

The Amputee Roadmap

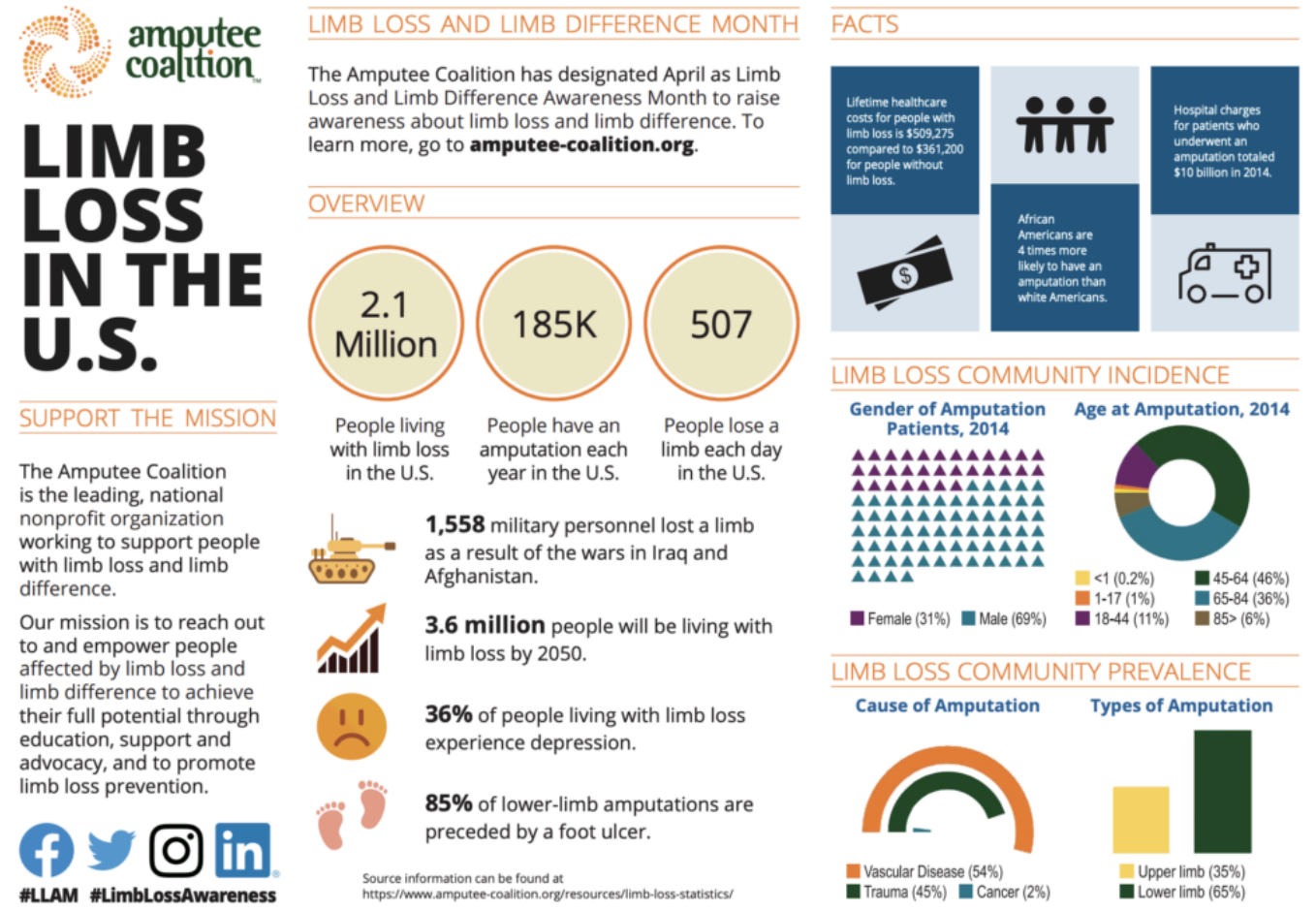
Best Practices for an Amputee's Journey

Introduction

Welcome!

This comprehensive guide is designed to support you through the various stages of limb loss and the transition into a fulfilling life thereafter. This resource is assembled with insights from diverse roles within your care team, ensuring a holistic perspective on the challenges and triumphs you may encounter. Each stage is thoughtfully accompanied by checklists, addressing practical aspects, commonly asked questions, and additional resources to empower you with the knowledge needed for a smooth journey. Whether you are personally navigating this path or supporting a loved one, this guide aims to provide a roadmap, fostering understanding, resilience, and a sense of empowerment. Embrace the journey ahead, knowing that a dedicated team and valuable resources are here to guide you every step of the way.

You are not alone.



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Care Team Member Roles

MEDICAL CARE PROVIDERS

- **Primary Care Provider:** Cares for your health and overall well-being
- **Podiatrist:** Cares for your foot, ankle, and leg
- **Surgeon:** Performs your surgery in the hospital
- **Nutritionist/Dietician:** Determines your meal plan for optimal recovery

PROSTHETIC CARE PROVIDERS

- **Prosthetist:** Fits you with an artificial limb (prosthesis) and helps get you accustomed to your new device

THERAPY CARE PROVIDERS

- **Physical Therapist:** Focuses on improving your ability to move your body
- **Occupational Therapist:** Focuses on improving your ability to perform activities for daily life

FINANCIAL/EMOTIONAL CARE PROVIDERS

- **Social Worker/Care Coordinator:** Provides you with local financial resources to help prepare your home after amputation
- **Counselor:** Provides emotional support following your amputation

My Care Team

Primary Care Provider _____

Surgeon _____

Podiatrist _____

Nutritionist/Dietician _____

Prosthetist _____

Physical Therapist _____

Occupational Therapist _____

Social Worker/Care Coordinator _____

Counselor _____

Other _____

Defining Each Stage

PHASE 1
PRE-AMPUTATION

1) Educate yourself
2) Gather resources
3) Plan prior to your amputation



PHASE 2
SURGERY/HOSPITALIZATION

1) Amputation of limb
2) Recovery at hospital



PHASE 3
POST-OP/TRANSITIONAL CARE

Following hospital discharge:

1) Focus on the healing of your surgical site
2) Maintain your strength in preparation for a prosthesis
3) Prepare to adapt to the world after amputation

PHASE 4
PROSTHETIC



When limb is healed or surgeon approves you for prostheses:

1) Prosthetic design, fabrication and fitting takes place
2) Build strength and confidence as you learn to walk with a prosthesis

PHASE 5
REHABILITATION



1) Pactice transfers, standing, walking, and high-level balance tasks w/ prosthesis
2) Work to increase your walking endurance
3) Progress to uneven surfaces, ramps, and outdoor mobility
4) Goal is to function as close to pre-amputation baseline as possible

PHASE 6
LIFE WITH LIMB LOSS

1) Begins after prosthetic and rehabilitation processes
2) Adapt and return to activities of everyday life with limb loss





MEDICAL

Prior to your surgery you will meet with your surgeon to determine the level of your amputation. This is often based on your overall health and the ability to heal wounds or sores. The amputation level does affect your rehabilitation plan before and after your prosthetic fitting, as well as the type of prosthesis that may be appropriate for you.

Your surgeon will discuss the plan moving forward in managing your other health concerns such as diabetes, sores, lack of strength or other conditions that may affect the status of your limb that will not be amputated.

Your surgeon will also alert you on the types of pain you may experience, such as ***post-operative pain*** from tissue and nerve damage, ***phantom limb pain*** and ***phantom sensations.***

Phantom sensations are when you feel your amputated limb or toes, even though they are no longer there. Sensations such as tingling, pins and needles, itching, and temperature changes are common. These sensations are not painful; therefore, no treatment is indicated.

Phantom pain is when those phantom sensations become so strong that they result in pain.

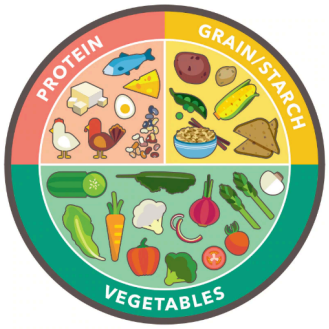
Residual limb pain is pain in your residual limb from swelling, or nerve and tissue damage following your surgery.

The surgery date will then be scheduled and pre-operative instructions will be provided.

NUTRITION

There are steps you can take for better wound healing prior to your surgery. Wound healing time can be dramatically decreased if you stop smoking and practice proper nutrition habits. Wound infection rates and surgical revision rates are found to be lower in non-smokers. (6) While quitting smoking completely is rarely possible prior to surgery, smoking abstinence can also be beneficial to wound healing and improve immune function.The earlier the abstinence, the greater the benefits to healing. (5)

Proper nutrition is also very important to the wound healing process. It has been shown that well-nourished patients heal with fewer complications than malnourished patients. (2) Dietary changes should start as soon as possible or immediately and be continued for at least the time spent in the hospital. (3)



Dietary recommendations for proper healing include eating a balanced diet that includes plenty of fruits and vegetables, whole grains, and adequate protein. You should aim to make ½ of your plate plant based (fruits/vegetables) for at least 3 main meals per day to ensure you have an adequate intake of micronutrients for healing as well. Adequate protein intake is also essential for wound healing because it contains amino acids which act as building blocks in the body. (1) Whole grains (or complex carbohydrates)

such as whole wheat bread, whole wheat pasta, starch vegetables, and brown rice are the primary source of energy for the body.

Lastly, proper hydration is essential for tissue health and blood circulation.

PROSTHETICS

Prosthetic Process

The prosthetic process can vary depending on each individual's health, healing capabilities, injuries and cause of amputation. If an individual knows an amputation will need to occur ahead of time, a pre-amputation consultation could help an individual become informed of what to expect.

Pre-Amputation Consultation

Prior to amputation your medical provider or surgeon may order a pre-amputation consultation. A pre-amputation consultation gives you an opportunity to meet with a Certified/Licensed Prosthetist or professional in the field to answer any questions or address any concerns that you may have.

Don't know what to ask or expect?

Don't worry, this is normal. Your prosthetist will give you some reading material and information about prosthetics and the process after amputation so you have an idea of what to expect on your journey ahead.

Peer Visitor

Peer visitors have first-hand knowledge and experience as it relates to living with limb loss or limb difference. They may be able to answer some of your questions or concerns. If you would like to speak with someone who is currently living with limb loss or limb difference, contact your prosthetist or care team.

Support Networks / Groups

If you are seeking a support network or group of others living with limb loss in the Central Minnesota area, The Amputee Network of Central Minnesota is a great resource. This network will allow you to socialize and interact with others that are living with limb loss or have loved ones that are living with limb loss. This Facebook group was created to help spur communication between local prosthetic users living with limb loss. To become a member on Facebook, search Amputee Network of Central Minnesota and request to become a member.



The Amputee Coalition is another great resource and is the nation's largest nonprofit organization. The Amputee Coalition's mission is to reach out to and empower people affected by limb loss to achieve their full potential through education, support and advocacy, and to promote limb loss prevention.

