

A man and a woman are riding their bicycles on a dirt path in a wooded area. The man is in the foreground, wearing a blue t-shirt, grey shorts, white sneakers, and a black helmet. He is smiling and looking towards the camera. The woman is behind him, wearing a grey tank top, grey shorts, and a black helmet. She is looking forward. They are both riding white mountain bikes. The background is filled with green trees and a large tree trunk on the right. The scene is brightly lit, suggesting a sunny day.

TOTAL KNEE REPLACEMENT

THANK YOU

Thank you for choosing us for your knee replacement surgery. We know you have a choice of where to go for your procedure.

Our goal is to ensure that your stay with us is as pleasant and comfortable as possible. We do this through our unique program that helps to guide you through your journey – so you know what to expect before, during and after your knee surgery. Our dedicated care team is here for you every step of the way so that you have a great experience.

Again, we're so glad that you chose us for your care.

Your Care Team

Table of Contents

Section One: General Information4

Welcome to the Orthopedic Center 5

Overview of the Orthopedic Center 5

Using the Guidebook 6

Pre-op Joint ReplacementClass.....6

FAQ’s about Knee Surgery 7

Section Two: Getting Ready for Surgery..... 11

Exercising and understanding post discharge planning.....12

Anesthesia and You15

Blood donation and Transfusion..... 17

Smoking Cessation72

Pre OP Joint Class..... 21

Week beforeSurgery.....22

Five days beforeSurgery23

One day before Surgery.....25

Night before Surgery.....28

Table of Contents

Section Three: Hospital Care

29

The Day of Surgery

30

Understanding Pain Management.....

33

After Surgery – Till Discharge

34

Post OP Goals Progress Chart.....

34

Fall Prevention

43

Going directly Home

44

Potential Complications

45

Section Four: Living With Your Joint Replacement.....

50

Caring for Yourself at Home

51

Recognizing and Preventing Potential Complications.....

53

Post-op Goals At Home

55

Pre- and Post-op Exercises

57

Activities of Daily Living

64

Fall prevention at home

70

Do and Dont's throughout life

71

Importance of lifetime follow up visits

73

Rules for life after your new Knee

74

Strategies for a successful exercise
program.....

76

Table of Contents

Section Five: Helpful Resources	77
Patient task checklist.....	78
PAT day checklist.....	79
Health History Form.....	80
Before you go home checklist.....	83
Medication Record.....	84
Symptoms requiring immediate attention	85
Medications to stop before surgery.....	86
Glossary of Terms	87
Exercise Log.....	89
ROM Log.....	92
Nutrition recommendation.....	95
Phone numbers.....	97
Important dates.....	98

Section One:

General Information



Welcome

We are pleased that you have chosen the Orthopedic Center. Your decision to have elective joint replacement surgery is the first step towards a healthier lifestyle.

Each year, more than 700,000 people make the decision to undergo joint replacement surgery. The surgery aims to relieve your pain, restore your independence, and return you to work and other daily activities.

The program is designed to return you to an active lifestyle as quickly as possible. Most patients will be able to walk the first day after surgery, and move towards normal activity in six to twelve weeks.

The Orthopedic Center has developed a comprehensive treatment program. We believe that patients play a key role in ensuring a successful recovery. Our goal is to involve patients and their caregivers in their treatment through each step of the program. This Guidebook provides the information needed to maximize a safe and successful surgical experience.

Every detail, from pre-operative teaching to post-operative exercising, is considered and reviewed with each patient. The orthopaedic coordinator will assist to guide patients through the surgical experience.

Your team includes surgeons, physicians, nurses, nursing assistants, technicians, physical and occupational therapists, coordinators, dieticians specializing in total joint care.

Overview of the Center

We offer a unique program. Each step is designed to encourage the best results leading to discharge from the hospital after surgery. Features of the program include:

- Dedicated Nurses and Therapists trained to work with joint patients
- Private rooms/shared rooms
- Emphasis on group activities
- Family and friends participating in the recovery process
- A Joint Care Coordinator who assists the team in coordinating all pre-operative care through discharge planning
- A comprehensive patient guide for you to follow from preoperatively and beyond

Using the Guidebook

As soon as you are scheduled for surgery, you will be handed this guidebook. Kindly go through this guidebook thoroughly and make a note of any queries you have. Preparation, education, continuity of care, and a pre-planned discharge are essential for optimum results in joint surgery. Communication is essential to this process. The Guidebook is a communication tool for patients, physicians, physical and occupational therapists, and nurses. It is designed to educate you so that you know:

- What to expect every step of the way
- What you need to do
- How to care for your new joint

Remember, this is just a guide. Your physician, nurse, or therapist may add to or change any of the recommendations. Always use their recommendations first and ask questions if you are unsure of any information.

Bring your Guidebook with you to the hospital, outpatient, rehab facilities and all visits.

You can find your Patient Guidebook online at



Frequently Asked Questions

We are glad you have chosen the Orthopedic Center to care for your knee. People facing joint surgery often have the same questions. If there are any other questions that you need answered, please ask your surgeon or the Joint Care Coordinator. We are here to help.

Q. What is osteoarthritis and why does my knee hurt?

A. Joint cartilage is a tough, smooth tissue that covers the ends of bones where joints are located. It helps cushion the bones during movement, and because it is smooth and slippery, it allows for motion with minimal friction. Osteoarthritis, the most common form of arthritis, is a wear and tear condition that destroys joint cartilage. Sometimes, as the result of trauma, repetitive movement, or for no apparent reason, the cartilage wears down, exposing the bone ends. Over time, cartilage destruction can result in painful bone-on-bone contact, along with swelling and loss of motion. Osteoarthritis usually occurs later in life and may affect only one joint or many joints.

Q. What is total knee replacement?

A. The term total knee replacement is misleading. The knee itself is not replaced, as is commonly thought, but rather an implant is used to re-cap the worn bone ends. This is done with a metal alloy on the femur and a plastic spacer on the tibia and patella (kneecap). This creates a new, smooth cushion and a functional joint that can reduce or eliminate pain.



Q. How long will my new knee last and can a second replacement be done?

A. All implants have a limited life expectancy depending on an individual's age, weight, activity level, and medical condition(s). A total joint implant's longevity will vary in every patient. It is important to remember that an implant is a medical device subject to wear that may lead to mechanical failure. While it is important to follow all of your surgeon's recommendations after surgery, there is no guarantee that your particular implant will last for any specified length of time.

Q. What are the major risks?

A. Most surgeries go well, without any complications. Infection and blood clots are two serious complications. To avoid these complications, your surgeon will use antibiotics and blood thinners. Surgeons also take special precautions in the operating room to reduce the risk of infection. There are additional risks involved with this surgery. These risks are included in your written consent for surgery. Your surgeon will be happy to address any questions or concerns you may have.

Q. How long will the surgery take?

A Knee replacement surgery lasts approximately one to two hours. The time you are in the operating room, however, is longer and includes the time to administer anesthesia, prepare the knee for surgery and perform surgery. After the procedure you will be transferred to the recovery room (PACU).

Q. Will the surgery be painful?

A. You will have discomfort following the surgery, but we will try to keep you as comfortable as possible with the appropriate medication. After surgery, most patients receive oral pain medication along with IV pain medication as needed. Nerve blocks are used as well.

