

Patient Guide

BELOW-KNEE

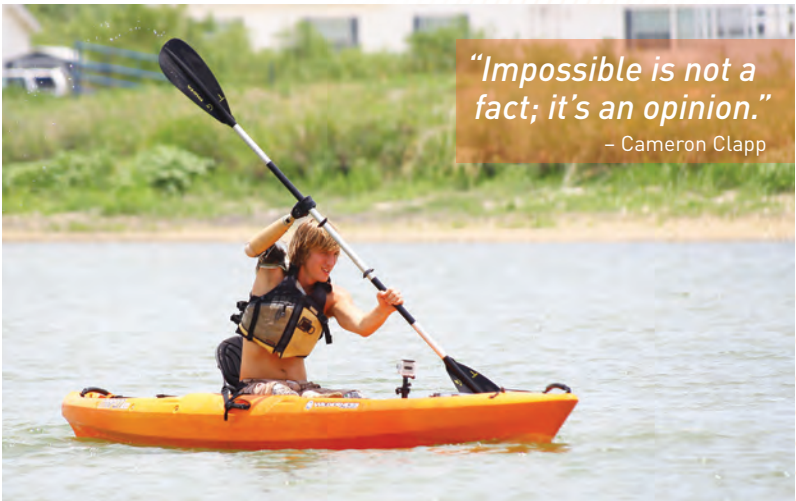
AMPUTATION CARE

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WHERE TO BEGIN

What do you do when an injury turns your life upside down and doctors say you'll never walk again? Find someone who believes, like you, that your potential is unlimited. After Cameron Clapp lost both legs and an arm in a train accident, he surrounded himself with people who supported his vision of a future that included walking, surfing and motivating others. The people at Hanger Clinic have been behind him every step of the way.



“Impossible is not a fact; it’s an opinion.”
– Cameron Clapp

Losing your limb can be overwhelming, but you are not facing this challenge alone. Many people will help you adjust to your amputation and return to a healthy, active lifestyle. This includes your team of healthcare professionals, such as your physician, prosthetist, physical therapist, nurse and occupational therapist.

YOUR PROSTHETIST:	
LOCATION:	
PHONE NUMBER:	

Who will provide my prosthetic care?

As you begin your rehabilitation, you will work with a prosthetist who is trained in the design, fabrication and fitting of artificial limbs (prostheses). Your prosthetist has skills and experience that will empower you to achieve your goals. It is important to talk to your prosthetist about your desires, expectations and concerns so that he or she can best address your needs. You will continue to partner with your prosthetist for routine maintenance, expected adjustments and future prosthetic care.

Hanger Clinic prosthetists are board certified. A certified prosthetist has successfully completed years of specialized training and passed a thorough examination administered by the American Board for Certification in Orthotics and Prosthetics (ABC) or the Board of Certification (BOC).

Your prosthetist will work closely with your physician, who will monitor your health, and your physical therapist, who will teach you how to use your prosthesis.



What will my insurance cover?

The cost of a prosthetic leg includes the specialized services we provide. Your prosthesis is a custom-made device that takes time and skill to design and fit. The cost of your device can vary greatly depending on the design that is medically necessary for you. Fees may be charged for modifications and adjustments that are necessary as your limb changes shape and size, but most initial adjustments and follow-up appointments are provided at no charge. Please contact your prosthetist with any financial concerns.

Prosthetic care is covered under most health insurance plans once deductibles and copayments are met. Our staff will help you understand your coverage and coordinate with your insurer. Please let our office know about any changes in your insurance. In addition, there are government funded programs available for people with physical challenges which may provide additional support.

IMPORTANT THINGS TO REMEMBER:



Hanger Clinic generally requires a physician's prescription for all prosthetic services, supplies and devices; especially if we are billing an insurance company.



Insurance approval for new supplies or devices may take time. Do not wait until the last minute.



Our team of prosthetists and office administrators want the best results for you. Please be patient as we partner with your physician's office and your insurance company to get approval for your supplies. Feel free to follow up with us about the status of your claim.

How long does rehabilitation take?

This is a general rehabilitation timeline for lower limb amputation. You may not experience all of these steps in exactly these timeframes because everyone's experience is unique. Talk to your prosthetist if you have questions about the expectations for your individual rehab.



2-4 MONTHS



INITIAL MOBILITY

- Fit initial prosthesis
- Begin prosthetic gait training

4-6 MONTHS



MATURATION

- Limb volume stabilization
- Ongoing therapy and prosthetic adjustments

6-12 MONTHS



LIFELONG CARE

- Receive definitive prosthesis
- Follow-up care
- Maintenance and replacements

Individual experiences will vary.

What is going to happen next?