Insurance Coverage

There are a wide variety of insurance plans available on the market and every plan will have their own coverage criteria regarding prosthetic devices. If your medical care team determines you are an appropriate candidate for a prosthesis and justifies it in their notes, an order will be written and sent to a Prosthetist. At this stage, it is highly recommended that you contact your insurance company to verify your coverage and ensure you have an active insurance plan. You may also ask questions such as:

- Will my insurance cover the cost?
- Do I have co-insurance?
- What is my deductible?
- What is my out of pocket max for the year?
- What type of prosthesis is best for me?

You will likely have to wait until your prosthetics appointment to determine which device and components are recommended. At that time, more specific costs and coverages can be determined. ***It is also very important to understand that your insurance will only be billed for the prosthetic device and supplies, not for the office visits with your Prosthetist.***

Determining Prosthetic Eligibility

Your health care team will determine if you are a prosthetic candidate, meaning you have the ability or potential to use a prosthesis. Their decision will be based on a variety of physical tests, an evaluation of your short- and long-term goals, identification of your previous activity level, the condition of your amputated limb, your daily activities, occupation and any other ongoing medical conditions.

Working with your Prosthetist

After your surgery and once you have been cleared by your surgeon to begin the process of obtaining a prosthesis, you will meet with your prosthetist who will determine what type of prosthetic device would be the most appropriate to help you reach your goals and return to a more active and independent lifestyle. You will also meet with your medical provider who will document why a prosthetic device is medically necessary. This documentation is required by all insurance carriers to help determine coverage. When the type of device has been determined, your prosthetic provider will submit a claim to your insurance provider to determine coverage. Oftentimes this process requires an authorization for coverage which may take a few days to a few weeks to be approved or denied. In the case of a denial, your prosthetist will start an appeal with your insurance provider. An appeal may require additional information from either your prosthetist or medical provider and will take additional time to be completed.

How You Can Help

Be sure to communicate with your health care team and specify your needs, lifestyle, daily activities, goals, work and hobbies. Their assessments and thorough documentation of your specific needs are crucial in the claims process. If done appropriately, proof of your medical need could get you coverage for the most appropriate prosthetic design that will allow you to achieve the best outcome and return to living life after limb loss or limb difference with a prosthesis that is designed specifically for you.

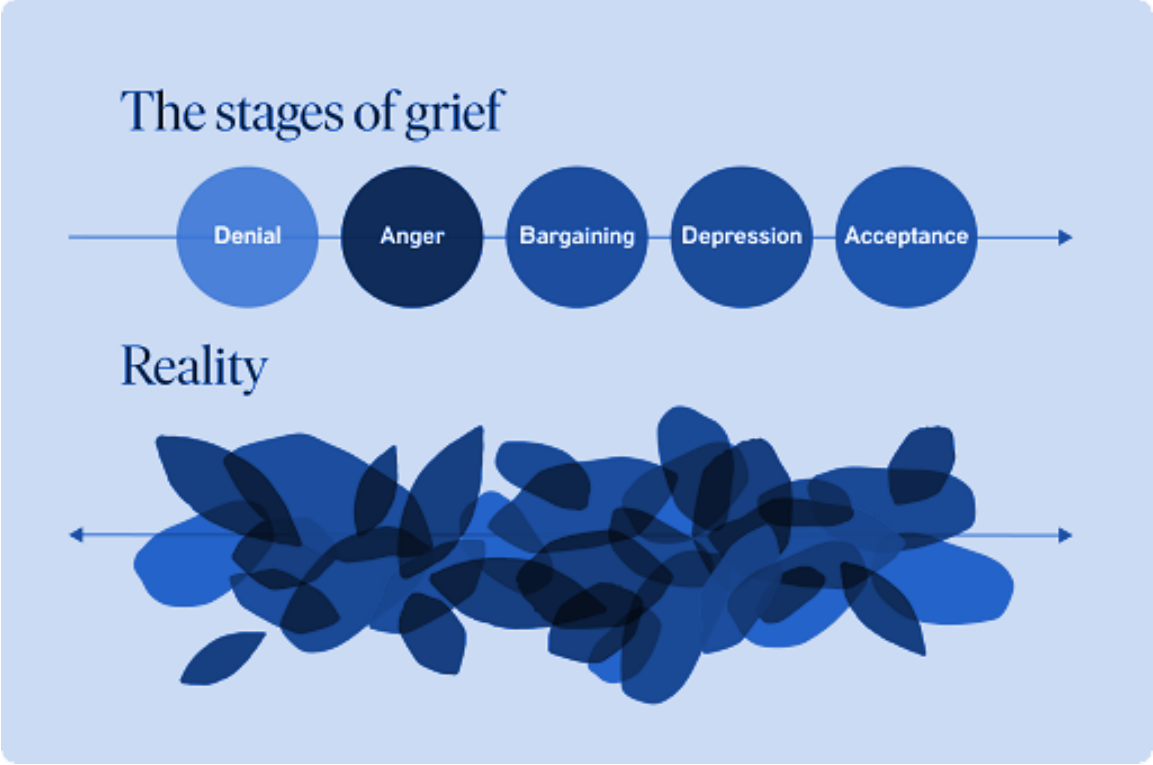
THERAPY

Prior to your amputation, you will want to assess your home and determine if it is ready for you to return home in a wheelchair. Staying as active as possible is important. Avoiding prolonged sitting postures is important so that you do not develop tightness and limitations with your joint motion. If you are able to walk (with or without an assistive device), continue to do so to work on your endurance. Getting used to exercise will be important as exercise will be an important part of your future rehab needs.

FINANCIAL\EMOTIONAL

Losing all or part of a limb is a life-changing experience that may provoke various emotions, some of which may include shock, anxiety, fear, anger, loss, depression, or body image issues. The grieving process is different for everyone, and it is important to know that there are professional resources available to help you cope with your limb loss. If at any point in your amputation journey you are struggling with emotional challenges surrounding your life change, please connect with one of your care team members so that proper services can be requested. Working with an individual who has already gone through an amputation can be helpful and serve as a good resource for asking questions, calming nerves, or receiving the needed support.

There are five stages of grief. You may experience some or all of these stages and they may not always occur in this order. You may move back and forth through the different stages at different times during your amputation journey.



Level of Amputation Determined:
- Medical professionals will assess and determine the appropriate level of amputation based on your specific condition and medical needs.

Preparation Before Surgery:
- Follow any pre-surgery instructions provided by your healthcare team.
- Arrange for transportation to and from the hospital on the day of surgery.
- Ensure you have a support system in place for post-surgery assistance and emotional support.
- Discuss any concerns or questions with your surgeon or medical team before the procedure.

Consult with Prosthetist:
- Schedule a consultation with a prosthetist before surgery to discuss the upcoming amputation and the prosthetic options available.
- Understand the prosthetic fitting process and gather information about the types of prosthetics that may be suitable for your situation.

Check Insurance Coverage:
- Contact your insurance provider to understand coverage for the amputation procedure, prosthetics, and rehabilitation.
- Clarify any pre-authorization requirements and ensure you have the necessary documentation for insurance claims.

Therapy and Rehabilitation:
- Coordinate with physical and occupational therapists to develop a pre-amputation exercise plan to optimize your physical condition.
- Establish post-amputation rehabilitation goals with your therapy team to expedite recovery and enhance mobility.

Maximize Success with Resources:
- Educate yourself on post-amputation care and lifestyle adjustments.
- Gather information on adaptive technologies and tools that can facilitate daily activities.

Professional Coping Resources:
- Seek counseling or support groups specializing in limb loss to connect with individuals who have gone through similar experiences.
- Engage with mental health professionals to address emotional and psychological aspects of limb loss.

Remember, open communication with your healthcare team, prosthetist, and support network is crucial throughout this process. This comprehensive approach ensures that you are well-prepared for the amputation, have the necessary resources for rehabilitation, and can navigate the emotional aspects of adjusting to life with limb loss.

PHASE 2 • Surgery/Hospitalization



MEDICAL

Day of Surgery

For a planned surgery the hospital or surgical center will contact you with information in preparation for your surgery. They will instruct you with arrival times, as well as rules for eating and drinking, medications, and what to bring with you. Be sure to ask questions if any instructions are unclear.

General 'Preparing for Surgery' Instructions can be found with this QR code

Upon arrival at the hospital or surgical center, a nurse will help you prepare for surgery. You will then meet with an anesthesiologist and how they will help you manage your pain. Be sure to communicate any complications you may have had with surgeries in the past. You will also meet with your surgeon to answer any last-minute questions you may have regarding your surgery.

You will then be taken to the operating room where the anesthesiologist will give you medication to help you sleep through the operation. Based on hospital policy, your family and friends may be allowed to stay in the waiting room during your operation. The average amputation surgery takes one to three hours, depending on the level of amputation and other complicating health conditions.

Following your surgery, you will be taken to a recovery room where you will wake up from surgery and be given pain medication as needed. Nurses will be available to assist you with your initial recovery and keep you comfortable. Be sure to let your nurse know if you are experiencing any pain or nausea.

Following recovery, you will be taken to your hospital room where your family and friends may visit in accordance with hospital policy.

It is normal to rest and sleep following surgery. The length of your hospital stay may depend on whether your surgery was planned or unplanned, the underlying cause of your surgery, and other medical conditions you may have. Your doctor can give you an estimate on your expected time in the hospital.

Majority of patients require some type of rehab or skilled nursing facility stay following an amputation. Even the healthiest patients rarely discharge directly to their homes following surgery.

Pain

Surgery is a physical trauma and you will likely experience pain. Pain control is important. If you do not get it under control, it can slow down your recovery and increase your hospital stay. It is important to keep up with or stay ahead of the pain so be sure to inform your nurse or surgeon if your pain is not tolerable. Everyone experiences and tolerates pain differently, therefore there are various ways to control your post-operative pain. They include limb repositioning, cold packs, massage, and medications such as anti-inflammatory agents, acetaminophen, muscle relaxers and narcotics.

Types of Pain You Might Experience

Residual limb pain is pain in your residual limb from nerve and tissue damage following your surgery, and is usually localized to the incision site. It may be described as achy or deep pain. This type of pain may be due to increased swelling and movement of the limb, and will lessen as your limb heals. It is often treated with medication which may be given through an IV or by mouth.

You will most likely be asked to rate your pain on a scale of 0–10. Be sure to communicate with your health care team regarding the severity and location of your pain level to help them treat you most effectively. It becomes important that you take the pain medication as prescribed to stay "ahead of the pain" rather than wait until the pain is unbearable.

Phantom pain is when the *phantom sensations* (feeling your amputated limb or toes, even though they are no longer there) become so strong that they result in pain. It is believed to be caused by mixed signals from your brain and can be triggered by certain activities or conditions such as exposure to cold or changes in barometric pressure. This pain typically lessens over time and varies in both frequency and severity. It may be mild or severe, intermittent or continuous, and may be described as aching, throbbing, burning or shooting.