Q. How long and where will my scar be?

A. Surgical scars will vary in length, but most surgeons will make it as short as possible. It will be straight down the center of your knee. Please note that there may be some numbness around the scar after it is healed esp. on the outer aspect. This is perfectly normal and should not cause any concern. The numbness usually disappears with time.

**Q. Will I need a blood transfusion?**

A. Some patients need a blood transfusion after surgery. you have three options. You may donate your own blood, have a relative donate blood for you, or use blood available from the blood bank. A blood transfusion is administered only if absolutely necessary and with your consent.

Q. How long will I be in the hospital?

A. Most knee patients will be hospitalized for five to seven days after surgery. There are several goals that must be achieved before discharge.

Q. When can I shower?

A. The dressing is water proof and you can shower at hospital before discharge and continue showering at home without wetting the dressing.

Q. When are the sutures or staples removed??

A. Sutures are generally self dissolving and we just need to inspect the stitchline at your first post op visit. If non dissolving sutures or staples are taken they are removed 10-14 days after surgery at your first postoperative visit with your surgeon.

Q. How long and why do I need to wear a knee immobilizer after surgery?

A. The knee immobilizer is generally worn for approximately 2-3 weeks during prolonged walking or as a night splint while sleeping and during rest periods in the bed. It is required in some patients with severe deformities or osteoporotic bones to give support during initial period of healing. This helps in normal postoperative recovery.

Q. Will I need physical therapy when I go home?

A. Yes, you will have either have outpatient or in-home physical therapy. If you need home physiotherapy, the physiotherapy department will arrange for a physical therapist to provide services at your home. The length of time for this type of therapy varies with each patient.

Q. What medical equipment will I need after surgery?

A. The medical equipment needed after surgery varies with each individual. Generally, patients will need a height adjustable walker, height adjustable single legged cane and commode seat raise. Patients begin with a walker and transition to a cane. This is achieved in approximately four to six weeks. Your therapist will advise you on the appropriate device and when it is safe to transition.

Q. What will I notice that is different about my knee?

A. You may have a small area of numbness on the outside of your surgical scar. This is normal and generally decreases over the period of a year. Some individuals notice that their knees “click”. This is normal and is the result of metal moving on the plastic (polyethylene) part of your knee.

Q. What will I feel during the course of recovery?

A. You will have discomfort and slight swelling around the knee. You may also feel stiffness in knee after a prolonged period of rest. Some will feel thigh and calf pain in the legs esp. in the evening. All these symptoms are part of your recovery and they gradually decrease over a period of two to three months post surgery.

Q. When can I resume work?

A. Return to work depends on your particular job and how you will use your knee in that job. For activities that involve lifting, climbing and kneeling, 1-2 months may be necessary before you return to work. For supervisory positions or for desk work, return to work is very individualized and is allowed as soon as you are comfortable.

Q. When can I drive?

A. It is usually safe to drive at approximately 3 months post surgery. It usually takes this much time to regain your reflexes after surgery.

Q. What activities should be avoided after surgery?

A. High impact activities such as running, jumping as well as contact sports like football, squatting like in an indian toilet etc. are not recommended. Swimming, cycling, moderate dancing, golf, gardening can be done. sitting cross legged on floor should be avoided but is not an absolute contraindication.

Q. What medical precautions should I keep in mind?

A. Inform your doctors and dentists of your knee replacement before undergoing any surgery, podiatric procedure, dental work or whenever you have any infection anywhere in body esp. urine infection. You may need to take appropriate prophylactic antibiotics before these procedures.

Q. When can I resume intimate activity with my partner?

A. Intimate activity may be resumed as soon as healing of your surgical wound permits.

Q. What if I live alone?

A. Most patients return home and receive help from a relative or friend. You may have a home health nurse and physical therapist visit you at home for one to two weeks if required or you may begin outpatient physical therapy directly.

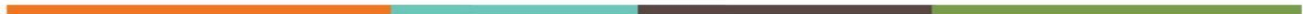
Q. Will my new knee set off security sensors when traveling?

A. Your joint replacement is made of a metal alloy and may or may not be detected when going through some security devices. Inform the security agent you have a metal implant. The agent will direct you on the security screening procedure. You will also get an implant certificate which you can show to the security agent at the time of screening.



Section Two:

Getting Ready for Surgery



Exercising and understanding Post Discharge planning

Exercising before Surgery

Many patients with arthritis favor the painful leg. The muscles can become weaker making recovery slower and more difficult. It is important to be as flexible and strong as possible before undergoing a total knee replacement. **Always consult your physiotherapist/surgeon before starting a pre-operative exercise plan.** Twelve basic exercises are listed here that your physiotherapist/surgeon may instruct you to start doing now and continue until surgery. You should be able to do them in 15-20 minutes and it is typically recommended that you do them twice a day.

Remember that you need to strengthen your entire body, not just your leg.

Do NOT do any exercise that is too painful. Listen to your own body and individualize as per your comfort and ability. Not all the exercises have to be done always and at one go. These are broad guidelines and have to be seen in totality. The purpose here is to prepare you mentally as well as tone up and strengthen so that your post surgery recovery becomes easier. Talk with your physiotherapist/surgeon for further guidance.

Pre-operative Knee Exercises

1. Ankle Pumps
2. Quad Sets
3. Gluteal Sets
4. Abduction and Adduction
5. Heel Slides
6. Short Arc Quads
7. Straight leg raises
8. Sitting Knee flexion
9. Extension stretch
10. Standing heel/toe raise
11. Standing knee Flexion
12. Chair push-ups

Understanding Post Discharge Planning

Understanding your plan for discharge is an important task in the recovery process. You can expect help from your Joint Care Coordinator to develop a plan that meets your particular needs. Many patients should expect to be able to go directly home, as is usually best to recover in the privacy and comfort of your own surroundings. You can arrange for a caregiver at home at least for the first few days to week if you require as per your need.

One to Two Weeks before Surgery

Pre-Admission Assessment /Testing/Classes

After your surgeon's office has scheduled you for joint surgery, you will be scheduled for **Pre-Admission Assessment ,Preadmission Testing (PAT)and Joint classes.** For your pre-admission assessment, you will need to fill some forms and have the following tentative information :

- Patient's full name and address
- Phone number
- Marital status
- Name of insurance holder, his or her address and phone number and his or her work address and work phone number
- Name of insurance company, mailing address, policy, if any.
- Patient's employer, address, phone number and occupation,if any.
- Name, address and phone number of nearest relative
- Name, address and phone number of someone to notify in case of emergency. This can be the same as the nearest relative
- Height and weight
- Medical and surgical history
- List of all medications (prescribed, over-the-counter, vitamins, supplements, herbals etc.)

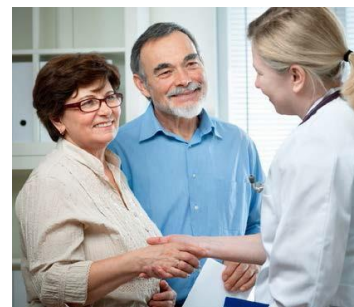
Obtain Tests, Medical ,Cardiac and Anesthesia Clearance

You will have to undergo certain tests which include lab, radiological and cardiac tests.The appointment for these will be fixed by the joint coordinator and will be intimated to you by phone.Any specific instructions regarding the tests will also be told to you.The tests will take approx. half to one day of you.

You may need to have a nasal swab test for MRSA/MSSA. IF positive, your surgeon's office will contact you for appropriate local antibiotic treatment (Mupirocin).

