

Services Guide

Podiatrists

**NOTE 1: This information is pulled from credible sources. This information is a guide. Any information used from this guide must be re-contextualized (no copying and pasting). Re-contextualize information incorporating SEO and business specifics.*

**NOTE 2: For MCP websites, stick to general information and avoid specifics.*

Table of Contents

Contents

1. Podiatrist Overview	1
1.1 General Information	1
1.2 SEO	2
1.3 Types of Services	2
2. Biomechanical Assessment	3
2.1 Biomechanics	3
2.2 Assessment	4
3. Treatment	6
3.1 Conditions	6
3.1 Treatment Types	6
4. Foot Surgery	8
4.1 Types of Surgery	8
5. Foot Orthotics	11
5.1 Types of Foot Orthotics	11
5.2 Foot Orthotic Flexibility	13
5.3 Foot Orthotic Manufacturing Process	13
5.4 Foot Orthotic Care	14
5.5 Foot Orthotic Use	15

1. PODIATRIST OVERVIEW

1.1 GENERAL INFORMATION

<http://www.podiatrycanada.org/faqs/>

<http://www.podiatrycanada.org/foot-health/>

<http://www.opma.ca/podiatryandchiropody>

<http://www.canadianfootclinic.com/patient-information/podiatry-chiropody/>

<http://michener.ca/program/chiropody/>

<http://www.cps-bc.ca/colleges.php>

<http://www.podiatrycanada.org/faqs/>

- Podiatrists are feet doctors – they assess and treat everything related to foot pain. Any time you experience sore feet or pain, you should consider seeing a podiatrist.
 - The foot is a very complex body part. Each foot contains 26 bones, which are held in position by hundreds of ligaments, tendons and muscles, so it's important to see a foot specialist such as a podiatrist to properly treat foot problems.
- Podiatrists will provide medical, surgical and rehabilitative treatments for the foot, ankle, and lower leg.
- You do not need a doctor's referral to see a podiatrist.
- In order to practice podiatry, they typically must earn a Doctor of Podiatric Medicine (D.P.M.) degree from a recognized college of podiatric medicine.
- Chiropodists and podiatrists are not the same thing, though both professions are regulated by the College of Chiropodists of Ontario.
 - Chiropody is a branch of medical science that involves the assessment and management of foot and lower limb disorders: this includes the management of a wide variety of disorders, injuries and local manifestations of systemic conditions.
 - In Canada, the definition and scope of the practice of podiatry varies provincially
 - In British Columbia and Alberta, the Doctor of Podiatric Medicine (DPM) is the only accepted qualification.
 - In Ontario, "chiropody" is the standard. After 1993, Doctors of Podiatric Medicine entering Ontario have been required to register as chiropodists and practice according to the Ontario Chiropody Act of 1991.
 - Chiropodists don't do as much schooling as podiatrists. Chiropody education in Canada is obtained through a 3 year diploma level course
 - Most Podiatrists are educated in the United States, and they are required to have a "Doctor of Podiatric Medicine/DPM" degree, which is a post baccalaureate, four-year degree.
 - It is more common to get your D.P.M. degree in the states since there are so many schools that offer it, but there is one school in Canada that has the program - the Universite de Quebec a Trois-Rivieres
 - OHIP coverage: Podiatrists may bill OHIP for their services. Chiropodists may not.

Services Guide: Podiatrists

- Services: Podiatrists may "communicate a diagnosis" to their patients (or to their patients' representatives) and perform surgical procedures on the bones of the forefoot. Chiropodists may do neither.

