Minimum: Undergraduate degree in Kinesiology or related field; and is working towards, or is certified, in either a 1 year Pedorthic diploma (or one year of on the job clinical training under

supervision of a certified Pedorthist) or a 2 year Prosthetics and Orthotics program.

Years of Experience:

— Minimum: Up to 2 years experience

Competencies:

- Use of machinery such as band saws, drill presses, handheld rotary tools, and related repair and calibration.
- Strong artistic design skills.
- Working in a team environment.
- Oral and written communication skills.

Interpersonal Skills

- A range of interpersonal skills are used to perform activities such as listen to and ask questions to gather information from patients during assessments/interviews, provide information and direction to others, communicate complex information, provide care, comfort and nurturing to patients during the treatment process, gain the cooperation of team members and other employees to accomplish tasks and ensure quality, provide expert advice to clients during assessment/follow-up/fitting, instruct/teach/train users how to use devices, and deal with upset or angry people when devices do not fit properly, or being empathetic to patients that are highly emotional, sensitive or angry.
- Communications occur with a range of contacts including employees within and outside the
 department, clients, general public, students/trainees, suppliers and professional associations as
 well as professional advisors.
- The most significant contact is with clients to ensure the service they expect is received and to conduct the assessment; with co-workers to coordinate work completion and with supervisors to consult on job related and client issues.

EFFORT

Physical Effort

- Required to exert physical effort which can result in fatigue requiring periods of rest and performs tasks that require strength and endurance.
- Occasionally lifts a variety of materials up to and over 50lbs., regularly works with plaster casts which can be quite heavy, if it is for a body portion above the knee. Many of the items are awkwardly shaped making lifting and moving difficult.
- Physical effort includes constantly standing and utilizing manual dexterity to use hand tools to fabricate devices and shape foam covers (2-3 hrs per), as well as being placed in awkward positions during assessment and fitting that requires strength and precision.
- Regularly uses gross and fine motor skills to lift and assemble components and plaster casts, and to use various tools to mold and shape objects.

Concentration

Visual concentration includes using machinery such as band saws and grinders, ensuring proper measurements and proper alignment of all devices (i.e. contouring metal so that it fits properly and is visually appealing). Many of the parts worked with are very small and delicate requiring visual concentration to ensure they are not lost or damaged. Assessments require

- **visual concentration** to identify range of motion, joint angles, gait patterns (i.e. to assess any abnormalities which need to be incorporated into the device).
- Auditory concentration includes listening to multiple stakeholders while working in a noisy environment. Auditory concentration is required to detect air leaks during vacuum forming of thermoplastic, whether a rivet was successful, and for resin setting, etc.
- Other sensory concentration such as touch is required to ensure surfaces are smooth so client comfort is achieved, and to assess range of motion. Vibration is also utilized during grinding to create smooth clean lines and soft changes in devices.
- Repetition requiring alertness occurs when sewing with an industrial sewing machine or when grinding or sawing to ensure safety. Knives are frequently used which requires concentration to avoid injury. Must exercise higher than normal levels of attentiveness when helping clients walk with the new device to ensure injury does not occur, as well to check for marks, bruising, lesions and other indicators that adjustments are required.
- Required to work under **deadlines** to have devices ready for clients, to deal with unscheduled clients that require emergency repairs while they wait, and when assessments run longer than expected causing a backlog.
- Eye/hand coordination is a constant requirement when fabricating devices, working with various devices to fit the client properly, aiding them in walking correctly by taking exact measurements, inspecting fabrications to ensure quality, and ensuring pigmentation of skin and device are exact matches for cosmetically appealing results.
- **Exact results and precision** is required when measuring for casting, modifying the cast and manufacturing a device as small discrepancies can lead to client functionality issues and injury.

Complexity

- Tasks are different /unrelated and require the use of a broad range of skills and diversity of knowledge.
- Tasks vary from completing assessments of persons with physical disabilities to the design, fabrication and fitting of appropriate devices. Some tasks have a limited number of guidelines or procedures available while others may be more diverse and technical with limited opportunity for standardized solutions but ideas may be resolved in a team setting.
- Typical problems or challenges involve working with client's requiring specific footwear that falls outside regular off the shelf products. The clinician requires knowledge of the foot as well as available products to determine the most appropriate solution to optimize functionality. Clients also present with multiple problems that cannot be resolved by the fabrication of one device. In this case, the clinician must make the best device possible and determine which other specialists the client should be referred to.
- There are various manuals and guidelines to assist as well as help from technicians and other co-workers.

RESPONSIBILITY

Accountability and Decision-Making

— Work tasks and activities are somewhat prescribed or controlled. Functions as the primary clinician for the client and has the ability to decide on orthosis design, material to use and any other details. These decisions will be guided by formal knowledge, recommendations and/or

- suggestions by a supervisor and what the client has tried before and likes/dislikes.
- Independently makes decisions on small details related to a device such as rivet size and width of straps; however, supervisory approval is required from a Certified Orthotist or Certified Prosthetist before proceeding to make the device recommended for the client. Approval is also required to refer a client to another specialist, and to make policy or process changes.
- Has some discretion to exercise within predetermined limits in determining the device to fabricate and what it will look like if a client provides a prescription and the supervisor approves the device. Uses discretion and judgement to interpret directions by making recommended changes to prescriptions, if the prescribed device will not support the client needs; and exercises a high degree of independent discretion and judgement when assessing clients and concluding that different devices or treatments other than what is prescribed will best serve the client.

Impact

- Generally has impact within immediate work area, department, and on customers/clients/general public/patients. Additionally, may impact equipment (used to make devices), finances (cost of materials), material resources (used in fabrication), processes and systems, human resources, health and safety and corporate image.
- Errors are generally detected upon testing of the device or when trialed by the client.
- The most typical error or mistake occurs during device fabrication. If an error occurs such as not having enough relief in a joint device, rubbing will occur leading to blisters and lesions. This will not only result in the client being injured and unable to wear the device but other disciplines may have to delay therapy they are providing. In this case, the client has noticed the error however a high percentage of clients do not have sensitivity in their feet, so if the clinician fails to check for rubbing, etc. serious damage such as foot ulcers could occur, which eventually leads to amputation.

Development and Leadership of Others

- Not responsible for the supervision of staff.
- As many positions within this profession are the sole specialist for certain devices they often
 provide quality assurance and technical assistance to other staff, as well as give direction on
 device fabrication.

WORKING CONDITIONS

Environmental Working Conditions

- Required to use safety precautions and equipment such as wearing a respirator, eye and hearing protection, safety shoes, covering skin when working with irritants such as fibreglass, and working under a fume hood when working with adhesives.
- There is a moderate likelihood of receiving minor cuts, bruises and abrasions; however, there is a lesser likelihood of any illness or injury beyond this level of severity.
- Working in a workshop setting, there is exposure to unusual or distracting noise; sharp objects; dust and vibration from power equipment and sewing machines; toxic fumes from plastics/resins/adhesives; and physical danger, infectious disease, body fluids and odours when working with clients.