After you have completed the above formalities and obtained your test results you will be scheduled for **consultation with physician/cardiologist** depending upon your test results **and anesthetic doctor** for your surgical clearance.

You may be instructed regarding any need for Blood Transfusion pre/post surgery incase required depending upon your test reports.You may get additional instructions as directed by Anesthetist. Please follow these.



Start or Stop certain medications

If ordered by your surgeon/physician/cardiologist/ anesthesiologist, prior to your surgery, you may be instructed to start or stop certain medications depending upon your medical condition and test reports.

Read Anesthesia and You

Joint surgery does require the use of general or spinal anesthesia. Please review “Anesthesia and You” (see Page 18) . If you have questions or want to request a particular Anesthesiologist, please contact your surgeon’s office in order to coordinate schedules.

Put Your Health Care Decisions in Writing

It is our policy to place patients' wishes and individual considerations at the forefront of their care and to respect and uphold those wishes. If you wish you can complete advance directives forms concerning future decisions regarding your medical care. To review information about Advance Directives, please refer to Page 64.

Become Smoke Free

If you are a smoker, you should stop using tobacco products. The tar, nicotine, and carbon monoxide found in tobacco products have serious adverse effects on your blood vessels and thus impair the healing process. Finally, we have found that smokers experience a greater degree of pain than do non-smokers .Please review “Smoking Cessation” information on page 71.



Anesthesia and You

All surgery requires some form of anesthesia. This is done by “numbing” various parts of the body or by creating a state of “deep sleep” with medication. This allows your surgery to proceed comfortably.



Anesthesiologist

Your anesthesiologist is a doctor with specialized knowledge who gives you the anesthesia during surgery. A member of the anesthetic team will stay with you and monitor you closely throughout your surgery. The anesthesiologist is also responsible for helping you manage your pain after the surgery.

The anesthesiologist who assesses you before surgery may not be the same one who gives you your anesthetic on the day of surgery. Our anesthesiologists work as a team. All information will be in your hospital record and will be reviewed with you.

Before the Anesthetic

During anesthesia, the systems that keep food and drink safely in your stomach become weak. Food and drink may find its way out of your digestive system and into your lungs, by vomiting or regurgitation, and can cause serious problems. This is why it is important to have an empty stomach before surgery.

What are the Risks of Anesthesia

All operations and all anesthesia have some risks. The risk depends on the type of surgery, the type of anesthesia, and your health. Fortunately, bad outcomes are very rare. Your anesthesiologist will make every effort to ensure your safety and is prepared to deal with any problems that may arise.

Types of Anesthesia

For hip and knee replacement procedures, two kinds of anesthesia are common: general or epidural/spinal. Most patients having a joint replacement have a spinal anesthetic. You will have an opportunity to discuss with your anesthesiologist which type is best for you. This is influenced by your general health and the type of surgery you are having.

General Anesthetics

General anesthesia provides loss of consciousness and often involves multiple medications. They can be given through your intravenous line or in the form of a gas you breathe. The ones your anesthesiologist chooses for you depend on your general health and the type and complexity of your surgery. In general anesthesia, you are fully asleep during surgery. A breathing tube is placed in your mouth and throat during surgery and you are hooked up to a breathing machine. When your surgery is finished, the breathing tube is removed and you breathe on your own. You are then taken to the post anesthetic care unit (PACU), where you will wake up.

What are the Risks of General Anesthesia?

- ♦ A mild sore throat that lasts one to two days.
- ♦ Tooth or airway damage may occur from putting in the breathing tube.
- ♦ You may feel nauseated and drowsy.
- ♦ Slight confusion or memory loss can happen in older people and usually lasts for a short time only.
- ♦ Regurgitation of stomach contents into your lungs (aspiration).
- ♦ Allergic reactions, damage to nerves, heart attacks and death are extremely rare.

Spinal /Epidural Anesthetic

Spinal/Epidural anesthesia, provide numbness, loss of pain, or loss of sensation to a particular region of the body. In this medication is put in the spinal fluid around the spinal nerves in the lower back. This freezes the nerves so that you have no feeling or movement in your legs. This numbness lasts about 5-10 hours or sometimes longer. Spinal anesthesia is suitable for surgeries in the lower half of the body.

Before receiving spinal anesthesia, medication is given to help you relax. You will be asked to sit up or lie on your side. The anesthesiologist will freeze a small area of your lower back. A very small needle is then inserted to inject medication into the fluid around your spinal nerves. Once the spinal medication is in, the needle is removed.

When having spinal anesthesia, you will be given medication to put you into a light sleep. This is called sedation. You will not see or feel the actual surgery taking place. Your anesthesiologist can adjust your

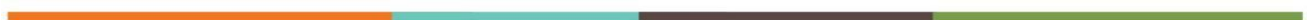
medication to reduce the chance of you hearing anything during your surgery. Please discuss this if it is a concern. You may also choose to stay awake during surgery rather than having a sedation, Just let your anesthesiologist know.

What are the Benefits of Spinal Anesthetics?

- ♦ You will not need a breathing tube. You breathe on your own without needing an artificial breathing machine.
- ♦ Fewer medications are used.
- ♦ Reduces post-operative nausea and vomiting.
- ♦ You won't feel as groggy.
- ♦ Some research suggests that patients who have spinal anesthesia have less blood loss during surgery and have better pain control after surgery.
- ♦ There is also a decreased incidence of blood clots.
- ♦ You recover more quickly.

What are the Risks of Spinal Anesthetics?

- ♦ You may experience a headache; the risk is less than 1%.
- ♦ Your blood pressure may drop. A machine will check your blood pressure often, and an intravenous will give you fluids to help prevent this.
- ♦ Nerve damage, heart attack and death are extremely rare.



Blood Donation & Transfusion

-
- ! *Investigate your options.*
 - ! *Be ready to make an informed decision about blood transfusion.*
-

There are times when patients may need a blood transfusion after surgery. Your surgeon /Nurse will notify you if this becomes necessary. This procedure requires an informed consent, which may be addressed when you initially consent for surgery.

There are three options available for blood donation.

1. You may donate your own blood prior to surgery. This is called autologous blood donation and for many individuals this is a very popular method since, if you need blood, you will be given your own blood in the postoperative period. There are also risks to receiving your own blood so your surgeon will help determine when and if you will need your blood transfused. Not every person meets the necessary requirements to donate their own blood.
2. A second method is blood donated by someone that you know personally. This method is called directed donor and for some individuals this is a
3. The third method is blood that is available in the blood bank. This is blood that other individuals have donated to be used during surgery. This blood is extensively tested for safety; however, it is not risk free and is only used if necessary.

successful way to have stored blood available. As well, this method is not risk free.

If you choose to donate your own blood or have a directed donor, this process must be initiated a few weeks before surgery. Our office can help you initiate this process.

As a patient, you have the right to refuse a blood transfusion. Please be ready to make an informed decision if the need for blood arises. While it is important to understand the risks and benefits of receiving blood from a donor, it is equally important to understand the risks of not receiving a blood transfusion when it is considered to be medically necessary.

Your surgeon and anesthesiologist are available regarding your questions and concerns.

Smoking Cessation Program

Did you know that:

- Within 24 hours of quitting your risk for heart attack decreases?
- Within 48 hours your lung function can increase up to 30 percent?
- Within one month nicotine is no longer in your body?
- The benefits of stopping tobacco use never end?