POST-OP LIMB CARE

Your doctor may prescribe a shrinker to help shape your residual limb and/or an AmputeeShield® to protect your leg from injury (see page 8).



FIRST PROSTHETIST MEETING

Your prosthetist will get to know you and ask about your daily activities. He/she will listen to your goals and then use his/her clinical expertise to design the right prosthesis for you.



INITIAL PROSTHESIS

When your residual limb is sufficiently healed, you will be measured and fit with a prosthesis. The prosthesis you take home will be custom made using materials most appropriate for your needs. Your prosthetist will teach you how to put on and care for your prosthesis and supplies, as well as how to take care of your limb.



PHYSICAL THERAPY

Your physician, prosthetist and/or physical therapist will teach you how to use your prosthesis. You may be able to resume physical activities such as walking up and down stairs, driving and participating in sports and hobbies once you have mastered these skills.



FOLLOW-UP CARE

Your prosthetist will continue to make adjustments, fittings and replacements as necessary. It is important to follow up with your prosthetist at least every six months to address any issues, especially as your residual limb is changing in size.

RECOVERY AND HEALING

How will I recover physically?

Some people are slow to heal after amputation due to other health complications, which may delay prosthetic fitting. Be patient and remember that your goal is long-term success.

After amputation surgery, it is very important to protect your residual limb and to prevent falls. Falls can cause your sutures (stitches) to reopen, which delays the healing process. Removable rigid dressings such as AmpuShield® are proven to protect your limb, speed the healing process and shorten the time to prosthetic fitting.



AmpuShield®

Another post-operative dressing option is a shrinker or compression sock. The shrinker will prepare your limb's volume and shape for a future prosthesis.



Shrinker

If you see sores or blisters on your limb and/or near your suture line, you should speak to your doctor. Your doctor or physical therapist may suggest exercises you can do while healing.



HOW TO KEEP YOUR LIMB HEALTHY

Exercising is important preparation for gait training. Your prosthetist and/or physical therapist will teach you specific exercises and give you an exercise schedule.

You can also perform easy tasks at home:

- Keep knee straight while sitting in wheelchair or on the bed
- Stretch your limb daily
- Wear your shrinker or compression sock according to your doctor's instructions
- Massage and desensitize your limb according to your doctor's instructions
- Safely practice transferring from chair to bed (toileting, bathing, etc.)
- Safely practice balancing on one leg on a stable surface with your assistive device

EXERCISE EXAMPLES

Home exercises are provided by the Amputee Coalition at:
[amputee-coalition.org/resources/keep-moving-exercises](https://www.amputee-coalition.org/resources/keep-moving-exercises)

To prevent muscle tightening, DO NOT:



Keep leg in a bent position while in bed or sitting



Cross your knees while sitting



Place pillow under hip or knee

How will I heal emotionally?



Losing any part of your body can be traumatic and life changing. Everyone has their own way of coping, and it is OK to grieve. Counseling and support groups can help you process the many emotions you may experience after amputation. Speak to your doctor if you're feeling overwhelmed.



Family members and friends may be a source of encouragement and support even if they do not fully understand what you are going through.

Other people living with amputation can also provide inspiration and information. Our AMPOWER® support program has 1,000 certified peer visitors who understand what you're going through from personal experience and can meet with you in-person, by phone or online. You can also ask your prosthetist who he or she would recommend.



CONTACT THE AMPOWER TEAM

Call **1-844-AMPOWER (1-844-267-6937)**, visit

HangerClinic.com/AMPOWER and join EmpoweringAmputees.org

INITIAL MOBILITY

What happens at my first prosthetic evaluation?

At your first meeting, your prosthetist will take your complete history including:



Current health and physical condition



Activity level and recreational interests



Expectations and goals



Occupation and career goals

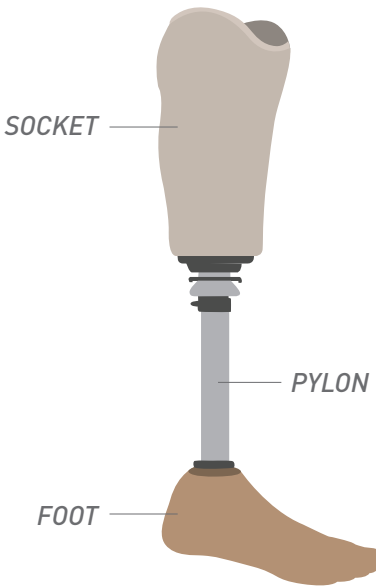


Hobbies and interests

Your prosthetist will take measurements and/or a cast or 3-D scan of your residual limb. This information will be used to create a “test” socket, also called a “check” or “diagnostic” socket, which allows you to try it on to see what changes need to be made to the fit. The socket will be designed to be comfortable and supportive.