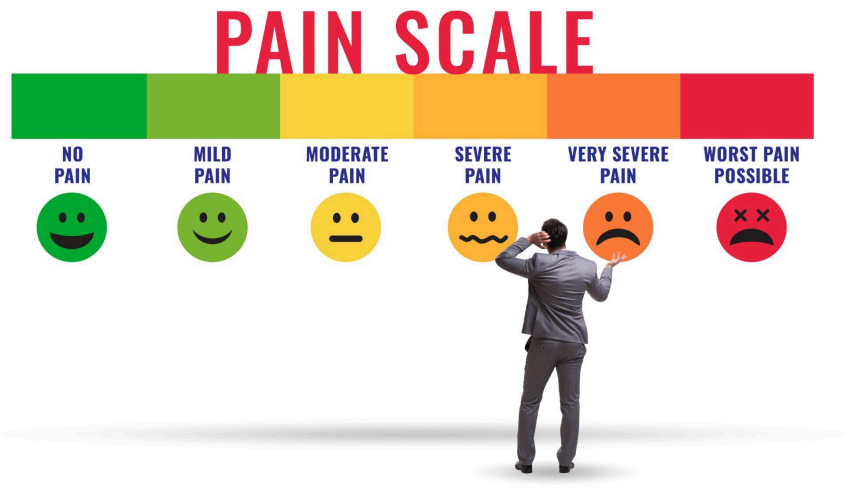
Pain Management

Pain while in the hospital is often treated with medication which may be given through an IV or by mouth. The most common types of medicines used to control pain in this phase are narcotic pain medicines, Opioids, or other medications for nerve pain. If your pain does not require a narcotic medication, your provider may suggest acetaminophen for mild pain, or other specific pain medication instead. Anti-inflammatory drugs may be effective on pain due to swelling, and muscle relaxer drugs for pain from muscle spasms.
Elevating your limb can also minimize the swelling and the resulting pain.

The goal is to manage your pain level rather than completely eliminate it. Managing your stress and anxiety levels is also an important part of pain control.

Surgical Site

You will likely have sutures, staples, or both to keep your surgical site closed. Your surgeon or physician assistant will decide when it is time to remove them, usually 4-6 weeks after surgery. In the meantime, it is important to keep your surgical site dressed for optimal healing. Your nurse will help change your dressing daily throughout your hospital stay. These dressing changes may be painful, and you may need to take pain medication prior. It is also very important to wear your limb protector when out of bed to protect your surgical site if a fall should occur.



PROSTHETICS

If you are hospitalized prior to your surgery your medical provider or surgeon may have ordered a pre-amputation consultation. A pre-amputation consultation would allow you the opportunity to meet with a Certified/Licensed Prosthetist or professional in the field to answer any questions or address any concerns that you may have. Don't know what to ask or expect? Don't worry, this is normal.

The day following your surgery you will meet with a prosthetist to discuss the upcoming prosthetic process. They will inform you on the steps of the prosthetic process and answer any questions you may have. The prosthetist will also fit you with a limb protector and deliver other supplies such as socks and shrinkers for future use. They will instruct you on which socks to wear as well as how to put on and take off your protector. If you have future questions on how to use/wear those supplies, please refer to the instructions provided in your prosthetic folder.

THERAPY

During your hospital stay, you will likely be evaluated by both Physical and Occupational Therapy. Both are important to improving your overall chances for a successful recovery.

Your Physical Therapy team will focus on helping you prepare to access your living environment safely. The way you access your environment will likely change, in some manner, from what you are used to. You will be asked questions about your living environment to get an idea of what you will need to be able to return to that environment.

Questions you may be asked:

How will you enter the home if you have stairs?

How will you move from your bedroom to the bathroom?

How will you get onto and off the toilet or in and out of the shower?

Is your home wheelchair accessible, including doors wide enough for a wheelchair to pass?

In many cases, people are not able to transition home directly from the hospital and require additional therapy in a post-acute setting (swing bed, short-term nursing home stay, rehab, etc.) prior to returning home.

Occupational Therapy will work with you on being able to help care for yourself. Tasks such as bathing, dressing and personal hygiene may be more difficult after your surgery. Your Occupational Therapist may show you special techniques to perform activities of daily living. You may require special equipment, known as adaptive equipment, to be able to perform these activities safely on your own.

One of your first major therapy goals following amputation is to move from one surface to another. Surfaces you encounter on a normal day would include your bed, a chair or wheelchair, the toilet, and a bathing surface like a shower chair or tub bench. Mobility will not be easy and may cause some pain, but mobility early after your amputation is important for overall physical and mental

health. Your therapist will guide you through the process and will help you develop skills to move not only from the bed to a chair, but from a chair to a toilet, a chair to a shower chair, and from a chair to your bed. These movements may involve equipment such as a sliding board. A sliding board will bridge the gap between two surfaces and allow you to slide over the gap. As your mobility increases, you may be able to stand using a walker or other equipment such as a cane or crutches. Some amputees eventually develop the skills to move from the bed to the chair, the chair to the bed, and to and from the toilet without using any additional equipment. You will need assistance performing those movements until your therapist indicates it is ok to do so on your own, which may take several weeks.

Following surgery, it will be several weeks before your residual limb is ready to walk with a prosthesis. During this time a wheelchair will be your primary method of mobility. You may be able to begin walking short distances without a prosthesis by using a walker or crutches if your therapist feels you are ready. Your therapist will instruct you on the proper use of the walker or crutches. DO NOT walk by yourself until your therapist has told you it's ok to do so.

Moving with only one limb requires not only a great deal of strength, but also good endurance. Aerobic activity is important for developing endurance that will allow you to eventually move around your community. Moving yourself along in a wheelchair is one example of an activity that can help improve your endurance. Other examples include exercises your therapist may ask you to perform while sitting in a chair or lying-in bed.

ASSISTIVE DEVICES AND ADAPTIVE EQUIPMENT

It is likely you will require special equipment —assistive devices and adaptive equipment —when you return home. Assistive devices that will help you move from one place to another may include items like walkers, crutches, canes, wheelchairs and sliding boards. Adaptive equipment that will make caring for yourself easier may include items such as reachers, sock aids and dressing sticks.



If you discharge from the hospital to a nursing or rehab facility, that facility will work with you to determine what equipment is necessary prior to returning home safely. If you are discharged directly from the hospital to your home, your therapy team in the hospital will determine what equipment is necessary to ensure your safety when you return home. Insurance coverage for equipment varies. Please check with your insurance representative for specifics to your insurance plan.

STRETCHING EXERCISES

Maintaining good flexibility of your hips and

knees will be critical when using a prosthesis to walk. Poor flexibility can lead to abnormal walking patterns as well as abnormal pressure areas on your residual limb and/or sitting areas. While you are sitting in a chair, a board may be used under your residual limb to prevent your knee from bending. While lying on your back, avoid putting a pillow under your knee.



FINANCIAL/EMOTIONAL

Your social worker will assist in coordinating your discharge details such as the location, transportation, needed equipment and pharmacy selection. Patients most often transition from the hospital to an in-patient rehab or a skilled nursing facility for further care and therapy. Occasionally patients will discharge home with home health services. Your discharge location will depend on factors such as insurance coverage, your overall health, your limb condition, as well as support available such as family/friends. Be your own advocate at discharge and communicate your needs.

If not already done, your social worker can work with your therapists on acquiring equipment you may need such as wheel-chairs, walkers and bathing equipment.

The hospitalization phase will likely bring on a variety of emotions. Some amputees will experience denial and anger in the hospital, especially if the amputation came as a surprise and was unplanned. Other amputees may feel relief moving forward with a planned amputation. While in the hospital or initially after returning home, you may not be comfortable around others or even feel awkward.

Be open with communication to your loved ones so that they best know how to support you. While in the hospital you may request to speak with a chaplain who is skilled in providing both spiritual and emotional support especially when dealing with grief and loss. Psychologists and social workers can also be requested while in the hospital to help with your needs. Please do not hesitate to request these services. If you are feeling too overwhelmed while in the hospital, ask your physician for an outpatient referral to work with a behavioral health specialist once discharged when you have had a little more time to adapt and recover from surgery.

Surgery and Hospitalization:

- Undergo limb loss surgery at the hospital.
- Receive immediate post-operative care and monitoring.

Early Recovery Support:

- Hospital provides assistance with the early stages of the recovery journey.
- Medical staff monitor healing and manage pain.
- Check skin/wound daily.
- Practice safety awareness during transfers.
- Wear a limb protector when out of bed.

Meeting with Certified Prosthetist:

- Within the first few days post-surgery, meet with a Certified Prosthetist.
- Obtain information, resources, and support regarding prosthetics.

Physical Therapy:

- Engage with physical therapists to regain strength and mobility.
- Tailored exercises to facilitate maximum recovery.

Occupational Therapy:

- Consult occupational therapists to address daily living challenges.
- Develop strategies for independence and adaptability.

Adaptive Equipment:

- Therapy team assists in acquiring adaptive equipment.
- Ensure access to tools that aid in rehabilitation and daily activities.

Professional Resources:

- Utilize available professional resources for coping with limb loss.
- Seek counseling or support groups for emotional well-being.

This checklist outlines the key steps and support mechanisms during the limb loss surgery and hospitalization stage, emphasizing the collaboration with healthcare professionals, prosthetists, and therapists to facilitate a comprehensive recovery process.

PHASE 3 • Post-Op/Transitional Care



MEDICAL

In this phase you have been discharged from the hospital and are now at home, a nursing facility, or inpatient rehab.

Hospital Discharge

Your discharge location will depend on factors such as insurance coverage, your overall health, your limb condition, as well as support available, such as family/friends. Patients most often transition from the hospital to an in-patient rehab or a skilled nursing facility for further care and therapy. Occasionally patients will discharge to home with home health care. Even the healthiest patients rarely discharge home immediately following surgery.

- Discharge to an in-patient rehab facility will provide you with daily intensive therapy to help prepare you for success when you return home.
- Discharge to a skilled nursing facility will allow you to undergo regular physical therapy. During your stay wound care nurses will monitor your wound healing daily and provide dressing changes.
- For those who are discharged to their home, therapy may be provided in home or at a clinic.

Your team will discuss options with you to determine what is the best option for your situation. Regardless of where you are discharged, throughout your healing process you will likely have several follow up appointments with your surgeon and care team to monitor your limb health as you will likely have sutures, staples, or both to keep your surgical site closed. Your surgeon or physician assistant will decide when it is time to remove them but it is commonly 4-6 weeks after surgery. In the meantime, it is important to keep your surgical site dressed for optimal healing. If you are in a rehab or nursing facility, your care team will change your dressing and monitor your wound. If you are at home, visits from a home health care or wound care nurse may be needed for dressing changes. These dressing changes may be painful, and you may need to take pain medication prior to them.

Skin Care

During your healing time it will be important for you to perform daily skin checks for *both* your operative and the non-operative limb.
These skin checks need to be performed daily to check for any new wounds, changes in existing open wound sites, skin color, skin temperature and any decreases in sensation. You may need to use a mirror to look at places like the soles of your foot or the end of your residual limb. You may need the assistance of a caregiver if you are having difficulty with these inspections. ***Some drainage from your incision site is normal, but signs of redness or significant drainage need to be reported to your care team as they can be signs of infection.***

It is okay to wash your limb, such as when you are showering, but you should avoid soaking your limb as that may increase swelling. Gently remove your wound dressings and wash your limb with mild soap and water.
Do not use alcohol-based cleaners as they will dry out your skin. Pat dry with a towel carefully to avoid catching your staples or sutures. Replace any wound dressings you were wearing.