The good news is that it can be done! Thousands of people have walked away from tobacco. The bad news is that many well-intentioned people fail. Nicotine is the most addictive drug known. Staying away means breaking the addiction and adopting new habits. It can mean lifestyle changes. Statistics show that smokers attempting to quit on their own succeed only 7 percent of the time. A minimum of 4-6 weeks of smoking cessation is required to reduce your risk closer to a standard patient that does not smoke.

Smoking Cessation Programs

Leading a healthier, happier life takes more than good intentions. It takes action. And it's easier to take action when you're supported by like-minded individuals with similar goals. **Freedom From Smoking** is a smoking cessation program offers both group smoking cessation classes counseling sessions to aid in smoking cessation.



Pre OP Joint Class

Attend the Pre-operative Joint Class

A special class is held weekly for patients scheduled for joint surgery. The joint coordinator will schedule this class for you 1-2 weeks prior to your surgery. You will only need to attend one class. It is strongly suggested that you read this guide thoroughly before attending the class and bring a family member or friend. Members of the team will be there to answer your questions. Tentatively, the joint classes will cover the following topics.

IMPORTANT TOPICS TO INCLUDE IN PREOPERATIVE

EDUCATION FOR TOTAL KNEE REPLACEMENT

Preparing for surgery

What to expect while in the hospital

The recovery process

Realistic information regarding pain after surgery

Expected functional levels in the postsurgical phase

When to resume normal activities at home

Adaptive equipment and techniques for daily tasks, such as self-care and home management activities

Functional mobility

Home safety

Precautions

Caregiver training

Exercise before and after surgery

Anatomy of the knee joint

Importance of Your Associate

In the process of a joint replacement, the involvement of a family friend or relative acting as your coach is very important. Your coach will be with you from the pre-op process through your stay in the hospital and to your discharge to home. They will give support during exercise classes, and keep you focused on healing. They will assure you continue exercising when you return home and see that home remains safe during your recovery.

COACH

A Week before Surgery

Stop Medications that Increase Bleeding/Delay healing.

- A week before surgery stop all pain medications esp. anti-inflammatories (NSAIDS) such as Voveran, Naproxen, Ibuprofen.(See page 62 for list) as these medications may cause increased bleeding.
- If you are on any **blood thinners** such as Coumadin, Xarelto, Clopidogril etc. (SEE List on page 62), you will need special instructions on stopping this medication.
- Certain other medications such as some steroids/immunosuppressants and anti rheumatoid medications has also to be stopped at this time.
- Any other medication ,as deemed necessary, and instructed by the physician/ cardiologist/anesthetist has to be followed.

Prepare Your Home for Your Return from the Hospital

HOME

- De-clutter your home. Temporarily put away area rugs that may create a tripping hazard; tack down loose carpeting.
- Remove electrical cords and other obstructions from walkways.
- Place essential and frequently used items at counter level in the kitchen, or on higher shelves in the refrigerator or bathroom. This may mean taking out the items from the lower or very upper cabinets out and storing them on the counter temporarily.
- Check railings to make sure they are not loose.
- Install grab bars in the shower/bathtub. Put adhesive slip strips in the tub.
- Complete needed yard work and mowing or arrange to have this done for you
- Strategically place night-lights in bathrooms, bedrooms, and hallways.
- Arrange a recovery area with arm chair

PETS

- Have help for the first week to keep food and water available for pets
- Have dog walker planned for the first two weeks. You will not want to chance losing your balance or being jerked by your excited canine friend!
- If you have cats, have the litter box up on a high table or counter so you don't have to bend down to clean it.

POINT OF COMFORT

- You may want to bring extra pillows for the ride home to maximize your comfort
- Bring comfortable, loose fitting clothing to wear in the hospital and going home (NO jeans)

Five Days before Surgery

Begin showering with Chlorhexidine gluconate (Hibiclens, Sken) soap/Liquid daily for each of the five days before surgery.

If allergic to Chlorhexidine, please use an Antibacterial Body Wash for 5 days prior to your surgery. Antibacterial Bar Soap may also be used, but you will need to use a new bottle if liquid OR a new bar for every day. Be sure to pay special attention to skin folds and area for surgery.

IF positive for MRSA or MSSA, your surgeon will call you to begin using an antibiotic ointment. (Mupirocin) Last application should be the morning of surgery.

Pre-Operative Skin Preparation

You are scheduled to have surgery that involves an incision through the skin. Since all humans have germs that live on the skin, it is important to thoroughly clean your body with a special soap before the surgery to reduce the risk of infection.

- Buy a special soap called Hibiclens® (4% chlorhexidine gluconate) bottle/soap bar. It is easily available at chemists.
- Shower daily with this soap for **five days prior to your surgery**. Use the entire bottle over 5 days.
- Do not shave near the area of your surgery for at least 48 hours before surgery.



Bathing Instructions:

CAUTION: It is very important that you DO NOT USE Hibiclens® ON YOUR HEAD OR FACE AND AVOID CONTACT WITH YOUR EYES AND GENITAL AREA. DO NOT USE IF YOU ARE ALLERGIC TO CHLORHEXIDINE GLUCONATE OR ANY INACTIVE INGREDIENTS IN THIS SOAP.

- Wash your hair as usual with your normal shampoo and wash your face with your regular cleanser.
- Rinse your body well to remove any shampoo that is on your skin
- Turn the water off or move away from the water spray
- Pour Hibiclens® onto a wet clean washcloth and wash gently from your **neck down avoiding genital area**.
- Rinse your body thoroughly. ***This is very important.***
- Dry your body with a fresh, clean towel.
- Put on clean clothes.
- **Do not** use lotions, powders, or creams on your body after this shower.

The last shower should be done on the day of the scheduled surgery.

Chlorhexidine gluconate skin cleansers will cause stains if used with chlorine releasing products. Rinse completely and use only non-chlorine detergents.

One Day before Surgery

You need to get admitted one day before surgery. Find Out Your arrival time at the Hospital. After completion of your admission formalities you will be allotted and shifted to your room. The nursing staff will give you clothes to change and start IV's, verify your information, complete any last minute testing, prepare the surgical site, get some forms filled and consent signed and answer any questions. They will also mark your surgical site.

What to bring to the hospital:

- Patient Guidebook, PAT paperwork, Advance Directives, forms, if any. Insurance card, picture ID.
- A list of current prescribed and over-the-counter medications, vitamins, minerals, & herbal supplements, including the name, dosage (mg, mcg, etc.) and frequency (daily, every morning or evening, etc.) of each.
- A list of your allergies, if any (medication, food, environmental).
- Personal hygiene items.
- Loose-fitting clothes or suits, Shorts, tops (no jeans).
- Non skid Well-fitting slippers, flat shoes such as sneakers.
- Cell phone
- Dentures and case
- Eyeglasses and case –No contact lenses are allowed in the operating room.
- Hearing aids with extra batteries and case

What NOT to bring to the Hospital:

- Jewelry (watch, rings, chains). Any other valuables.
- You may bring a small amount of cash & change.
- Please remove fingernails/toenails and polish.
- Preferably remove make-up prior to your arrival on the day of surgery.