1.2 SEO

Note: This list excludes "chiropody"

Keywords (First Row – BEST, Last Row – LEAST)

○ Podiatrist	○ Bunion	○ Plantar fasciitis	○ Foot doctor
○ Bunion surgery	○ Foot clinic	○ Orthotics	○ Foot pain
○ Heel spur	○ Foot care	○ Orthotic shoes	○ Podiatric
○ Foot and ankle clinic	○ Foot surgery	○ Foot injuries	○ Foot specialist

1.3 TYPES OF SERVICES

<http://doctormathews.com/services/orthotics/>

http://www.jeffwarnerpodiatry.com/#section_biomechanics

http://www.aestheticsinpodiatry.com/common_ailments.asp

<http://www.thefootcarecentre.co.uk/special-interests/biomechanics-and-orthotic-therapy/>

<https://en.wikipedia.org/wiki/Podiatry>

Type	Description
Biomechanical Assessment	<ul style="list-style-type: none"> ○ Biomechanics refers to the way our muscles, bones and joints work together as we move. ○ Podiatric biomechanics includes assessment and treatment of all foot, ankle and lower limb disorders. ○ Assessment usually includes static and dynamic assessment
Treatment	<ul style="list-style-type: none"> ○ Podiatrists can treat a variety of foot pain/problems, including injuries, skin problems and toenail problems ○ Treatment can involve providing padding, trimming or taping, cortisone injections, inflammatory or anti-fungal medication, stretching programs and ultrasound and laser therapies, prescribing orthotic devices, and removing warts

Foot Surgery	<ul style="list-style-type: none">○ Foot surgery is sometimes necessary for painful deformities such as bunions, hammer toes and brachymet
Orthopaedic Footwear	<ul style="list-style-type: none">○ Many podiatrist offices carry modified orthopedic footwear, including shoes and sandals, and safety boots, as well as name brand walking and athletic shoes
Foot Orthoses	<ul style="list-style-type: none">○ Foot orthotics are devices used to support, align or improve the function of the feet and lower limbs.○ Excessive stress on bones, joints, and soft tissue caused by poor biomechanics will eventually cause foot (and even knee and back) pain. A foot orthotic can relieve that pain by properly supporting the ligaments, joints, muscles and bones of the feet.

2. BIOMECHANICAL ASSESSMENT

2.1 BIOMECHANICS

<http://metrovanancouverpodiatry.com/about-us/>

- Biomechanics refers to the way muscles, bones and joints work together
- A person's left and right sides are rarely symmetrical – including feet and legs. Additionally, many people have mild deformities such as torsions in the pelvis, a bowed leg, or one leg longer than the other.
- When we stand, walk or run our body has to cope with and compensate for these anomalies. These compensations put structures such as muscles, joints, ligaments and tendons under undue strain as they begin functioning in an abnormal or compromised manner. Over time the structures can become inflamed or injured.

2.2 ASSESSMENT

Note: These are typical examinations that a podiatrist will conduct – they may do other specialized assessments specific to their clinic. Assessments usually take about an hour, depending on the clinic.

<http://thefootandlegclinic.co.uk/pressure-plate-analysis-benefits/>
<http://www.aucklandsportspodiatry.co.nz/index.php/biomechanical-examinations>
<http://www.podiatrytoday.com/article/6436>
<https://www.fortiusclinic.com/conditions/podiatry/biomechanical-assessment>
<http://www.podiatryassociates.ca/services.html>

Steps	Description
1. Foot Posture Screening	<ul style="list-style-type: none">○ The podiatrist will look at the foot to determine foot type: normal, high-arched (supinated) or low-arched (pronated)
2. Non-Weight Bearing Anatomical Examination	<ul style="list-style-type: none">○ Involves testing the foot and ankle with the patient lying down, looking at the rear foot and forefoot alignment and the amount of ankle dorsiflexion.
3. Weight Bearing Anatomical Examination	<ul style="list-style-type: none">○ The patient is examined in a standing position to determine how the foot and lower leg are aligned during weight bearing
4. Posture, Stability and Flexibility Examination	<ul style="list-style-type: none">○ The podiatrist simply assesses the patient's natural posture while standing and walking, and the ankle, leg and hip joints' range of motion and stability.○ This information helps the podiatrist understand more about the patient's condition beyond what is occurring in the feet.○ For example, a lordotic posture with the pelvis tilted forward causes an inward rotation of the knees, which in turn inwardly rotates the tibia. This promotes pronation (when the foot strikes the ground and rolls inwards).
5. Muscle Testing	<ul style="list-style-type: none">○ Tests of muscle strength and control - the more functional the better (such as squat, lunge, hop and jump tests to determine how lower limb alignment is affected by loading and movement).○ The podiatrist will test the strength of the four main ankle movements - plantar flexion, dorsiflexion, eversion and inversion - with the use of manual muscle tests.
6. Video Gait Analysis	<ul style="list-style-type: none">○ Involves taking a video of the patient walking or running on a treadmill so the podiatrist can understand what is happening during gait