If your lower limb amputation is related to circulatory insufficiency (poor blood flow) and/or Type II diabetes, your remaining limb is at increased-risk for future amputation making skin inspections of *both* limbs very important. Statistics show that 55% of individuals with both diabetes and vascular disease undergo a second amputation within 3-5 years. (7)

During this time, it is also very important to wear your limb protector when out of bed to protect your surgical site if a fall should occur.

Pain

It is not uncommon to experience phantom limb pain. Phantom limb pain is when the *phantom sensations* (feeling your amputated limb or toes, even though they are no longer there) become so strong that they result in pain. It is believed to be caused by mixed signals from your brain and can be triggered by certain activities or conditions such as exposure to cold or changes in barometric pressure. This pain typically lessens over time and varies in both frequency and severity. It may be mild or severe, intermittent or continuous, and may be described as: aching, throbbing, burning or shooting.

Nutrition / Dietary Management

Your wound healing is greatly influenced by your general health and nutrition. Recommendations for proper healing includes a diet that is high in protein, rich in whole grains, and focuses on plenty of fruits and vegetables. This ensures that you have adequate protein (which are made up of amino acids) for tissue growth, vitamins essential to healing, complex carbohydrates for protein sparing energy, and proper hydration for tissue health and blood circulation. Controlling your blood sugar (if you are diabetic) will reduce healing time along with smoking cessation.

PROSTHETICS

In this phase you will be focused on the healing and shaping of your residual limb in anticipation of the next phase of your journey that involves prosthetic fitting. Your care team will be following you throughout this healing phase as you will likely have several follow up appointments with your surgeon and care team as they monitor your limb health.

During your hospital stay you will likely be given a protector for your residual limb. It is important to wear your protector at all times when you're out of bed, chair, transferring or working with therapies. This applies to both below knee and above knee amputees. Your protector can admittedly be rather cumbersome and feel like an inconvenience, but the importance of this device cannot be understated. Your protector is a device that will help you reduce your healing time and improve the overall fit and function of your prosthesis.

Limb Protector

Limb protectors are designed to protect your residual limb and incision site from any bumps, scrapes or falls that may occur throughout the healing process. There is an increased likelihood of falls following amputation, which could result in external trauma to your residual limb. This trauma may break open the incision site, resulting in extended healing times, the need for revision surgery, or possibly even higher amputation.

Limb Protectors help to keep the affected joints extended and stretched. This is important during this time as you have a greater risk for developing a joint contracture (shortening of the muscle) due to extended time periods spent in the same body position.



Above Knee Limb Protector



Below Knee Limb Protector

Shrinkers

Shrinkers will also be provided to you while you are in the hospital. It is important to know that you should not wear your shrinker until instructed by your provider. Shrinker wear can vary from patient to patient depending on multiple factors. A shrinker is used to reduce, prevent, or control swelling (edema) in your residual limb, and will also promote healing. Shrinkers are designed to fit snugly and apply pressure to the soft tissues of your limb. The shrinker can be applied over dressings (sutures, staples) as necessary.



Above Knee Shrinker



Below Knee Shrinker

Limb Shapes

It is important to know that your residual limb must be a *cylindrical* or *conical* shape in order to successfully put on a prosthetic socket. It is natural for your residual limb to appear *bulbous* following surgery. A shrinker will aid in the reduction of the swelling or fluid on the bottom of your residual limb. This will help prepare your residual limb shape for a prosthetic socket and greatly reduce the difficulty of donning your prosthesis.



Bulbous



Cylindrical



Conical

For proper hygiene you should hand wash with fragrance free mild soap, rinse thoroughly and air-dry your shrinker daily, especially if there is drainage.

For specific questions regarding your protector or shrinkers, please refer to the education sheet provided to you in the hospital or call a member from your prosthetic team as they will be happy to assist you with your questions or needs.

There are four milestones to meet before the prosthetic process can begin:

1. Your residual limb and incision site are completely healed. Free of any discharge or scabbing.
2. You have been wearing your shrinker for a minimum of 1-2 weeks.
3. Your residual limb shape has reached either a cylindrical or conical shape.
4. You are able to stand for more than 3 minutes (with support) if you are an above knee amputee.



Not Healed



Not Healed



Nearly Healed



Healed

THERAPY

Functional Goals: Early on in therapy you will sit down and discuss your functional goals. It is important to think about your home, work, social, and recreational life when coming up with your goals. Objective tests will be performed early on in your rehab process to help guide your goal making.

Equipment: Once out of the hospital, you will need to obtain equipment to help you be safe and mobile in your home. Your physical and occupational therapists will help determine what specific equipment is required. Equipment may include wheelchairs (purchased or rented), walkers, canes or crutches, a shower chair, and a Reacher. You may also require special footwear for your unaffected side to help prevent future problems. You will work with your medical team and a durable medical equipment company to obtain this equipment. Some equipment may require prior authorization from your insurance company. When deciding on what type of equipment to order, try to consider your long term (several years) needs as insurance may limit how often new equipment can be received.

Contracture Prevention: While waiting for your prosthesis, it is vital that you work to prevent contractures (shortening of the muscles). Contractures are caused by a lack of stretch or movement throughout a joint. Contracture prevention is accomplished by performing daily stretches and positioning recommendations from your therapist, limiting the time you spend sitting in one spot without changing leg position, and avoiding putting pillows under your residual limb when sitting or lying down.



Knee Flexion Contracture



Hip Flexion Contracture

Developing contractures can slow down the rehab process and negatively affect the fitting of your prosthesis and your future ability to walk.

Scar/Skin Care

It is important to spend time caring for your skin and scar after an amputation. You should perform daily skin checks to your scar and residual limb to ensure there are no signs of poor healing or infection. Use a mirror or ask for help to check the hard to reach and see areas. You should also perform daily skin checks on your non affected limb. Massage techniques and tapping of your residual limb can be done to help decrease your sensation of phantom limb pain. Desensitization techniques using different materials and textures can also be performed to make your residual limb less sensitive/ painful. Scar mobilizations are done to prevent thick, hard, and painful scars from forming over your incision. Scar mobilization should be done only once your incision is fully healed. Your physical therapist will provide you with specific instructions and timelines on when to perform massage, tapping, desensitization, and scar mobilization techniques. Do not attempt these techniques until instructed.

If your amputation was due to diabetes, vascular insufficiency, or numbness in the feet from neuropathy you are at a high risk of requiring future

amputations. This is why it is critical to monitor the skin condition of both legs and manage your chronic medical conditions.

Signs of Infection that Warrant an Immediate Call to your Physician Include:

- Worsening or spreading redness around the incision or limb
- Swelling or increased warmth around the incision or limb
- Discharge from the incision site, especially with a greenish color or bad odor
- A fever or a general feeling of illness
- Any new openings along the incision or on the residual limb (blisters, abrasions)

If your lower limb amputation is related to circulatory insufficiency (poor blood flow) and/or Type II diabetes, your remaining limb is at increased-risk for future amputation making skin inspections of *both* limbs very important. Statistics show that 55% of individuals with both diabetes and vascular disease undergo a second amputation within 3-5 years. (7)

Pain Management

After your amputation you may experience painful sensations across your residual limb. This is often described as burning, tingling, or itching sensations. Desensitization techniques along with pain medications can be used to help decrease pain. Your therapist will teach you various desensitization techniques.

Shrinker Wear: Once a shrinker is recommended, consistently monitor the shrinker for proper application and fit.

Wear your shrinker at all times, day and night, except when showering, bathing or during skin care treatments. For proper hygiene you should hand wash with fragrance free mild soap, rinse thoroughly and AIR DRY your shrinker daily, especially if there is drainage.

Exercise: Your therapist will provide you with a handout designed for your strength and functional needs.

Strengthening: Adequate strength is required to be safe and independent after an amputation. It is important to perform your prescribed strengthening exercises to increase your success of utilizing a prosthesis in the future.

Stretching: Daily stretching is required to prevent contractures and to allow use of a prosthesis. Stretching will also help aid proper walking mechanics and can decrease musculoskeletal pain.

Balance Activities: Balance exercises are required to prevent falls.

Positioning: Your therapist will provide you positioning recommendations. These will assist with joint mobility, prevent contractures, decrease pain, and increase your success of using a future prosthesis.

Transfers and Walking: Therapy will teach you how to perform safe and efficient transfers. You will also spend time working on safe walking techniques with your non affected limb and an assistive device. It is important to maintain the strength, balance, and flexibility of your non affected leg to optimize future walking ability.

FINANCIAL/EMOTIONAL

Your life has changed immensely. The immediate shock of surgery may now be wearing off and you may have more time to think about how your amputation will affect your future day to day life. Your support system and post-operative response from family and friends will affect your emotional response to your amputation.

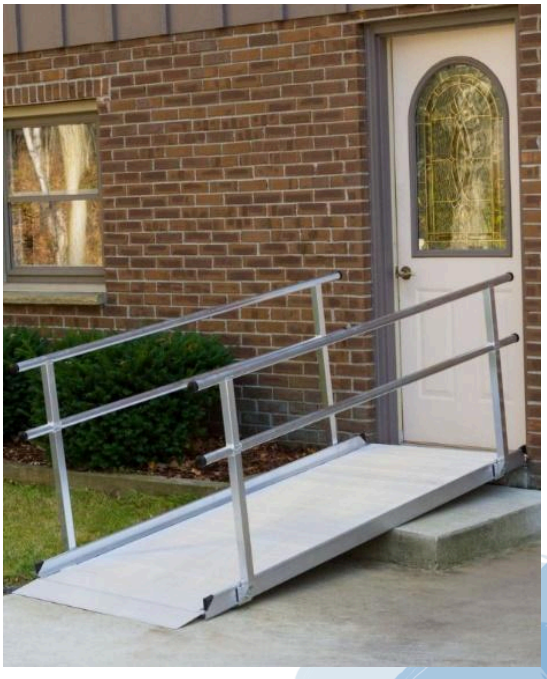
Accepting your new body can be a challenge during this phase. It is important to recognize that your limb loss does not define you. You are you, a whole person that can and will learn to live life to its fullest despite the challenges you have been dealt. Again, reach out for help and do not be shy to request emotional assistance during your post-operative treatment. It will take clear communication with your support staff to determine the right amount of assistance you need. Do not be afraid to ask for help and do not be afraid to request less help if your caregiver's assistance does not meet your needs.

HOME MODIFICATIONS

Home modifications and equipment needs are usually discussed prior to your discharge home. Home safety evaluations may be ordered and initiated through home care therapy. Recommendations for home modification will come from therapists, but it is up to you or a family member to initiate the process. Social workers can request a MNChoice assessment to see if you qualify for a waiver to help cover the cost of home modifications, however it can take the county up to 20 days to perform an initial assessment. If you are already on a county waiver or have Medical Assistance, these services may cover funding for home modifications.