Be sure to ask questions and express any concerns you may have about what to expect. Significant family members or caretakers can attend any or all appointments. Their understanding of life with a prosthesis can be vital to your ongoing care.

What are the parts of a prosthetic leg?



- 1 After taking measurements and/or a cast or scan, your prosthetist will design a prosthetic leg that will be carefully customized to your residual limb to help you meet your goals. The prosthesis may seem tight at first as you get used to it. Let your prosthetist know if you have any pain.
- 2 This socket will be attached to a pylon that connects to a foot. Your prosthetist will begin a procedure known as dynamic alignment, in which he/she lines up the components of your prosthesis for optimal walking and balance.
- 3 The prosthesis may be covered for protection with soft foam and shaped to match your other leg.

How is the prosthesis held to my limb?

There are several ways the prosthesis can be held to or suspended from the limb. Your prosthetist will discuss with you which method is most appropriate for your needs.



SUCTION SUSPENSION

A gel liner is rolled onto the residual limb and a gel sleeve is pulled around the prosthesis and the thigh, holding the prosthesis in place. A suction valve, attached to your socket, allows air to flow out but not in, creating a seal around the limb for suspension. In some cases, a vacuum pump is added to help manage changes to your limb volume.



PIN LOCKING SUSPENSION

A gel liner, which includes a pin attachment at the very end, is rolled onto the residual limb. As you put on the prosthesis, a mechanism at the end of the socket locks onto the pin, holding the prosthesis on the limb. The lock will not disengage until a release button is pushed.



STRAPS

A leather or nylon strap attached to the prosthesis wraps around your lower thigh to hold the prosthesis on.



SUPRACONDYLAR SUSPENSION

Less commonly, prosthetic sockets can be suspended using the anatomy of the limb.

How will I learn to use my prosthesis?

Your prosthetist will give you a schedule for gradually increasing the amount of time your prosthesis should be worn. As your limb is still sensitive, it is important that you limit activity during the first couple of weeks. Your prosthetist will give you initial training during the fitting process as he or she aligns your prosthesis. As you learn to walk with your prosthesis, you will become more confident with it and build up endurance. Using a prosthesis requires hard work and daily practice. It is important to set realistic expectations and be persistent.

As your limb changes in volume throughout the day, you may need to add or remove prosthetic socks to adjust the fit. Your prosthetist will instruct you how to manage your sock wear in order to achieve the proper socket fit. You will be given socks of different thicknesses to use.

Physical therapists can help you learn to walk more efficiently with gait training. Your therapist can help you transition from walking with an assistive device (walker, cane or crutches) to walking independently if that is your goal and if you have the necessary strength and balance. He or she may also teach you how to walk up and down steps, drive and do other daily activities. Eventually, your therapist can even help you to walk on uneven terrain or return to recreational activities of your choice.

NOTE



If you are using a cane or crutch, it should be held in the hand opposite your amputated side. For example, if you wear a right BK prosthesis, hold the cane in your left hand.

LIFELONG CARE

How do I care for my limb?



Wash your skin at least once a day with lukewarm water and a mild bathing soap. Rinse thoroughly without soaking, and dry carefully without rubbing too hard. Keeping your skin clean will help avoid skin irritation such as cysts or pimples.



It is important to check your skin for infection, redness or breakdown. Using a mirror can help you to thoroughly check all areas of your limb.



Do not shave the residual limb, which will cause skin irritation. Lotions should only be used at night, not while wearing your prosthetic leg. Do not use creams, lotions or moisturizers until your limb has completely healed, unless otherwise instructed by your physician. Also do not use any of these with your prosthetic liner unless instructed by your prosthetist.

COMMON LIMB PROBLEMS

You may experience various sensations in your residual limb. Phantom limb sensations are feelings that the lost limb is still present. Phantom limb pain is a painful sensation in the missing limb. These usually decrease in intensity and duration with time. If pain persists or is intolerable, please discuss with your physician or therapist. There are various treatments, both medicinal and therapeutic, available.

Edema, or swelling, is a very common issue for people with limb loss. Your physician or prosthetist may suggest wearing a shrinker or elastic bandage to help reduce swelling when you are not wearing your prosthesis.

Excessive sweating is also common depending on the climate and your activities. It is more typical during the first couple of months wearing a prosthesis but may remain an issue for certain individuals. Over time your limb may adjust to perspire less, but if needed your prosthetist or physician can recommend a treatment, such as special socks and antiperspirants. Odors can be managed with proper hygiene and care of prosthetic supplies.