	<ul style="list-style-type: none">○ The video can be reviewed frame by frame or at slow speed, enabling medical consultation. Coupled with this is the ability to apply overlying grids to the images, place landmarks, and make side by side comparisons of same subjects allowing before and after comparisons.○ Also provides an easy way for patients to visualize and understand their foot function
7. Computer Gait Analysis	<ul style="list-style-type: none">○ The FSCAN is a high resolution clinical measurement and research tool for assessing existing and potential foot problems. It captures force and time data of the feet while standing or walking in shoes○ A thin, pliable force sensor is positioned between the foot and the sole (or orthotic) within the shoe. As one walks the data is collected. Proprietary software is used to analyze the data collected, and is displayed as a series of pressure profiles, graphs and gait curves.○ From this information various parameters of biomechanical foot function can be seen.○ Allows accurate data for whether both feet moving at the same speed, in the same direction, and whether both feet are gripping the ground equally, or if one sliding.
8. Pressure Plate Analysis	<ul style="list-style-type: none">○ Pressure plate analysis is a test done to measure the forces going through one's feet as they go about their activities like walking and running○ Uses a sophisticated machine which produces a clear graphical image of the pressure experienced by every part of the foot.○ Many low back pains and pains experienced along the extent of the lower limbs are caused by unequal distribution of forces on the feet. Therefore, a pressure plate analysis is essential for the diagnosis and treatment of the varied conditions arising from this pressure imbalance.○ Can also use a force plate, pressure mat and pressure insole to determine the kinetics of the foot and lower extremity during weight-bearing activities (such as walking)
7. Tests of balance and agility	<ul style="list-style-type: none">○ Uses a balance board, uneven or unstable surfaces and Swiss/gym balls

3. TREATMENT

3.1 CONDITIONS

<http://metrovanancouverpodiatry.com/about-us/>
http://www.jeffwarnerpodiatry.com/#section_services
<http://www.podiatrycanada.org/foot-health/>

Podiatrists treat a range of different conditions, including:

- Bunions
- Athlete's foot
- Neuromas (a benign growth of nerve tissue frequently found between the toes)
- Hallux Limitus/Rigidus
- Forefoot, arch, heel, ankle, Achilles, shin, knee, hip and lower back pain
 - Worth noting: Plantar Fasciitis is a very common source of foot pain, caused by inflammation of connective tissue on the bottom of the foot due to a mechanical imbalance in foot function
- Toenail conditions (ingrown, fungal nails and deformed/damaged nails)
- Ganglion cysts
- Deformities (bunions, hammertoes, brachymet, tailors bunion and heel spurs)
- Pediatric foot problems (toe walking, flatfoot, High-arched feet and severs disease)
- Skin problems (warts, dermatitis, calluses/corns, xerosis, hyperhidrosis, tinea pedis and ulcers)
- Sprains, strains, broken bones and injuries
- Tendonitis

3.1 TREATMENT TYPES

<http://www.pedorthics.org/?page=ORTHPEDTAPREBRO>
<http://www.aucklandsportspodiatry.co.nz/index.php/biomechanical-examinations-69>
<http://www.thefootcarecentre.co.uk/special-interests/eswt/>
<http://www.axisfootclinic.com/blog/post/using-laser-therapy-to-relieve-foot-and-ankle-pain.html>

Type	Description
Exercises to Stretch or Strengthen Muscles	<ul style="list-style-type: none">◦ Flexibility exercises: various stretches for the gastrocnemius/calf muscle, soleus and any other leg, hip or back muscles which are found to be tight.◦ Strength exercises: dorsiflexion, plantar flexion, eversion and inversion exercises using resistance bands and closed-chain ankle plantar flexion exercises standing, with static inversion and eversion.◦ Core stability exercises: abdominal hollowing to improve the lumbar