Surgery Preparation Checklist

NAME: _____

DATE OF SURGERY: _____

Enter Dates, ✓ - Check circles to indicate Completed or Not Applicable

Date	Mupirocin Nasal Ointment (only if MRSA/MSSA positive)	Hibiclens® Showers (FORALL)
Day 1 _____	Morning <input type="checkbox"/> Bedtime <input type="checkbox"/> Not Applicable <input type="checkbox"/>	<input type="checkbox"/>
Day 2 _____	Morning <input type="checkbox"/> Bedtime <input type="checkbox"/> Not Applicable <input type="checkbox"/>	<input type="checkbox"/>
Day3 _____	Morning <input type="checkbox"/> Bedtime <input type="checkbox"/> Not Applicable <input type="checkbox"/>	<input type="checkbox"/>
Day 4 _____	Morning <input type="checkbox"/> Bedtime <input type="checkbox"/> Not Applicable <input type="checkbox"/>	<input type="checkbox"/>
Day 5 _____	Morning <input type="checkbox"/> Bedtime <input type="checkbox"/> Not Applicable <input type="checkbox"/>	<input type="checkbox"/>
Day 6 _____ *Day of Surgery	Morning <input type="checkbox"/>	

PLEASE COMPLETE and BRING THIS CHECKLIST WITH YOU TO THE HOSPITAL to give to your nurse when you arrive.

You will be notified if you need to use the Mupirocin Nasal Ointment

Pre-Operative Staphylococcus aureus Test and Treatment

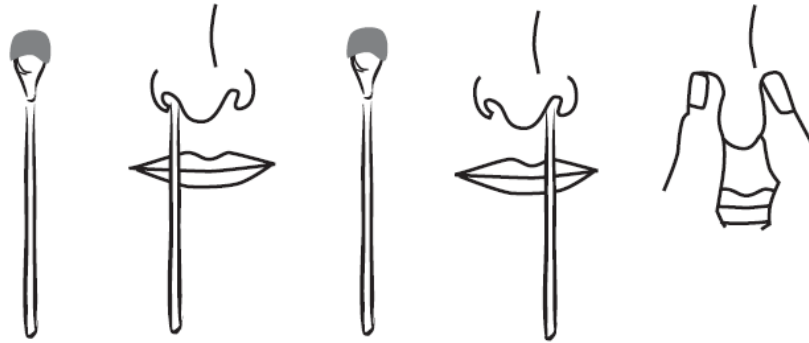
We will swab your nose to test for Staphylococcus aureus or “Staph” which is a very common germ that about 1 out of every 3 people have on their skin or in their nose. This germ does not cause any problems for most people who have it on their skin. Because you are having surgery, it is important that you be tested to see if you are carrying this Staph. The results of your test will be sent to your doctor’s office within 3 – 4 days. **IF** Staph is present, the nurse will call you for Mupirocin, an ointment that will reduce the Staph in your nose.

The process will be to apply the Mupirocin twice a day for 5 days, with the last application the morning of your surgery (which is actually your 6th day)

Mupirocin applications:

- Wash your hands before applying Mupirocin
- Place a pea size amount of ointment onto the tip of a cotton swab
- Insert only the cotton portion of the swab inside your nose and coat the inside of your nostril with the ointment
- Repeat the process on the other nostril using a fresh cotton swab
- Press the sides of the nose together gently massaging to spread the ointment throughout the inside of the nostril.

Do this once in the morning and at bedtime for 5 days. Also, do an application at home the day of surgery.



If I have Staph, will I be treated differently in the hospital?

If you have a resistant type of Staph called MRSA, you will be in a room on “Contact Precautions.” **This means your doctors, nurses, and visitors must wear gloves while in your room.** We do this to make sure we do not spread MRSA to others.

The Night before Surgery

Your nursing assistant/nurse will help to prepare your limbs for surgery including painting with chlorhexadine/betadine and draping with sterile drape. your private part preparation will also be done if indicated. No hair removal should be done from the operative site of knee.

Do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed to do so.

You may take a bath, brush teeth, rinse and spit on the morning of surgery; do not swallow any additional water

SPECIAL INSTRUCTIONS:

You will be instructed by your surgeon and prescribing physician on diabetic medications, blood pressure or heart medications and daily medications to take or omit the morning of surgery. The nursing staff will also review this as advised by your physician and Anesthesia requirements for surgery.

If you must take medication the morning of surgery, do so with a small sip of water



Section Three:

Hospital Care

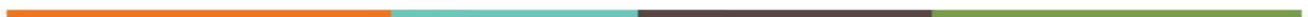


Day of Surgery

What to Expect

You will be shifted to the operation theatre complex at aprox. 8 - 8:30 AM. In the Periop area, The team will be checking your vital signs, starting your IV, validating your medications, health history, lab results .Your anesthesiologist and surgeon will see you and your family prior to your surgery if possible. You will be escorted to the operating room by cart. Your family can wait in the surgical waiting room. Following surgery you will be taken to the Post Anesthesia Care Unit (PACU)/ Surgical ICU where you will remain for the next 24 hrs. During this time, the nursing staff will be checking your vital signs, checking for blood circulation, sensation and movement in your extremities as well as assessing and treating your pain. If you have or develop numbness or tingling in your legs, feet, or toes, notify your nurse as this may be due to the anesthesia in the immediate post op period which gradually improves as the effect of anesthetic drugs wear off. Friends and family can see you once you are settled in the unit.

For the rest of this day, you will begin with liquids advancing to regular foods as tolerated. We encourage you to drink plenty of water. We will instruct you on the benefits of breathing exercises, early ambulation, ankle pumps, T.E.D. compression stockings (If ordered), and sequential compression devices (SCD's). Our staff will **assist** you out of bed to the chair or walking in the hallway. You will be seen by the physical therapist for an initial evaluation. Initially, your pain will be managed with IV and epidural medication. There will be a dressing over your incision along with cold therapy. Most patients will not have a catheter to their bladder. **IF you do have a catheter to your bladder it will be removed in subsequent days.** Some patients may have a drain connected to the knee to collect drainage from within the knees though this is quite infrequent now. The drain is typically removed on Post-Op Day (POD) 1 or 2 depending on the amount of drainage.



Post-op Routine through Discharge

An X-ray may be taken of your knee after surgery. Your Surgeon may have this done in surgery, in recovery or on the Orthopedic unit.

Each day starts with blood work obtained early in the morning with the vital signs. We strongly encourage you to be up in the chair for each meal.

Your surgeon, covering physician, nursing assistant or Nurse will check on you daily while you are in the hospital.

Safety

Call, Don't Fall. Call the phone number in your room for your nurse/assistant. You may also use the call bell.

Breathing Exercises

To prevent potential problems such as pneumonia, it is important to understand and practice breathing exercises. Techniques such as deep breathing, coughing, and using an **Incentive Spirometer** may also help you recover more quickly.

Prevention of blood clots:**Early Ambulation and ankle pumps**

To prevent blood clots, it is important to do at least 10 ankle pumps every hour while you are awake. We will assist you to get out of bed and walk.

Blood thinners (anticoagulants)

You will also be started on a blood thinner (pill or shot form) AFTER SURGERY as determined by your physician to decrease your risk of developing a blood clot.

Pneumatic Compression devices

Your calf or whole leg is enclosed in a cuff. The cuff fills with air and squeezes the leg, much like a blood pressure cuff. Then the cuff deflates and relaxes. The process then repeats over and over. The compression helps move blood through your veins towards your heart.

TED stockings/compression hoses

This is another method used to decrease your chance of forming blood clots in your legs. It works on principle of graduated compression. They may be removed for short periods of time (30 minutes to 1 hour) each day. Otherwise, they should be worn while in bed.