It is important to inspect your residual limb on a daily basis. A poorly fitting socket can place unwanted pressures on your limb, which may result in blisters and sores. Sock management and socket adjustments may restore the proper fit. Talk to your prosthetist about managing your sock use. If a wound or blister appears, talk to your prosthetist as soon as possible. Preventing wounds is critical to avoid complications. It is also important to avoid any bacterial or fungal infections and rashes. If your entire leg is warm to the touch, swollen or very red, and you suspect an infection, contact your physician immediately. If skin infections or rashes persist, you should visit a dermatologist.

How do I care for my prosthesis?

Keeping your prosthesis clean is extremely important. Your prosthetist will provide you with daily cleaning instructions for your socket and other supplies. If you notice any abnormal looseness or noises, call your prosthetist immediately. It may be necessary to order loaner or replacement parts before your appointment.

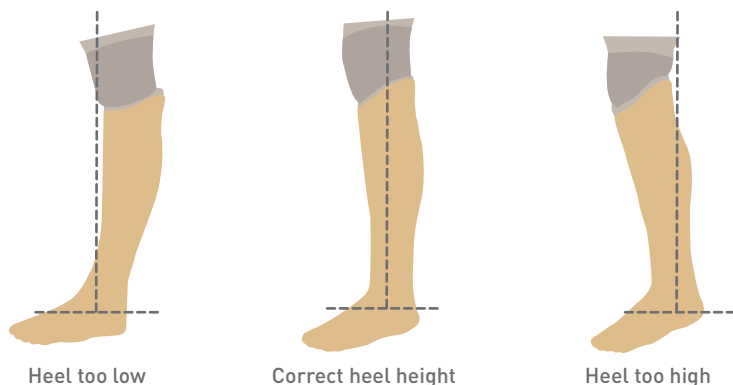
Always contact your prosthetist if you need any adjustments. Do not try to adjust your prosthesis yourself. Never oil, grease or introduce any foreign substances to any mechanical part of your prosthesis. If you modify your prosthetic components, it will void your warranties and could damage the components or injure you.

Avoid getting your prosthesis wet. If it does get wet, remove the shoe and allow the prosthesis to dry. If the prosthesis is completely submerged in water, see your prosthetist to avoid long term damage. Waterproof covers are available to protect your prosthesis.

Even if things are going well, you should see your prosthetist every six months for routine checkups to ensure optimum fit and safety. Call your prosthetist anytime you need new supplies and/or adjustments

What shoes can I wear?

Talk to your prosthetist about the shoes you want to wear. Your prosthetist will select and fit the appropriate prosthetic foot based on your needs and your preferred shoes. Bring those shoes to all of your appointments. Wearing shoes with a different heel height will affect your alignment, how the prosthesis feels and how you walk. Do not wear your prosthesis barefoot, which could damage your prosthetic foot and strain your limb or knee.



What home aids and modifications will I need?

Adjusting your home to be more accessible can make it easier to live with an amputation. You can make structural changes around your home such as shower modifications, ramps or handrails in areas like the bathroom or outside your home. In addition, various assistive devices may be necessary to navigate your home. Government and/or private funding may be available for home modifications.

Some patients who are affected on their right side choose to have a left-foot accelerator installed in their cars. To learn more about safety mechanisms for prosthetic wearers, contact your state's DMV.

When will I get a replacement?

As your residual limb changes over time, your prosthetist can modify your socket to improve comfort, and you may be able to use prosthetic socks to manage socket fit. Your doctor and prosthetist will decide when to replace your prosthesis based on socket fit and comfort, normal wear and tear and limb changes.

If you gain or lose weight, the comfort and performance of your prosthesis may be affected and you may need a new socket. It is important to maintain a consistently healthy weight.

REPLACING SUPPLIES

While your prosthesis may last for years, you will need replacement supplies such as liners, sleeves or socks more often. Tell your prosthetist if you see any holes, tears or problems with your supplies.



What's next?

Please remember:



Schedule regular check-ups with your prosthetist to check your prosthesis for wear, damage and fit. These appointments are also good ways to learn about new prosthetic technologies that may benefit you.



Never adjust your own prosthesis. If you ever have any problems, call your prosthetist.



Take care of your prosthesis by keeping your inner socket, liners and socks clean.



Inspect your skin daily.

If you have any questions at all, please talk to your prosthetist. At Hanger Clinic, we are dedicated to helping you achieve your goals and regain an active lifestyle!

You can find more resources on living with limb loss, suggested questions to ask your prosthetist at the first visit and the different types of prostheses at [HangerClinic.com/LivingWithLimbLoss](https://www.hangerclinic.com/LivingWithLimbLoss).

ADDITIONAL SUPPORT RESOURCES

[EmpoweringAmputees.org](https://www.empoweringamputees.org) | [Amputee-Coalition.org](https://www.amputee-coalition.org)



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