Services Guide: Podiatrists

	<p>control and posture, standing pelvic tilting to improve the gluteal muscles' ability to keep the pelvis level during the swing phase.</p>
Shoes	<ul style="list-style-type: none">○ Podiatrists advise patients on the correct training shoes, recommending the shoes that suit their particular foot type and problem, and checking the effectiveness of the shoe○ Some clinics also sell footwear
Orthoses	<ul style="list-style-type: none">○ Orthoses support, align, prevent, protect or correct deformities, or improve function○ Orthosis types include:<ul style="list-style-type: none">● Foot orthotics● AFOs (ankle foot orthoses)● Straps, cushions, or pads
Inflammatory or Anti-fungal Medication	<ul style="list-style-type: none">○ Podiatrists can prescribe oral medication to treat painful inflammation and topical creams for lesions
Shockwave Therapy	<ul style="list-style-type: none">○ Extracorporeal Shockwave Therapy (ESWT) is a new technology to treat chronic, painful conditions of the musculoskeletal system through the use of sound waves.○ Seems to work best when an injury reaches the chronic, non-healing state. ESWT kick starts the healing process in chronic conditions, returning the tissues to the acute phase of healing.○ The shockwave works by exerting a mechanical pressure onto the damaged tissue, and the cell membrane in particular. By making the cell membrane more permeable, there is an increase in blood supply and metabolism. Both of these reactions provide the basis of healing.○ ESWT has been shown to also increase both the number of osteoblasts (these repair and create bone) and fibroblasts (which repair connective tissue such as ligament, tendon and fascia).○ Useful for conditions such as:<ul style="list-style-type: none">● Plantar Fasciitis● Achilles Tendinopathy● Stage 1 Posterior Tibial Tendon Dysfunction● Peroneal Tendinopathies● Stress fractures● Patellofemoral Syndrome (runners knee)
Laser Therapy	<ul style="list-style-type: none">○ When you need pain relief from a chronic problem that the above remedies haven't fully addressed, laser therapy can be a next step before trying injections or invasive surgery.

- Laser therapy can treat fungal nails, warts, neuromas, plantar fasciitis, Achilles tendonitis and capsulitis/bursitis
- It energizes the cells and promotes cell metabolism, it eliminates inflammation, and it reduces or removes pain
- The therapy itself involves focusing a concentrated light beam in the red wavelengths on the damaged tissue. The light passes through the skin into the inflamed and painful tissue underneath.
- Once there, it stimulates the natural healing process in the cell, makes the cell membranes more permeable so nutrients are absorbed and used more quickly, and increases blood circulation to deliver oxygen for cell growth and repair.

4. FOOT SURGERY

General:

- If non-operative treatment doesn't help symptoms, podiatrists can perform surgery to help relieve pain, and increase stability and foot strength.
- Podiatric surgery is the surgical treatment of the foot and its associated structures. It is carried out by a podiatric surgeon, usually as a day case procedure.
- Most surgical procedures are performed under local anesthetic by oral sedation in the clinic's operating rooms. This reduces the risk of anesthesia-related complications and allows the patient to leave the clinic as soon as their surgery is complete.

4.1 TYPES OF SURGERY

<http://www.thefootcarecentre.co.uk/wp-content/uploads/Electrosurgery.pdf>

<http://orthoinfo.aaos.org/topic.cfm?topic=a00140>

<http://www.propetusablog.com/8-types-of-foot-surgery-what-they-mean-for-you/>

Type	Description
Nail Surgery	<ul style="list-style-type: none">○ Toenail surgery is carried out painlessly under local anaesthetic. This is achieved by using an anaesthetic injection similar to that used by dentists○ Conditions such as ingrown, infected, deformed, thick or painful toenails can benefit from nail surgery○ A small piece of toenail is typically removed from the side that is problematic and a chemical is applied to prevent that piece of nail from growing back again.