Knee Immobilizer

Your knee immobilizer should be worn postoperatively while in bed and at rest. It helps to maintain the knee in extension (straight). During ambulation (walking), it can provide support just after your total knee replacement. As the muscles in your leg begin to gain strength, you will not need the support of the immobilizer. Your surgeon or therapist can specify when and for how long you need to continue wearing this device.

Pillows for Support

Pillows may be used as a support by being placed under the heel(s) or ankle(s). However, **DO NOT place a pillow under your KNEE** for comfort as this limits knee extension (straightening) and can cause a permanent bend or flexion contracture in your operated knee.

Ice to Your New Knee

Ice packs may be placed on your knee after surgery. Cold therapy reduces knee pain, inflammation and swelling. Knee range of motion tends to be greater when the knee is less swollen.

Medications :

-Antibiotics/antiemetics/appetizers/antacids/laxatives and stool softeners/
urological medications/Clot stabilizers to prevent excessive bleeding/
medicines for associated medical conditions ,if any.

Understanding pain management

We realize that you will have some discomfort after your operation. It is our aim to make you as comfortable as possible after surgery. There are several factors that limit our ability to completely eliminate pain after surgery. The first is that pain medications have side effects. These include respiratory depression (decreased ability to breathe normally), hypotension (low blood pressure), nausea and constipation. Other less common side effects include itching, urinary retention (inability to urinate) and abdominal distention (collection of gas within the intestines). These side effects mean that the amount of medication will have to be reduced at times to avoid uncomfortable conditions. Another factor is tolerance. This is the body's tendency to become less responsive to the pain-reducing action of drugs esp. opioids after being exposed to them for periods of time. In other words, your body can become used to having these drugs. Patients who have taken large doses of pain medications for months or years have a much harder time keeping comfortable after surgery.

Pain Scale

Using a number to rate your pain can help the Joint Team understand the severity of your pain and help them make the best decision to help manage it.



Your Role in Pain Management

Using a pain scale to describe your pain will help the team understand your pain level. If “0” means you have no pain and “10” means you are in the worst pain possible, how would you rate your pain? With good communication about your pain, the team can make adjustments to make you more comfortable. Simple repositioning and mindfulness can help. Cold therapy will also be used.

Pain Medications After Joint Replacement Surgery

To help manage your pain, we will employ a “multimodal strategy.” This means you will receive several different medications via different routes including oral/intravenous/cutaneous patches/nerve blocks etc. that will work together to control your pain while reducing side effects. These medications will be coordinated by your anesthesiologist and orthopedic surgeon.

After Surgery -Till discharge

On Day One after surgery, you can expect to get sponge bathed, assisted out of bed and seated. Your surgeon and physical therapist will visit you. They will check your vital signs and pain level. After that you will be encouraged to walk with the help of a walker.

From day 2-day 5/7 you will be gradually trained to be independent for yourself. You will be taught how to do exercises, sit, stand, use toilet and walk with the help of walker. Depending upon your progress you will be taught to walk greater distances and climb stairs. Your medications will be gradually changed as you progress and improve clinically.

Postoperative Goals

Goal setting is an important part of recovery. When setting goals they should be realistic, challenging and achievable. The goals listed below are a start to great recovery. You will see that some are basic and familiar to you, while others seem more of a challenge. Please feel free to add additional

recovery goals. We want you to have a sense of accomplishment. Therefore, use the following as a check list. This will help you keep track of your efforts.

*If you are not able to meet the goals on the listed day, strive to do so the next day.

Day of Surgery

<u>Goal</u>	<u>√ If Goal Met</u>
Obtain adequate pain control ≤ 4 on scale of 0-10	
Tolerate ice chips without nausea or vomiting	
Tolerate clear liquids without nausea or vomiting	
Wear compression hose as much as possible	
Wear foot pumps while in bed	
Keep ice packs on your new knee (20 min on/20 min off)	
Wear immobilizer while in bed	
Passing gas by evening of surgery	
Begin using incentive spirometer	
Breathe deeply and cough	
Ankle Pumps (as shown in "Pre-Op/Post-Op Exercises")	
Do NOT place a pillow behind your new knee	

Postoperative Day 1 – (POD #1)

<u>Goal</u>	<u>√ If Goal Met</u>
Obtain adequate pain control ≤ 4 on scale of 0-10	
Tolerate regular food without nausea or vomiting	
Wear compression stockings as much as possible(if advised)	
Wear pneumatic compression pumps while in bed	
Keep ice packs on your new knee (20 min on/20 min off)	
Wear immobilizer while in bed (incase advised)	
Be passing gas regularly	
If catheter is removed, be able to urinate within 6-8 hours	
Use incentive spirometer 10 times per hour, while awake	
Breathe deeply and cough – to remove secretions from your lungs	
Physical Therapy (PT) – Be out of bed with walker	
Physical Therapy – Walk 25 Feet	
Physical Therapy – Sit up in chair	
Physical Therapy – Per protocol in the rehab	
Perform Ankle Pumps and Quad Sets in addition to PT	

Postoperative Day 2 – (POD #2)

<u>Goal</u>	<u>√ If Goal Met</u>
Obtain adequate pain control ≤ 4 on scale of 0-10	
Tolerate regular food without nausea or vomiting	
Wear compression stockings as much as possible(if advised)	
Wear pneumatic compression pumps while in bed	
Keep ice packs on your new knee (20 min on/20 min off)	
Wear immobilizer while in bed(if advised)	
Be passing gas regularly	
Have a bowel movement	
If catheter is removed, be able to urinate within 6 hours	
Use incentive spirometer 10 times per hour, while awake	
Breathe deeply and cough – to remove secretions from your lungs	
Physical Therapy – Be out of bed with walker	
Physical Therapy – Walk 50-75 Feet	
Physical Therapy – Sit up in chair	
Physical Therapy – Increase range of motion to knee(s)	
Physical Therapy – Toilet transfers	
Physical Therapy – Bed Transfers	
Physical Therapy – Walk on stairs	
Physical Therapy – Car Transfers(if advised)	
Physical Therapy – Per protocol in the rehab	
Perform Ankle Pumps and Quad Sets in addition to PT	

Postoperative Day 3 – (POD #3)

<u>Goal</u>	<u>√ If Goal Met</u>
Obtain adequate pain control ≤ 4 on scale of 0-10	
Wear compression stockings as much as possible(if advised)	
Wear pneumatic compression pumps while in bed	
Keep ice packs on your new knee (20 min on/20 min off)	
Wear immobilizer while in bed(if advised)	
Be passing gas regularly	
Be up to the bathroom with walker for urination/bowel movement	
Use incentive spirometer 10 times per hour, while awake	
Breathe deeply and cough – to remove secretions from your lungs	
Physical Therapy – Be out of bed with walker	
Physical Therapy – Walk 100 Feet	
Physical Therapy – Sit up in chair	
Physical Therapy – Increase range of motion to knee(s) Goal 0-90 degrees	
Physical Therapy – Toilet transfers	
Physical Therapy – Bed Transfers	
Physical Therapy – Walk on stairs	
Physical Therapy – Car Transfers(if advised)	
Physical Therapy – Per protocol in the rehab	

Postoperative Day 4 – (POD #4)