Ramps: You may need to have a ramp put in to help you enter your home while you are in a wheelchair after your amputation. Metal Ramps independently built, prefabricated, or contracted can be purchased or rented and set up. Ramp ADA codes:

- Ramps may have a maximum slope of 1:12. **ADA recommends a more gradual slope of 1:16 to 1:20, whenever possible.*
- Ramps must be a minimum of 36 inches wide. Some areas require wider ramps.
- All edges must be protected to keep anyone from slipping off.
- All ramps shall have top and bottom landings as wide as the ramp itself and at least 60 inches long.
- Landing size must be at least five feet square.
- Ramps must have handrails on both sides if their rise is greater than 6 inches or their length is greater than 72 inches.



Stairs / Handrails: You may need or want to have handrails added to your stairs for safety. A local contractor in your area could assist in placement of handrails.

Showers: You may need to have grab bars added for safety of getting in and out of a shower. A shower chair is often needed and can be purchased at a local medical supplier or retail store. A local contractor would be able to put in grab bars properly.

Assistive Devices: Equipment such as wheelchairs, walkers and canes will be recommended in the hospital if you are discharging home straight from the hospital. In the case that you are transitioning to a transitional care unit/subacute setting that facility would then be responsible for determining and ordering equipment.



- Walkers are often distributed by hospitals; however, if they are not, you or a family member can purchase one at a local Durable Medical Equipment (DME) Store.
- Wheelchairs and tub benches are not usually distributed at hospitals. You or a family member can purchase one at a local DME store.
- If you are on a county waiver or have Minnesota Assistance for insurance, equipment can be submitted for funding. Medicare covers some equipment but usually only one mobility device such as a wheelchair every 5 years. Medicare will not traditionally cover a wheelchair and walker.
- If purchasing an assistive device on your own, you are directed to local durable medical companies, general stores like Walmart, or online sources like Amazon. Amazon is often the most affordable place to order equipment.

Financials

Most of these services are not covered by insurance. A social worker can provide assistance or have programs to offer to assist with finances.

Transportation

You will likely not be able to drive right after your amputation. Call your insurance company to determine if you have coverage for ride service.

Meals

You may need to have help with meals while you are recovering after your amputation. There may be local options for getting prepared meals delivered to your home. Eligibility for Meals on Wheels typically consists of those 60 years or older. Those younger than 60 years of age but are considered homebound and unable to provide nutritious meals for themselves may also qualify for meals on wheels. Caregivers and spouses of recipients are also eligible for these delivered meals.

Home Healthcare

This service is available for individuals who are considered homebound. This means that you would only be leaving your home for medical appointments, religious services, or attending a licensed adult day care center. Your medical doctor will reassess this status after 60 days and update status accordingly. Home care agencies are available in your area and offer nursing, PCA and rehab services. They may also be able to help with lite housekeeping duties. Life alert systems may be beneficial to provide 24/7 immediate emergency assistance. There are many options available and it may depend on your area to find a local provider. **CentraCare Health Medical Alert system is available and can be reached at (320) 255-5700.**

Discharge Planning:

- Assess discharge location based on insurance coverage, overall health, limb condition, and available support from family and friends.
- Follow a proper diet high in protein to support healing.
- Consult with a registered dietitian if necessary for personalized guidance.
- Obtain necessary equipment to ensure safety and mobility at home.

Limb Protection/Shrinkers:

- Check skin/wound daily for any signs of infection or complications.
- Monitor the condition of the remaining limb as well.
- Wear a limb protector at all times when out of bed, chair, transferring, or during therapy sessions.
- Limb protector helps keep affected joints extended and stretched.
- Start wearing shrinkers once instructed by the surgeon to aid in shaping and reducing swelling.

Outpatient Therapy:

- Schedule and attend outpatient therapy sessions to regain strength, mobility and independence.
- Perform prescribed exercises regularly.
- Therapists will assess and recommend specific equipment based on individual needs.

Financial/Emotional Support:

- Meet with a psychosocial counselor to help cope with emotional and psychological challenges associated with the amputation and recovery process.
- Consider undergoing an assessment through MNChoices to explore available support services and resources.

Following this checklist can facilitate a smoother transition from the post-operative phase to ongoing rehabilitation and adjustment to life with limb loss.

PHASE 4 • Prosthetic



MEDICAL

This phase will typically begin when your surgeon or provider determines that your residual limb is healed and can withstand the weight bearing pressure experienced when utilizing a prosthesis.

Skin Care

It is important for you to perform daily skin checks for *both* your operative and the non-operative limb even when your incision and residual limb are fully healed following surgery. These skin checks need to be performed daily to check for any new changes in skin color, breakdown, temperature and any decreases in sensation. You may need to use a mirror to look at places like soles of the foot or end of your residual limb.

Statistics show that 55% of individuals with both diabetes and vascular disease undergo a second amputation within 3-5 years (7)

Monitoring your residual limb skin health is very important following the fitting of your prosthesis. You may be asked to check your skin more often following the fitting of your prosthesis. Your prosthetist will instruct you how often to check your skin following the fitting of your prosthesis. You may need the assistance of a caregiver if you are having difficulty with these inspections.

If your residual limb is fully healed and free of open wounds it is important to maintain good skin hygiene on your residual limb. Good skin hygiene involves daily washing with a mild soap, pat dry with a towel, allowing to fully air dry for 15 minutes before putting on your prosthesis. When not wearing your prosthesis, wear your shrinker. This will maintain a consistent prosthetic fit. You should avoid shaving hair from the residual limb, it can result in painful ingrown hairs.

If your lower limb amputation is related to circulatory insufficiency (poor blood flow) and/or Type II diabetes your remaining limb is at increased-risk for future amputation, making skin inspections of *both* limbs are very important.

Pain

It is common to experience an increase in phantom pains (feeling your amputated limbs even though they are no longer there) following the initial fitting of your prosthesis. Your prosthetist will provide you with initial wear instructions that will gradually increase your prosthetic wear and weight bearing. This will most likely result in a gradual decrease in phantom pains as your residual limb becomes accustomed to new weight bearing pressures.

IS A PROSTHESIS RIGHT FOR ME?

The decision and choice of obtaining a prosthesis is up to you. It's recommended you consult with other family members as well as your care team when making that decision Take into consider the following when decising whether or not to pursue a prosthesis:

1 Your overall health



Other medical conditions that may interfere with your rehabilitation include respiratory difficulty, cardiac issues or significant joint pain.

2 Level of amputation



Above knee amputations require more extensive rehabilitation than that of below knee amputations due to the challenges of controlling a prosthetic knee.

3 Limb Condition



Contractures, scars, skin conditions or recurring sores that may affect prosthesis fit and comfort.

4 Motivation/Goals



Desire to participate in the prosthetic process and rehabilitation in order to successfully use a prosthesis in your future.

5 Activities to Return To



Activities specific to your work, recreation or daily tasks.

6 Therapy Needs



The amount and type of therapy needed is based on your overall health and level of amputation.

OTHER MOBILITY DEVICES NEEDED IF YOU DO NOT DESIRE A PROSTHESIS

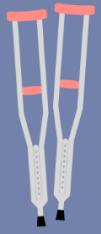
1 Wheelchair



2 Walker



3 Crutches



How K-Levels are Determined

K-levels are a rating system created by Medicare and used by most insurance companies to indicate a person's rehabilitation potential. It is based on your potential functional level and it will determine what type of prosthesis you will be eligible for.

Your K-Level will be determined by a provider. A physical test and functional outcome measures are common tools used to determine your score, typically performed in a clinic. If you are unable to complete a physical assessment, your provider will assign your level based on an evaluation.

K0 Level Does not have the ability or potential to ambulate or transfer safely with or without assistance. A prosthesis does not enhance quality of life or mobility.	**K0**
K1 Level Has the ability or potential to use a prosthesis for transfers or ambulation on level surfaces at fixed walking speeds. Typical of the limited and unlimited household ambulator.	**K1**
K2 Level Has the ability or potential for ambulation with the ability to traverse low-level environmental barriers such as curbs, stairs or uneven surfaces. Typical of the limited community ambulator.	**K2**
K3 Level Has the ability or potential for ambulation with variable cadence. Typical of the community ambulator who has the ability to traverse most environmental barriers and may have vocational, therapeutic or exercise activity that demands prosthetic use beyond simple locomotion.	**K3**
K4 Level Has the ability or potential for prosthetic ambulation that exceeds basic ambulation skills, exhibiting high impact, stress or energy levels. Typical of the prosthetic demands of the child, active adult or athlete.	**K4**

PROSTHETIC APPOINTMENTS



Visit #1 - Consultation / Evaluation

This may occur at the prosthetic clinic, hospital or other location as needed. This first appointment allows you to get to know your prosthetic team. Your medical history will be reviewed, along with your lifestyle, hobbies, career and prosthetic goals. It is a good idea to bring along a family member or close friends to ask questions and help absorb all the information. If you have not done so already, schedule an appointment with physical therapy as soon as possible following your trial fitting (aka, diagnostic fitting) of your prosthesis.

Visit #2 - Measurement / Casting



At this appointment you will be measured and have a cast taken of your residual limb. A smooth plaster bandage will be applied to your limb. After the plaster hardens it is removed. This serves as a negative impression in which to fabricate your custom prosthesis. Also, at this appointment, you may be asked to perform a series of movements to assess your current physical functional and strength. It is recommended you wear loose pants or shorts, if possible, to this appointment, as it allows easier access to your limb when casting. For below knee amputees the cast is typically taken in a seated position. For above knee amputees a cast is usually taken standing in the parallel bars with your sound leg. It is beneficial to have the strength and ability to stand for over 3 minutes with your sound leg utilizing parallel bars during the cast if you are an above knee amputee.

Visit #3 - Diagnostic Fitting



During this appointment your prosthetist will carefully evaluate the fit of your diagnostic socket. Proper socket fit is critical for comfort and to prevent skin damage or discomfort caused by friction or asymmetric pressure. Your prosthetist uses a clear diagnostic socket for this important evaluation. Once the socket is properly adjusted, other elements such as prosthesis height and alignment will follow. Your diagnostic prosthesis is made of a different material than that of your final prosthesis. The diagnostic prosthesis is often heavier and bulkier. It is important to bring a pair of shoes to this appointment as you will likely take your first steps with a prosthesis.

Diagnostic Sockets

Below Knee





Above Knee



Visit #4 - Definitive (Final) Fitting & Delivery

It is at this visit you will receive your final prosthesis. Your prosthetist will ensure it fits properly and final alignment adjustments will be made. You will receive a care and use guide, as well as plans for follow up appointments. If you notice any lasting redness, unusual discomfort or have any other concerns in the days following this appointment, you should call your prosthetist. Do not wait for your follow up appointments.

Definitive or Final Prostheses



Below Knee Suction



Below Knee Pin Lock



Above Knee Suction



Above Knee Lanyard

FOLLOW UP VISITS

To avoid small problems from growing into bigger issues, it's important to keep your follow up appointments. If you have any questions in between your scheduled office visits, please call your prosthetist so they can be addressed by phone or to schedule an appointment. We are committed to answering your questions promptly to ensure your ongoing comfort, safety and success.

THERAPY

Functional Goals: Early on in therapy you will discuss your functional goals. It is important to think about your home, work, social, and recreational life when coming up with PT goals. Objective tests will be performed early on in your rehab process to help guide goal making.