Electrosurgery	<ul style="list-style-type: none">○ Electrosurgery uses electrical currents to destroy skin lesions○ An electrosurgery unit creates a controllable low power electrical current between an electrode and a plate held against the skin. This enables the podiatrists to target and destroy a localized area of tissue (such as verrucae or corns) at the site of the operating electrode.○ The foot is anesthetized for the procedure by local anesthetic.
Bunion (or Metatarsal) Surgery	<ul style="list-style-type: none">○ A bunion is a bony bump that forms at the base of your big toe, where it forms a union with a foot bone called the first metatarsal. Your big toe points excessively towards your second toe when you have a bunion. The bunion is a foot deformity that consists of both bone and soft tissue.○ Most people with bunions find pain relief with simple treatments to reduce pressure on the big toe, such as wearing wider shoes or using pads in their shoes. However, if these measures do not relieve symptoms, bunion surgery may be necessary.○ You should only get bunion surgery if your bunion is painful. Good candidates for bunion surgery usually have: significant foot pain that limits their everyday activities, chronic big toe inflammation, swelling and pain that does not improve with rest or medications, and toe deformity and stiffness○ Because bunions vary in shape and size, there are different surgical procedures performed to correct them. Surgical procedures include:<ul style="list-style-type: none">● Repairing the tendons and ligaments around the big toe - in some cases, the soft tissues around the big toe may be too tight on one side and too loose on the other. This creates an imbalance that causes the big toe to drift toward the other toes.● Osteotomy – the podiatrist makes small cuts in the bones to realign the joint. After cutting the bone, the podiatrist fixes this new break with pins, screws, or plates. The bones are now straighter, and the joint is balanced.● Arthrodesis – the podiatrist removes the arthritic joint surfaces, then inserts screws, wires, or plates to hold the surfaces together until the bones heal. Arthrodesis is commonly used for patients who have severe bunions or severe arthritis, and for patients who have had previous unsuccessful bunion surgery. <p>*exostectomy and resection arthroplasty are two less common surgical procedures for bunion relief.</p>
Hammer Toe Surgery	<ul style="list-style-type: none">○ A hammer toe is a toe that is bent permanently downward, typically as a result of pressure from footwear.○ The actual procedure will depend on the type and extent of the deformity.○ It may involve removing a portion of the toe bone to realign the toe or

Services Guide: Podiatrists

	<ul style="list-style-type: none">could involve fusing the joint○ Additionally, it may involve the use of an implant to help maintain the realignment of the toe.
Heel Surgery	<ul style="list-style-type: none">○ Plantar fasciitis and heel spurs are problems that can develop in the area of the heel on the sole of the foot, causing chronic pain and interfering with the ability to walk normally or comfortably.○ Usually consists of plantar fascia release, with or without heel spur excision.
Fusions	<ul style="list-style-type: none">○ Typically fusions are used to treat arthritic conditions of the foot and ankle.○ These procedures involve the removal of cartilage and any diseased bone from a joint to produce a fusion of at least two bones to create one bone.○ This removal of cartilage exposes the underlying bone on both sides of the joint. These joints surfaces are then compressed together with some form of fixation to create the fusion.○ Fusions can be done with screws, plates or pins or a combination of these.
Tendon Surgery	<ul style="list-style-type: none">○ Tendons are the soft, band-like tissues that connect muscles to bone. When the muscles contract, the tendons pull the bones and cause them to move.○ Tendon repair is surgery done to treat a torn or otherwise damaged tendon due to injury, but is also commonly done to lengthen or shorten the tendon, depending on the problem.
Reconstructive Surgery	<ul style="list-style-type: none">○ Reconstructive foot and ankle surgery seeks to relieve the pain and discomfort caused by injury, congenital abnormalities, infection, arthritis and even improperly fitting footwear.○ It aims to restore or improve function and stability and/or prevent further deformity or disease.○ Reconstructive surgical procedures are complex and can involve repairing or transferring tendons, implanting joints, removing tumors, and cutting, grafting, or fusing bone.○ Bone screws, pins, wires, staples or other fixation devices – both internal and external – may be used for repair and stabilization of bone in reconstructive procedures.