<u>Goal</u>	<u>√ If Goal Met</u>
Obtain adequate pain control ≤ 4 on scale of 0-10	
Wear compression stockings as much as possible(if advised)	
Wear pneumatic compression pumps while in bed	
Keep ice packs on your new knee (20 min on/20 min off)	
Wear immobilizer while in bed(if advised)	
Be passing gas regularly	
Be up to the bathroom with walker for urination/bowel movement	
Use incentive spirometer 10 times per hour	
Breathe deeply and cough – to remove secretions from your lungs	
Physical Therapy – Per protocol in the rehab	

Postoperative Day 5 – (POD #5)

Goal	√ If Goal Met
Obtain adequate pain control ≤ 4 on scale of 0-10	
Wear compression stockings as much as possible(if advised)	
Wear pneumatic compression pumps while in bed	
Keep ice packs on your new knee (20 min on/20 min off)	
Wear immobilizer while in bed(if advised)	
Be passing gas regularly	
Be up to the bathroom with walker for urination/bowel movement	
Use incentive spirometer 10 times per hour	
Breathe deeply and cough – to remove secretions from your lungs	
Physical Therapy – Per protocol in the rehab	
Discharge from hospital to home or rehabilitation facility	

If you are discharged from the hospital to home, you may receive an Occupational Therapy evaluation at the discretion of your surgeon or physical therapist. During this evaluation, they will assess your activities of daily living and determine if any additional equipment is necessary.

Postoperative Day 6 – (POD #6)

<u>Goal</u>	<u>√ If Goal Met</u>
Obtain adequate pain control ≤ 4 on scale of 0-10	
Wear compression stockings as much as possible(if advised)	
Wear pneumatic compression pumps while in bed	
Keep ice packs on your new knee (20 min on/20 min off)	
Wear immobilizer while in bed(if advised)	
Be passing gas regularly	
Be up to the bathroom with walker for urination/bowel movement	
Use incentive spirometer 10 times per hour	
Breathe deeply and cough – to remove secretions from your lungs	
Physical Therapy – Per protocol in the rehab	
Discharge from hospital to home or rehabilitation facility	

If you are discharged from the hospital to home, you may receive an Occupational Therapy evaluation at the discretion of your surgeon or physical therapist. During this evaluation, they will assess your activities of daily living and determine if any additional equipment is necessary.

Postoperative Day 7 – (POD #7)

<u>Goal</u>	<u>√ If Goal Met</u>
Obtain adequate pain control ≤ 4 on scale of 0-10	
Wear compression stockings as much as possible(if advised)	
Wear pneumatic compression pumps while in bed	
Keep ice packs on your new knee (20 min on/20 min off)	
Wear immobilizer while in bed(if advised)	
Be passing gas regularly	
Be up to the bathroom with walker for urination/bowel movement	
Use incentive spirometer 10 times per hour	
Breathe deeply and cough – to remove secretions from your lungs	
Physical Therapy – Per protocol in the rehab gym	
Discharge from hospital to home or rehabilitation facility	

If you are discharged from the hospital to home, you may receive an Occupational Therapy evaluation at the discretion of your surgeon or physical therapist. During this evaluation, they will assess your activities of daily living and determine if any additional equipment is necessary.

Call Don't Fall

Fall Prevention at the Hospital

**While you're at Hospital, your safety is our priority.
Please speak up when you need help.**

Your doctor and/or nurse will let you know when you are able to walk without assistance. Before this time, please “Call don't fall!” Even if you feel capable, call your nurse or patient care **attendent** for help when getting out of bed, going to and from the bathroom or walking.

- ▶ **Call for help when getting out of bed.**
- ▶ **Take your time.
Be sure you are not feeling weak or dizzy.**
- ▶ **Wear non-skid footwear.**
- ▶ **Use canes, walkers and assist devices as instructed.**



Going Directly Home

Please arrange to have someone pick you up. You should receive written discharge instructions concerning medications, physical therapy, activity, etc. It is advised that you purchase a walker/cane/toilet seat raise before discharge. Take this Guidebook with you. Most patients going home will begin therapy at home/outpatient facility. If home health services are needed, the hospital will facilitate for this.

Discharge Plans and Expectations

Patients should be ambulating with a walker, eating and drinking well and taking oral medication to control discomfort. You should be able to use the bathroom independently with your walker. We suggest that you not go home alone but have someone with you to be your caregiver for the next few days to week. This can be a friend or family member. This caregiver will also help out with meals and household activities. During these first few days at home, we want you to

concentrate on your recovery. If equipment is still needed, the Physical Therapist will assist you in obtaining one while in the hospital. While most patients go directly home, sometimes the

services of home physical therapy is needed. If so, the Physical Therapist will make these referrals for you and discuss them with you.



We will gladly complete transfer arrangements during your hospital stay. Our team will also assist you in arranging the appropriate transportation based on your needs (if required). There is an out of pocket fee for transportation.

POTENTIAL COMPLICATIONS AND HOW TO HELP PREVENT THEM

Despite the success of total joint replacement, there is a small risk of developing complications. These complications can develop because of health problems, the anesthesia or the surgical procedure itself. Possible local complications include: surgical site infection, damage to blood vessels and nerves, blood loss possibly requiring blood transfusion, bone or implant fracture, increased bone formation around the joint, dislocation of the joint, early wear of the prosthesis, and persistent or worsened pain and stiffness in the joint that was replaced. These complications may require additional surgery to improve your function.

Other medical complications include the risk of developing a deep venous thrombosis, pulmonary embolism, heart attack, stroke and even death.

Although the likelihood of such complications occurring is low, your surgical team will make every effort to minimize the risk as much as possible. Please make sure all your questions are addressed when you meet with your surgical team.

Infection is a possible complication of any surgery. The risk is reduced through careful surgical technique and the use of antibiotics before and after your surgery. Bacteria can travel through your bloodstream from

infection elsewhere in your body to your new joint, i.e. from your throat, teeth, skin or urine. This is why it is important to have all infections assessed and treated before your surgery, as well as after surgery to protect your new joint.

Breathing problems such as pneumonia can occur after surgery. It is important to do several deep-breathing and coughing exercises every half hour when awake the first few days after surgery. This helps provide oxygen to your lungs and keeps your airways clear. Sitting up, getting out of bed as soon as possible and being active also helps prevent breathing problems.

Cardiovascular complications (heart problems) can occur due to the stress of surgery. Surgery puts an additional workload on the heart. In patients with known heart disease, this can increase the risk for abnormal heart beats, chest pain or, heart attack. These complications can also happen in patients with no known heart problems. This is why it is important to have a thorough health assessment before your surgery.



Deep Vein Thrombosis (DVT) are blood clots which can develop in the deep veins of your legs. This is often associated with lack of movement, so getting out of bed and being active as early as possible is encouraged. It is important to move your ankles up and down several times an hour after surgery. This is called “ankle pumping”. You should also tighten and release the muscles in your legs. These exercises promote good circulation. Anticoagulants (blood thinners) will also be used to prevent blood clots.

Pulmonary Embolism can occur when blood clots from the deep veins in the legs or pelvis break off, travel up to the lung and lodge there. If the clot is large enough, blood circulation to the lungs may be cut off. This is a serious complication. Anticoagulants (blood thinners) are given after surgery to prevent clot formation. Ankle pumping and early activity will also help prevent this complication.

Urinary Problems, such as difficulty passing urine, can happen following any type of surgery. Sometimes a catheter (soft plastic tube) is placed in the bladder to drain urine. The catheter can be left in place for a few days or removed immediately after the bladder has been emptied. Let your nurse know if you have problems passing urine. Following spinal anesthesia you may pass some urine without being aware of it. This is normal and can happen during the first few hours until the spinal anesthesia wears off.