Contracture Prevention: It is still vital that you work to maintain flexibility. Contractures can develop at any stage during your recovery process. Contracture prevention is accomplished by performing daily stretches and positioning recommendations from your therapist, limiting the time you spend sitting in one spot without changing leg position, and avoiding putting pillows under your residual limb when sitting or lying down. Developing contractures will slow down the rehab process and negatively affect the fitting of your prosthesis and your future ability to walk.

Shrinker Wear: Continue to wear your shrinker when you are not wearing your prosthesis, day and night. It is vital that we maintain shape, volume and size to ensure that your final prosthesis will fit you properly.

Exercise: Your therapist will provide you with a handout designed for your strength and functional needs.

Strengthening: Adequate strength is required to be safe and independent with management of your prosthesis. It is important to perform your prescribed strengthening exercises to increase your success of utilizing a prosthesis in the future.

Stretching: Daily stretching is required to prevent contractures and to allow use of a prosthesis. Stretching will also help aid proper walking mechanics and can decrease musculoskeletal pain.

Balance Activities: Balance exercises are required to prevent falls.

Positioning: Following positioning recommendations will assist with joint mobility, prevent contractures, decrease pain, and increase your success of using a future prosthesis.

Transfers and Walking: Therapy will teach you how to perform safe and efficient transfers while wearing your prosthesis. You will also spend time working on safe walking techniques while wearing your prosthesis.

FINANCIAL/EMOTIONAL

During this phase you may need to contact your local county in regards to obtaining additional medically needed services or insurance coverage. The state of Minnesota offers a wide variety of medical services. You can go to www.MN/gov/dhs to learn more about what the state and/or your county will offer.

Prosthesis Acquisition:

- Determine the design, fabricate, and fit the prosthetic limb.
- Consider factors such as overall health, level of amputation, limb condition, motivation/goals, activities to return to, and therapy needs when obtaining a prosthesis.
- If opting not to pursue a prosthesis, consider alternative mobility aids such as a wheelchair, walker, or crutches.

Skin/Wound Care:

- Continue to check skin/wound daily for any signs of irritation or complications.

Education and Maintenance:

- Learn how to wear, clean, and maintain the prosthesis and consumable supplies.
- Wear shrinker when not wearing the prosthesis to aid in shaping and reducing swelling.

Therapy and Rehabilitation:

- Continue working with outpatient therapy and the prosthetic team to successfully learn to walk and adapt to using the prosthesis.

This checklist outlines key steps and considerations for individuals in the prosthetic stage of recovery, focusing on acquiring and adapting to the prosthetic limb, maintaining skin health, and ongoing rehabilitation efforts.



MEDICAL

During this phase you will continue to work with your medical team to manage any other comorbidities you may have.

DM and PVD

Diabetes and peripheral vascular disease are the most common medical conditions that result in amputation. If you have either of these as a diagnosis, your ongoing attention to your medical care is essential as there is significant risk of potential amputation of your other limb. These diseases can also result in damage to other systems such as your heart, kidneys, eyes and produce increased risk for stroke.

Musculoskeletal

Back and hip problems are unfortunately very common in amputees. The loss of a limb changes the body's center of gravity, its balance point, such that muscles of the back and hips are used in a different biomechanical symmetry than what they had been doing for their entire life. These types of problems can be decreased by strict adherence to the core and leg strengthening exercises that you have learned during your rehabilitation. It is imperative that you continue to use these exercises regularly to try to avoid these problems.

Neuropathy

Peripheral neuropathy is a decrease in sensation and/or decrease in ability to use the muscles due to a lack of nerve supply in a limb. There are medications that can help reduce the often-increased pain felt in a peripheral neuropathy limb. At present there is no known medication that will reverse peripheral neuropathy. The most danger comes from the lack of sensation which makes it very important that persons with this diagnosis perform daily skin checks to look for any open skin areas which could lead to infection.

Obesity

As a society this is the most serious health problem that currently exists. For amputees, it can make any or all of these previously discussed secondary medical concerns an even larger problem.
The good news is that all of this can be controlled with healthy eating habits and regular exercise. A meeting with a registered dietician would be appropriate and your Physical Therapist can help you establish a long-term exercise program.



PROSTHETIC

In this phase you have been fit with your definitive prosthesis and have begun prosthetic gait training. It is continually important to maintain contact with your prosthetist and attend your follow up appointments. If you have any questions in between your scheduled office visits, you should contact your prosthetist right away.

THERAPY

During the rehab phase you will continue to work on flexibility, strengthening, core stabilization, and gait training with your prosthesis.

- **Flexibility:** Continue to perform your hip, knee, and ankle stretching exercises and use proper positioning to prevent contractures. This will allow for the required joint motion for normal gait mechanics.
- **Strengthening:** At this time, your therapist may progress to resisted strengthening using things such as therabands, ankle weights, or machines. You will work on improving strength both on the affected and unaffected limbs. Ongoing upper extremity strengthening will be recommended to help with transfers and gait training with an assistive device.
- **Core Strengthening:** Core strengthening is very important to allow you to maintain balance and posture while learning how to move with your prosthetic. Core exercises may be progressed by using equipment such as foam pads, bosu balls, trampolines, or computerized equipment such as the Wii or neurocom.
- **Gait Training:** You will continue to work on walking in this phase. This will likely start with the parallel bars but may progress to land with or without the use of an assistive device. Your therapist will give you walking distance/duration goals to try and meet each week. If available, the use of a treadmill or body weight supported treadmill may also be used. You may practice walking on uneven surfaces, in the grass, up and down hills or curbs, and stairs. For those hoping to return to sports and recreational activities, tasks such as jogging or sport-like drills will be practiced during the rehabilitative phase.
- **Aerobic Activity:** Regular aerobic activity is recommended to help maintain and improve your endurance, in order to help maintain or decrease your body weight, and to support overall cardiovascular health. Aerobic activity goals can be met with equipment such as recumbent or upright bikes, arm bikes, treadmills or with walking on land.
- **Home Exercise Program:** It is very important to maintain your home exercise program throughout rehab and after rehab in order to set yourself up for lifelong success with your amputation and to prevent future decline or issues.

Always follow the guidance of your therapist when deciding when and how to progress a new skill such as walking. Walking should not be attempted before clearance is provided in order to prevent risk of injury and falls.

FINANCIAL/EMOTIONAL

The rehabilitative phase can be a very exciting yet challenging time in your recovery. You may find yourself riding on the excitement of using a prosthesis and returning back to previously performed tasks, or you may find yourself frustrated when realizing the amount of time and effort it takes to do skills that were once easy. Many people assume that they will get a prosthesis and progress very quickly.These individuals can feel discouraged when realizing that initially when using a prosthesis, it may be hard to balance and control yourself.
You may move slower than you used to and you may tire out more quickly. With time and practice your confidence will improve. Try to provide yourself grace as you relearn skills in the rehabilitation phase.

The rehabilitative phase may be the most appropriate time to seek outpatient counseling services. Your therapy team may ask you about and provide screening questionnaires about your emotional health. Be open and honest with your care team so that they can provide you with the best resources. Your emotional health will affect your physical health and recovery time. Your therapist or primary care doctor can connect you with a member of the integrated behavioral health team. You can meet with this person once or several times to help work through any psychosocial needs. The integrated behavioral health team can help connect you with a long-term psychotherapist if needed. Working with a support group can also be very beneficial. Communicating with and learning from others that have or are currently going through similar challenges can be helpful for you as well as your family/support system. Utilize resources such as the Amputee Coalition, Facebook groups, or Reddit groups to help find established support groups.

Prosthetic Fit and Function:

- Focus on perfecting the fit of your prosthesis for comfort and functionality.
- Continue learning how to walk and live with your prosthesis effectively.

Shrinker Usage and Skin Monitoring:

- Wear shrinker regularly to aid in shaping and reducing swelling.
- Monitor your limbs daily for any potential skin issues or irritations.

Home Exercise Programs:

- Continue home exercise programs to maintain and improve strength, flexibility, balance, and walking ability.
- Work closely with your physical therapist on specific exercises tailored to your needs.

Progressive Training:

- Gradually progress to higher-level tasks such as walking outdoors on uneven surfaces, or navigating ramps and stairs.

Team Collaboration:

- Follow recommendations and guidance from both the prosthetic and rehabilitation teams.
- Communicate any challenges or concerns encountered during the rehabilitation process.
- Monitor and manage any secondary medical concerns that may arise, seeking appropriate medical attention as necessary.

By adhering to this checklist, individuals in the rehabilitation stage of their amputation journey can focus on optimizing their prosthetic use, improving mobility and function, and addressing any ongoing medical needs to facilitate a successful recovery and adjustment to life with limb loss.



MEDICAL

Managing Comorbidities

It is important to maintain a relationship with your primary provider as they will play a vital role in providing prescriptions and documentation to justify the need for future prosthetic care in an effort to obtain insurance payment and authorization. Most insurances require specific documentation in order to provide insurance coverage for prosthetic devices.

Your residual limb will continue to change throughout your life. As a result of your residual limb change, you will eventually require a prosthetic socket replacement. Your prosthetist can attempt to adjust your socket to accommodate your residual limb change, but eventually your residual limb will change enough and your socket can no longer be adjusted to provide a successful outcome. At that time, you will need a new socket and you will most likely need to see your primary provider to obtain proper documentation for insurance payment. Keep in mind your first socket will fit you appropriately for the least amount of time as your body and residual limb typically undergo the greatest amount of change following your surgery, healing and rehabilitation.

You may also require new prosthetic components, such as feet and knees, as you continue to progress and your activities and goals change. You will most likely need to see your primary provider to obtain documentation regarding the medical necessity to obtain payment for such devices.

Your prosthetist is the best resource to help you with specific insurance documentation requirements. He or she will guide you and your provider through this process as needed.

If your amputation was due to diabetes, vascular insufficiency, or numbness in the feet from neuropathy you are at a higher risk for developing skin break down/wounds and requiring future amputations. This is why it is critical to monitor the skin integrity of both legs and manage your chronic medical conditions. Now that you are in the process of wearing your prosthesis for longer periods of time it is still important for daily skin checks. We want to ensure that specific areas of your skin are not receiving excess pressure causing skin break down or wounds. If you also qualify for the diabetic shoe program, be sure to stay up to date with your diabetic footwear.

PROSTHETIC

Prosthetic Management

Once you have been fit with a definitive prosthesis your prosthetist will establish a long-term treatment plan, which involves regularly scheduled follow up appointments. The timeframe and frequency are dependent on your individual needs. Oftentimes your prosthetist will recommend seeing you once every 6 months to 1 year to ensure your prosthetic supplies remain in good condition. Your prosthetic supplies are everything you use in conjunction with your actual prosthesis. Examples of prosthetic supplies are; shrinkers, sheaths, socks, liners and suspension sleeves. It is important to keep these supplies and your residual limb clean to ensure good residual limb health. Oftentimes these supplies become

worn out, stretched, soiled or torn. This can cause a decrease in your prosthetic suspension, comfort and overall residual limb health.