5. FOOT ORTHOTICS

<http://orthoinfo.aaos.org/topic.cfm?topic=A00172>

General: Foot orthotics treat foot problems such as plantar fasciitis, bursitis, tendinitis, diabetic foot ulcers, and foot, ankle, and heel pain. Podiatrists will prescribe them for patients with these ailments before suggesting surgery or more invasive treatments.

5.1 TYPES OF FOOT ORTHOTICS

<http://www.apma.org/Learn/FootHealth.cfm?ItemNumber=988>

<http://www.cerebralpalsy.org/information/mobility/orthotics>

Type	Description
Prefabricated Orthotics/Shoe Inserts	<ul style="list-style-type: none">○ A non-prescription, pre-made foot support designed to be worn inside a shoe○ Shoe inserts can be very helpful for a variety of foot ailments, including flat arches and foot and leg pain. They can cushion your feet, provide comfort, and support your arches, but they can't correct biomechanical foot problems or cure long-standing foot issues.○ The most common types of shoe inserts are:<ul style="list-style-type: none">● Arch supports: Some people have high arches. Others have low arches or flat feet. Arch supports are designed to support the foot's natural arch.● Insoles: Insoles slip into your shoe to provide extra cushioning and support. Insoles are often made of gel, foam, or plastic.● Heel liners: Heel liners, sometimes called heel pads or heel cups, provide extra cushioning in the heel region. They may be especially useful for patients who have foot pain caused by age-related thinning of the heels' natural fat pads.● Foot cushions: Foot cushions come in many different shapes and sizes and can be used as a barrier between areas of your foot that rub against your shoe.
Custom Foot Orthotic	<ul style="list-style-type: none">○ Custom orthotics are specially-made devices designed to support an individual person's feet. They match the contours of the patient's feet precisely and are designed for the way the patient moves.○ Custom orthotics are manufactured after a podiatrist has conducted a complete evaluation of the patient's feet, ankles and legs, so the orthotic can accommodate their unique foot structure and pathology.

	<ul style="list-style-type: none">○ Excessive stress on bones, joints, and soft tissue caused by poor biomechanics will eventually cause foot (and even knee and back) pain. A properly designed custom orthotic can relieve that pain by providing dynamic balance of your foot while walking or participating in sports○ Custom orthotics help guide your foot through proper functions, allowing muscles and tendons to perform more efficiently○ There are two types of custom orthotics:<ul style="list-style-type: none">● Functional orthotics are designed to control abnormal motion. They may be used to treat foot pain caused by abnormal motion; they can also be used to treat injuries such as shin splints or tendinitis.<ul style="list-style-type: none">▪ Functional orthotics are usually crafted of a semi-rigid material such as plastic or graphite.● Accommodative orthotics are softer and meant to provide additional cushioning and support. They can be used to treat diabetic foot ulcers, painful calluses on the bottom of the foot, and other uncomfortable conditions.○ A podiatrist will typically take an impression of the foot (either with foam, plaster or a computer scanner) and an orthotist will make the foot orthotic based on the mold
Ankle Foot Orthoses	<ul style="list-style-type: none">○ Sometimes referred to as AFOs or drop foot braces, these semi-rigid L-shaped braces stabilize both the foot and ankle to bring muscles and joints into alignment.○ The braces extend up the calf, and are typically made of metal or hard plastic; they have straps that can connect together to hold the device in place, and bring stability to foot, ankle and lower leg by immobilizing it.○ These orthoses are typically used to correct foot drop.○ AFOs are less commonly prescribed by podiatrists than foot orthotics as a corrective treatment, since patients who need them can also be treated by an orthotist rather than a podiatrist.

5.2 FOOT ORTHOTIC FLEXIBILITY

General:

- These specifications can be applied to both custom and pre-fabricated orthotics
- The flexibility of the material is based on your weight, activity or occupational demands. The thicker the material, the more stability the orthotic will provide.