You may experience unexpected residual limb soreness, redness or discomfort when wearing your prosthesis. If you experience any of these symptoms, be sure to contact your prosthetist as soon as possible. These symptoms typically begin with a mild nature and may continually get worse.
If you contact your prosthetist when the symptoms have just begun, he or she can typically resolve any issues before they become a larger problem.

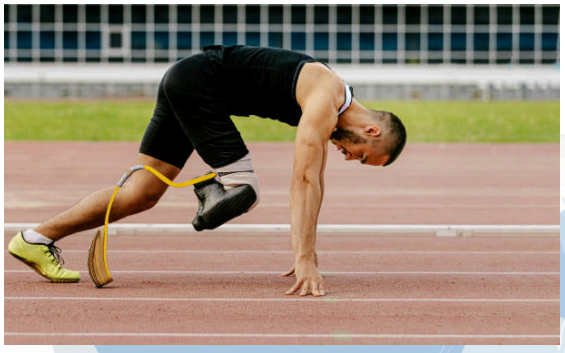
Oftentimes your prosthetic fit can change with fluctuations in weight, diet, activity level, residual limb volume/shape and even change of season/weather/climate.

Be sure to continue managing your prosthetic fit with the appropriate sock ply throughout your day to reduce the risk of residual limb soreness, redness or discomfort. If adjusting sock ply does not resolve the prosthetic issue you are experiencing, contact your prosthetist.

Your prosthesis most often is maintenance free. However, some feet, knees, vacuum pumps, valves, locks and other components require regular maintenance. Your prosthetist will explain and instruct you if your prosthesis includes any of these components and if they are your responsibility for maintenance.

Specialized Prosthesis

Specialized prostheses are specifically designed for more advanced functional mobility skills or conditions. These more advanced prostheses are available to amputees that have developed the flexibility, strength, balance and cardiovascular tolerance necessary to participate in higher performance levels. Specialized prostheses will allow you to achieve your desired level as part of your long-term progression.



THERAPY

Exercise: Once discharged from rehab, you will want to continue with regular physical activity in order to prevent losing the gains you made. Regular exercise will be encouraged.

The *American College of Sports Medicine* recommends:

- 2-3 full body strengthening routines per week
- 150 minutes of moderate intensity aerobic activity per week. Moderate intensity can be determined using the talk test. While doing aerobic activity you should be able to talk but not sing. You should be able to get a few words out and then need to catch your breath.

A sedentary lifestyle is one of the biggest risks you have on your health and recovery. Staying active and eating well can help combat conditions such as diabetes which can increase risk of future amputation.

Health and Wellness Activities:
Staying active and making healthy lifestyle choices is very important when living with limb loss. Once deemed safe, we encourage ongoing participation in recreation and leisure activities. Search your area for adaptive sports and recreation activities that exist. Many adaptive programs including hunting, fishing, bowling, and sports have options for amputees. You can search the Amputee Coalition Adaptive Sports Program for more information on available programs in your area.

Weight Gain: Weight gain can cause great challenges with prosthetic use. Weight gain can increase pain, affect the fit of your prosthesis, put more pressure on your joints and make walking more difficult. It is important to maintain a healthy body weight and monitor your weight regularly. Consider working with your physician or requesting a referral to a formal weight loss clinic for guidance if needed.

Smoking: Smoking is a primary risk factor for poor healing and future complications. It is vital that you work to stop smoking. Work together with your medical team to find options to help assist you with smoking cessation.



FINANCIAL/EMOTIONAL

By this time, you may be leaning towards the acceptance stage of grief. Specific challenges that may present during this phase include things such as explaining your limb loss and change to a broader social circle. If returning to work, coworkers may start asking you questions or try to provide help that may or may not be needed. Similar situations may happen when returning to sport, activities, and hobbies. Returning to intimacy is important but can pose some challenges. If in a long-term partnership or marriage, you may have found yourself closed off to your partner initially after your surgery.

Be very open about your feelings and your concerns with your partner, they too will be adjusting to your limb loss. Initially you may feel awkward or even uncomfortable with intimacy but with proper communication and practice, returning to sexual activity can be exciting for you and your partner. If struggling with the mechanics of sexual activity, speak with your rehab team to learn advice on how to determine safe and comfortable techniques. If you are struggling with body image or insecurities, ask your primary doctor for a referral to counseling where a therapist can help you work through these challenges.

Returning to school, work, or hobbies is important for healing. These tasks can bring back a sense of pride, purpose, and accomplishment. At some point in your journey, you may also feel the desire to help new amputees in the form of a support group leader, participating in an advocacy group, or serving as a peer mentor.

Emotional Recovery

As you move forward living with your amputation you may continue to benefit from social support. It may be helpful to seek out an individual or multiple person support group. Collaborating with other amputees who are going through similar experiences can be helpful for problem solving challenges, coping with change, and planning for the future. If you find yourself struggling with emotional challenges such as acceptance of your new amputation, motivation to keep working hard, or body image issues, consider asking your primary doctor for a referral to see a professional emotional support counselor. You can find a list of different support groups on the Amputee Coalition Website.

Returning to Work or School

One of your goals may be returning to work after an amputation. Depending on your situation and type of amputation you may or may not be able to do the same job you had prior to losing your limb/s. If there is a plan or option to return to work, rehab may help create work type scenarios to practice while in therapy. Your therapists and medical team will help guide return to work timelines and recommendations. Your therapy team may need to work with your employer to determine appropriate work restrictions or adjustments to accommodate you or your working environment. For lower limb amputees, the amount of standing and walking time may be adjusted, for upper limb amputees, some manual activities may need adjusting.

Your employer is obligated to make *reasonable* accommodations for you through the Americans with Disabilities Act (ADA).

The ADA was developed to ensure you have an equal opportunity to the same employment available to others. ADA employment requirements apply to employers with 15 or more employees.

If your amputation prevents you from working, you may also qualify for Social Security disability benefits. If approved, you may receive cash payments and/or medical coverage. The Amputee Coalition has published a resource guide, Insurance Coverage & Reimbursement, which provides more information about the Social Security Disability Insurance (SSDI) program. You can request a copy of the guide by visiting the Amputee Coalition's website.

Job training, employment organizations, and state vocational rehabilitation programs are also available to help people enter the workforce or change careers. Contact your state vocational rehabilitation department for more information. You can search for local vocational rehab offices through the website: ***https://mn.gov/deed/job-seekers/disabilities/find-vrs/***

Driving

For new amputees, returning to driving a vehicle may be difficult or frightening. There are various transportation services available to provide paratransit to individuals unable to use regular public transportation. These services are typically wheelchair-accessible and may be private or public organizations. The transportation costs vary. Driving an automobile offers independence and personal freedom, but having limb loss does not mean that you have to give up this independence. It is however, important that you are safe to return to driving before you

get behind the wheel. A formal driver's assessment may be recommended, but is not mandatory. You may consider working with an occupational therapist or a certified driver rehabilitation specialist.

They will evaluate your needs, identify applicable adaptive equipment, and provide you with information on purchasing an accessible vehicle.

The evaluation process includes a clinical pre-driving assessment and on-the-road training. A prescription from your physician is required to begin the process.

For more information on the assessment and training, contact:

Courage Kenny Rehabilitation Institute
1-612-262-7855
CKRIDrivingService@allina.com
OR
Adaptive Experts
651-324-0791
http://www.adaptiveexperts.com/

The Association for Driver Rehabilitation Specialists

To search for certified driver rehabilitation specialist:
https://www.aded.net/search/custom.asp?id=2046

Many amputees continue to drive their vehicles without needing to make any vehicle modifications. Here are some tips you might find useful when getting back to driving:

- Adjust the driver's seat all the way back before entering the car to allow plenty of legroom to enter and exit the vehicle.
- Park facing downhill when parking on an incline so you will not have to work against the weight of the door when exiting the vehicle.
- When parking, consider parking where others do not have room or option to park next to the driver's side door.

Vehicle Modification

Depending on your amputation or type of prosthesis, you may wish to purchase a wheelchair-accessible vehicle, or you may adapt an existing vehicle to include accessible features to allow you to drive again.

Modifications to vehicles to make them accessible may include:



Left Foot Accelerator



Shifting Extensions





Mechanical Hand Controls



Power Transfer Seats



Back Entry Lifts and Ramps



Side Entry Lifts and Ramps

There are two companies in Central Minnesota that specialize in vehicle modifications. Both companies also offer wheelchair accessible vehicles for purchase or to lease.

Mobility Works

Roseville, MN 55113
877-275-4907

Cummings Mobility

Albertville, MN 55301
763-497-0103

Hand control modifications require a prescription from your physician as well as an evaluation and training with a Certified Driving Rehabilitation Specialist (CDRS) before you can drive your vehicle. The evaluation will assess your physical and cognitive skills. You would go through training and practice driving with the appropriate modifications. Once your CDRS deems you safe and ready to drive, a road test can be scheduled at your local DMV. You would have the option of renting a vehicle with the appropriate modifications or use your own modified vehicle. Upon passing the road test your vehicle modifications will be listed under "Restrictions" on your driver's license.

Oftentimes vehicle modifications are not covered by insurance. Always check with your insurance provider before modifying your vehicle. A prescription from your physician may not be needed for those modifications that are cash pay. If finances are a concern, the following organizations may provide financial assistance for accessible vehicles or vehicle modifications:

- → **Minnesota State vocational rehabilitation department**
- → **County social and human services programs**
- → **Charitable organizations and churches**
- → **Veterans Administration *(for US military veterans with limb loss)***

If your limb loss is work related, check with your company's workman's compensation policy for financial assistance. Some vehicle manufacturers also offer rebates for individuals who require vehicle modifications. Secondary markets are also available for used accessible vehicles.

Tips for Traveling

When planning for travel, take extra time to ensure you have packed all necessary prosthetic supplies. It may be helpful to research nearby prosthetic offices in case you have any problems while traveling. If traveling by air, contact your airline ahead of time and ask about handicap accessible parking, transportation in the airport, and seating on the plane. Ask how boarding will occur to determine if steps will be necessary. When choosing a hotel, ask about rooms that follow the Americans with Disabilities Act. The hotel website may provide specifics about their handicap accessible rooms.

Going through airport security screening may take additional time. The Amputee Coalition works with the TSA to assure persons with limb loss are screened with dignity and respect.

You will not be required to remove your prosthesis; however, your device may be subject to additional screening. That screening may take place in a private area and you may be accompanied by a companion or individual of your choice.

The TSA has a helpline to provide guidance to those traveling with a disability. You may speak with a representative about any concerns you may have with TSA Cares, (855-787-2227). More information on traveling with a prosthesis may be also found on the TSA website, **TSA.gov**

PHASE 6 • Life with Limb Loss

Health and Wellness

Remaining physically active with limb loss will have its challenges, but also many benefits. Participation in recreation or sport activities can not only improve your strength or mobility, they can also enhance your self-esteem and body image. Recreation activities may include walking, biking, swimming, hunting or fishing. Modified sport activities may include skiing, cycling, wheelchair basketball or tennis, and seated volleyball. Sports and recreational opportunities can range from very casual like a weekend kayak trial to very competitive such as Paralympic participation. Utilize the list of resources in the appendix to research options for adaptive sports and recreation in your area and work with your care team.