<http://www.podiatrycanada.org/foot-health/>

Type	Description
Rigid	<ul style="list-style-type: none">○ Used to control function; usually made of a firm material such as plastic or graphite as the base and a softer material as a top-cover
Semi-rigid	<ul style="list-style-type: none">○ Provides dynamic balance of your foot while walking or participating in sports; helps guide your foot through proper functions, allowing muscles and tendons to perform more efficiently
Soft	<ul style="list-style-type: none">○ Helps to absorb shock and take pressure off uncomfortable or sore spots of your feet

5.3 FOOT ORTHOTIC MANUFACTURING PROCESS

<http://steenwyk.com/custom-foot-orthotics/process>

<http://oolab.com/manufacturing-process/>

Steps	Description
1. Assess	<ul style="list-style-type: none">○ The podiatrist will assess the patient's foot and leg as described in section 2.2 to determine the source of the patient's pain or discomfort
2. Trace	<ul style="list-style-type: none">○ Involves making a trace around the sides of the foot
3. Footprint	<ul style="list-style-type: none">○ Involves taking a footprint of the patient's foot with ink
4. Plastering & Casting or Foam Impression	<ul style="list-style-type: none">○ Plaster casts or foam impressions are both methods for taking a mold of the patient's foot○ Molds are usually taken of the foot in a neutral (non-weight bearing) position while lying on an examination table○ The podiatrist will take the mold of the foot and send it to a manufacturing facility or continue with the manufacturing process.

Services Guide: Podiatrists

	<ul style="list-style-type: none">○ Clinics that make their own custom orthotics are called “central fabrication” or just “central fab” clinics
5. Cast or Foam Impression Scan	<ul style="list-style-type: none">○ Foam and plaster negatives are digitally scanned rendering a 3D electronic image.
6. Orthotic Design	<ul style="list-style-type: none">○ The foot mold scan is corrected using digital software
7. Mold Carve	<ul style="list-style-type: none">○ The foot mold positives are cut out of the plaster and examined for consistency with the prescription form
8. Molding	<ul style="list-style-type: none">○ Selected orthotic materials are heated in an oven until malleable, and are then placed over the cut out foot positives○ After cooling, the molded plastic is removed from the foot positives and any remaining material is cut off○ Each plastic shell conforms to the practitioners prescription
9. Grinding	<ul style="list-style-type: none">○ The orthotic is shaped using a grinder○ The width can be adjusted to fit a variety of footwear and any necessary cut-outs or shell accommodations are done according to the prescription○ The orthotic is then inspected to ensure an accurate match between the device and the mold/foot scan
10. Gluing	<ul style="list-style-type: none">○ All materials (top covers and additions) are picked according to specifications on the prescription and glued to the orthotics
11. Finishing & Fitting	<ul style="list-style-type: none">○ The orthotic is trimmed to fit the patient’s shoe, foot trace and footprint, and checked thoroughly for any imperfections

5.4 FOOT ORTHOTIC CARE

<http://steenwyk.com/custom-foot-orthotics/use-care>

- Orthotics can typically be washed with mild soap and warm water, and air dried.
- Keep away from high heat sources (e.g. space or base board heaters, dryers, fireplaces etc.)
- Do not machine wash them or use harsh chemicals on them (like bleach)

5.5 FOOT ORTHOTIC USE

<http://steenwyk.com/custom-foot-orthotics/use-care>

- It may take a couple weeks to feel fully comfortable wearing orthotics. Some people are immediately comfortable wearing them, while others need more time to adjust.
- Generally, the body does not adapt to change rapidly, and you may experience mild aches or fatigue when you first begin to wear orthotics.
- Wear the orthotics as long as they are comfortable, and increase wear-time as they become more comfortable. During the first week, do not wear your orthotics while playing sports, during workouts or other strenuous physical activity.
- After two weeks, you should be completely comfortable wearing orthotics for all activities
- The life expectancy of foot orthotics is 2-5 years depending on type of orthotic, maintenance, body weight and activity level.