PHASE 6 SUMMARY • Life with Limb Loss

Maintain Relationships with Healthcare Providers:

- Stay in touch with your primary doctor and prosthetist, as they will play a crucial role in providing prescriptions and documentation for future prosthetic care.

Residual Limb Changes and Prosthetic Maintenance:

- Understand that your residual limb will continue to change over time, necessitating periodic adjustments and/or replacements of prosthetic sockets and components.
- Check your skin daily for any signs of irritation, pressure sores, or other issues related to prosthetic wear.

Healthy Lifestyle Maintenance:

- Establish and maintain an active, healthy lifestyle to support proper fitting and utilization of your prosthesis.
- Continue your daily exercise routine to maintain strength, flexibility, and overall physical well-being which will aid in prosthetic adaptation and mobility.

By maintaining an active role in your prosthetic care and overall health, you can effectively navigate life with limb loss, ensuring continued independence, participation, and quality of life.

For Caregivers



For Caregivers

Caregiver burden can be defined as the strain or load carried by a person who cares for someone else (Amputee Coalition). It can be common for caregivers to struggle with their own health as they are focusing more attention on the needs of their loved one, sometimes forgetting their own needs. Sleep, good nutrition, and exercise are frequently put to the backburner especially if a caregiver is balancing a job/career and a new caregiving role. There may not be enough time in the day to accomplish all that needs to be done. Emotions that caregivers feel may include guilt, frustration, anger, helplessness, being overwhelmed, and overall exhaustion. On the other hand, other caregivers may feel very rewarded by the opportunity to help out a loved one.

Long term caregiver burnout can lead to physical issues caused by stress, such as poor sleep and headaches, body aches, or weight changes. Make sure to recognize these symptoms early and address them right away to prevent cycling into chronic issues. You can only be a good caregiver if you yourself are well.

Tips for Caregivers

- Practice relaxation techniques (deep breathing, warm baths, short walks, yoga, meditation)
- Eat a balanced and nutritious diet
- Get adequate and consistent sleep (8 hours). Go to bed and wake up at similar times each day.
- Perform regular physical activity
- Take time off for yourself
- Do not be afraid to ask for help
- Seek your own emotional support (whether that be casually through a friend or professionally through a counselor or support group)
- Continue to engage in your own interests and hobbies
- Stay socially connected with your family and friends

Last, do not be afraid to look into respite care. Respite care is planned or emergency temporary care provided to caregivers of a child or adult. Respite programs provide planned short-term and time-limited breaks for families and other unpaid caregivers. Ask your social worker about any potential personal care assistance options, adult day care, or overnight coverage that may exist.

Consider searching **Care.com** to find a part-time or full-time, in-home care assistant. Ask a friend or relative that you trust for occasional assistance to allow caregiver breaks.

Commonly Asked Questions

Q: Will I be in a lot of pain after surgery?

A: As with any major surgery, there will be pain afterwards. Everyone is different and everyone tolerates pain at different levels. We will make sure that your pain is monitored and treated accordingly. Typically, pain is controlled with IV medication immediately after surgery and is then transitioned to oral medication as needed.

Q: How long will I be in the hospital after surgery?

A: Again, everyone is different and your hospital stay will vary depending on a variety of factors. Most patients require in-patient rehabilitation or rehab at a skilled nursing facility after an amputation. This stay may be several weeks. If your pain is well controlled, you have the ability to return home independently and if you need minimal assistance; your hospital stay may only be a few days.

Q: How do I optimize my wound healing?

A: Many things can help your wound heal properly such as proper skin care as well as proper nutrition. Proper nutrition boosts the immune system, promotes collagen synthesis (the main structural protein in skin tissue), and decreases healing time. Many nutrition aspects help with healing, including a higher number of calories, including protein, vitamins A and C, and sometimes zinc.

Q: Will insurance cover my prosthesis?

A: Most insurances cover prostheses. It is recommended that you call your insurance provider and determine if you have an active plan. You may also ask questions such as what is my deductible or out of pocket maximum for the year? Do I have a co-insurance? The answers to these questions will help you determine what you will be financially responsible for. Each plan is different and each policy within that plan can differ. Once you have been casted for your prosthesis, your prosthetic provider can provide you with details of your specific costs based on specific design and components of your prosthesis.



Q: It feels like my foot is still there. Is that normal?

A: It is completely normal to feel pain, tingling, burning and other sensations from what feels like the part of your limb that is no longer there. This is known as phantom limb sensation. For some, these sensations resolve with minimal intervention. Others may require additional strategies to help manage the symptoms.

Q: When do I start to wear a shrinker?

A: Shrinker wear is started once the surgeon/provider gives you the okay to begin wearing it. Typically, the surgeons would give you the okay to wear a shrinker following staple removal. Every situation is different and so when to begin shrinker wear can vary.

Commonly Asked Questions

Q: How long after surgery will I need to wear my shrinker?

A: Typically, a patient will continue to wear a shrinker for the first several months to a year after amputation in order to control limb volume (size of the limb). Some patients continue to wear shrinkers for their entire lifetime as they feel more comfortable wearing the shrinker. Some amputees have issues with chronic edema and need to wear the shrinker when they are not wearing their prosthesis.

Q: Will I be able to walk again?

A: Every patient's story is different and everyone's outcome may be different. If you were able to walk prior to surgery, you will most likely be able to walk after surgery. Recovery after surgery and how quickly you return to an ambulatory status often depends on the level of amputation. A person with a below knee amputation versus an above knee amputation may be able to return to walking quicker as they still have their knee to help control the prosthesis. Walking with an above knee prosthesis can be more difficult due to the added number of joints a person needs to learn how to control and rehabilitation can take much longer.

Q: How long will it take for me to be fit with a prosthesis?

A: A typical time frame for casting and fitting a prosthesis is 6-12 weeks after your surgery. This of course depends on how well your limb heals. Wound healing is often complex and can involve minor to major setbacks resulting in longer wound healing time frames. Everyone is different and the time frame can vary from weeks to several months.

Q: Will it hurt to walk on a prosthesis?

A: In the beginning, there may be mild discomfort as your body gets accustomed to wearing a prosthesis but there should never be pain. If you are having any pain, your prosthetist should be informed immediately so that changes can be made to ensure a comfortable fit. It will take time to build up tolerance to wearing a prosthesis which is why there is a very slow and gradual wear schedule to follow once you receive your prosthesis. This is done in order to allow your limb time to acclimate to the weight bearing pressures, materials and contact of your prosthesis.

Q: How will I get up the stairs to get into my house or to my bedroom?

A: Some people are able to continue going up and down stairs similar to how they did before—by "hopping" up or down one step at a time, using the support of a handrail and/or crutches. Others require alternative methods for going up or down stairs (i.e., going up and down the stairs on your bottom). For short flights of stairs, such as entering a home, a ramp may be built to allow you to use a wheelchair.

Commonly Asked Questions

Q: When can I bathe?

A: Until your wound is fully healed, you will be limited to sponge bathing. You should use warm water and mild soap to gently wash the surrounding areas making sure not to rub directly over the incision/scab. Submerging your incision before it is healed can increase your risk of developing an infection. Once your wound is entirely closed/healed you may start submerging in a shower or bathtub. A shower chair or bench can be used to make bath transfers safer.

Q: When can I drive?

A: You will not be allowed to drive if using narcotics. Once off narcotics, there are several different considerations that impact when and if someone returns to driving. Some of these include: which leg was affected, the location of the amputation, sensation present, strength, and limb/prosthetic control. You should work with your rehab team to determine when you are safe to be cleared for driving. On occasion, a formal driving assessment may be recommended. It is possible that a vehicle alteration is required to allow the left leg or hands to control acceleration and breaking.

Q: What is involved in the casting process?

A: When you first meet with your prosthetist for the casting, he/she will take a set of measurements and note the important features of your limb. Your prosthetist will apply layers of plaster to obtain an impression of your limb which will then be filled with plaster. This provides a model for which your diagnostic socket will be made. Once the proper modifications are made, a technician will construct the diagnostic socket.

Q: What can I expect at the initial fitting of my diagnostic socket?



A: At the first fitting appointment it is important that you wear loose, comfortable clothing. Your prosthetist will explain how to don (put on) and doff (take off) your prosthesis, how to care for it, and provide a wearing schedule for you to follow. You will also learn how to modify the fit of your prosthesis with prosthetic socks and what to look for when you check your limb frequently. Proper alignment is attained while you walk inside the parallel bars and before you leave the office, your diagnostic socket is reinforced for added strength. The diagnostic socket is utilized for 1-2 weeks before your definitive (permanent) prosthesis is made.

Q: Why do I have to go to therapy/rehab?

A: Therapy will assist with ensuring that you have adequate range of motion, strength, and endurance to control your prosthesis. Physical therapy will also teach you how to ambulate properly with your prosthetic to reduce risk for falls and future orthopedic pain/injuries.

Commonly Asked Questions

Q: How often will I be seen for physical therapy?

A: Typically, you will see your physical therapist 2-3 times per week but it is ultimately up to your therapist and physician to determine how many times per week and for how many weeks.

Q: Once I receive my definitive prosthesis, how often will I see my prosthetist?

A: You will need to follow up with your prosthetist often after the delivery of your definitive prosthesis. As you continue to wear your prosthesis more often and become active again, your limb will change in shape and size and your prosthetist will need to make changes to your socket to accommodate those changes. If you are having pain or discomfort at any time, you will need to see your prosthetist immediately.

Q: Will I be able to participate in the sports or leisure activities I did prior to my amputation?

A: Yes! As long as your physician agrees, you should be able to return to the activities you enjoyed prior to your surgery. Prosthetic components today offer the amputee a variety of options that make participation in recreational activities possible. Be sure to express this to your prosthetist so that the proper components can be selected for your prosthesis.

Q: Can I wear different shoes?

A: Your prosthesis was designed to be worn with a specific shoe heel height. Switching to a shoe with a lower or higher heel height (or going without a shoe) can create a range of problems, from discomfort to safety issues, depending on the type of prosthesis. Any change in heel height, changes the ideal alignment of a prosthesis. You can certainly change shoes, but talk to your prosthetist before you change shoe style to a different heel height.

Q: How do I find out if I qualify for additional services?

A: Call your county and ask for a MnChoice Assessment. You can also go to the following websites for more information regarding MnChoices Assessment.

- https://mn.gov/dhs/people-we-serve/people-with-disabilities/services/home-community/programs-and-services/mnchoices.jsp
- **Disability Hub MN –** www.disabilityhubmn.org
  - Or Call Disability Hub MN at 866-333-2466
- **Senior Linkage Line –** www.seniorlinkageline.com
  - Or Call Senior Linkage Line at 800-333-2433

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Roadmap Conclusion

This manual aims to provide guidance and support as you navigate your journey with limb loss. While it offers valuable information and resources, remember that your care team is always available to assist you with any questions or concerns you may have.



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1900 CentraCare Circle, Suite 1550

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(320) 229-4922

CentraCare Heart & Vascular Center

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CentraCare Inpatient Rehab Center

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