Nausea is common after surgery. Medication may be given to settle your stomach, so let your nurse know if you are experiencing this. In order to minimize nausea, it is important to take your pain pills with food to protect your stomach.

Paralytic Ileus is a distention of the bowel with gas. This can happen when the bowels stop working properly. As a result, gas builds up and causes abdominal discomfort, bloating and vomiting. To prevent this, early activity is important to stimulate your bowels to function normally.

Constipation can occur because pain medication can make your bowels sluggish. Stool softeners are given twice a day to help prevent this. If they are not effective, ask your nurse for a laxative. Make sure your bowels have moved the day before surgery to help prevent problems after surgery. Lots of fluid, a high fibre diet and activity also help.

Allergic reactions can happen after surgery and vary from a mild rash to an intense reaction that can interfere with your breathing. Please let us know if you have any allergies. They will be documented in your medical record. We will also provide you with an allergy alert bracelet to be worn while you are here, if any.

Skin Irritation and bed sores are caused by pressure from lying in bed. It is important to change your position frequently while in bed and to get up as much as possible after surgery. The nurses and therapists will help you.

Confusion and Delirium can sometimes occur in older people after surgery. You may behave differently, and see or hear things that aren't really there. This usually resolves in a few days, but can last for several weeks. Many things can contribute to this, such as the anesthetic, pain medication, lack of sleep, and alcohol withdrawal. It is important to let us know if you have experienced this with previous surgeries. Wearing your glasses and hearing aids can help if you experience this. We also recommend that you reduce your alcohol intake several weeks before your surgery. If you have experienced postoperative confusion in the past, it is helpful to have a relative sit with you after surgery.

Remember...

Getting out of bed and walking as soon as you are able will help prevent many of these complications and allow for a smooth recovery.



While you are in the hospital, it is important to tell your health team if you have any of the following:

- | | |
|--|---|
| <input type="checkbox"/> Problems controlling your pain | <input type="checkbox"/> Difficulty breathing |
| <input type="checkbox"/> Chest pain, tightness or pressure | <input type="checkbox"/> Problems passing urine |
| <input type="checkbox"/> Problems with your intravenous | <input type="checkbox"/> Unusual feelings of numbness and/or tingling |
| <input type="checkbox"/> Upset stomach or dizziness | |

Your team will assess you and provide treatment as needed.

Section Four:

Living With Your Joint Replacement



Caring For Yourself at Home

When you go home, there are a variety of things you need to know for your safety, your recovery, and your comfort.

Be Comfortable

- Take your pain medicine at least 30 minutes before physical therapy.
- Gradually wean yourself from pain reliever as advised.
- Change your position every 45 minutes while awake.
- Use ice for pain control. Applying ice to your affected joint will decrease discomfort. It is recommended for 20 minutes each hour. You can use it before and after your exercise program. Always have a thin barrier such as a cloth between the cold pack and your skin to prevent any frostbite.
- NO pillows under knees in order to help you straighten your knee

Try not to nap too much

While you are recovering, try not to nap during the day so that you will sleep better at night.

Body Changes

- Your appetite may be poor. Drink plenty of fluids to prevent dehydration and constipation. Your desire for solid food will return. Increase roughage with fresh fruits, vegetables and whole grains.
- You may have difficulty sleeping, which is normal. Do not sleep or nap too much during the day.
- Your energy level will be decreased for at least the first month.
- Pain medication that contains narcotics cause constipation.
- Use stool softener while taking narcotics. Add mild laxatives if necessary. Do not let constipation continue. If the stool softener or laxative does not relieve your discomfort, contact your doctor for advice.



Blood Clots and Anticoagulants (blood thinner)

You will be given a blood thinner to help prevent blood clots in your legs. You will need to take it for four to five weeks depending on your individual situation. Be sure to take as directed by your surgeon.

Compression Stockings

You may be asked to wear special stockings IF ordered by your surgeon. These stockings are used to help compress the veins in your legs. This helps to keep swelling down and reduces the chance for blood clots.

- If swelling in the operative leg is bothersome, elevate the leg for short periods throughout the day. It is best to lie down and raise the leg above heart level.
- Wear the stockings continuously during the day and remove them at night.
- Notify your physician if you notice increased pain or swelling in either leg.
- Normally you will wear those three weeks after surgery. Ask your surgeon when you can discontinue stockings.

Caring For Your Incision

- Keep your incision dry.
- Keep your incision covered with a dry dressing until your stitches are removed, usually in about 2-3 weeks.
- You may shower two to three days after surgery, unless instructed otherwise. NO TUB baths until OK with your surgeon.
- Cover dressing with plastic to prevent it from getting wet during showering. Pat dry. Do not apply lotions or ointments.



- Notify your surgeon if there is increased drainage, redness, pain, odor, or heat around the incision.
- Take your temperature if you feel warm or sick. Call your surgeon if it exceeds 100.4 degrees.

Dressing Change Procedure

(if required)

1. Wash your hands
2. Open all dressing change materials (gauze pad and tape)
3. Remove stocking and old dressing.
4. Inspect incision for the following:
 - a. increased redness
 - b. increase in drainage
 - c. any yellow/green drainage
 - d. odor
 - e. surrounding skin is hot to touch
 - f. separation of the incision
5. Pick up gauze pad by one corner and lay over incision. Be careful not to touch the inside of the dressing that will lie over the incision.
6. If drain site is oozing, place additional gauze pad over this area.
7. Tape dressing in place.
8. Wash hands again

Recognizing & Preventing Potential Complications

Infection

Signs of Infection

- Increased swelling and redness at incision site
- Change in color, amount, odor of drainage
- Increased pain in knee
- Fever greater than 100.4 degrees
- Separation (opening up) of incision

Prevention of Infection

- Take proper care of your incision as explained.
- If advised by your surgeon, take prophylactic antibiotics when having dental work
- Notify your physician and dentist that you have had a joint replacement.
- No pools or hot tubs until cleared by your surgeon
- Good hand washing by visitors and yourself
- Clean bed linens and clothing
- Avoid people with colds and flu

Blood Clots in Legs

Surgery may cause the blood to slow and coagulate in the veins of your legs, creating a blood clot.

This is why you take blood thinners after surgery. If a clot occurs despite these measures, you may need to be admitted to the hospital to receive intravenous blood thinners.

Signs of blood clots in legs

- Swelling in thigh, calf, or ankle that does not go down with elevation.
- Pain, heat, and tenderness in calf, back of knee or groin area.

NOTE: blood clots can form in *either* leg.

To Help Prevent blood clots

- Perform at least 10 ankle pumps every hour while awake
- Walk several times a day
- Wear your compression stockings, IF ORDERED
- Take your blood thinners as directed

Pulmonary Embolus

An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency.

Signs of a pulmonary embolus

- | | |
|------------------------------------|-----------------------------------|
| • Sudden chest pain | • Sweating |
| • Difficult and/or rapid breathing | • Confusion |
| • Shortness of breath | • Palpitations or fast heart rate |

Prevention of pulmonary embolus

- Prevent blood clot in legs
- Recognize if a blood clot forms in your leg and call your doctor promptly



Post-op Goals (At Home)

Activity Guidelines.

Exercising is important to obtain the best results from total knee surgery. You may receive exercises from a physical therapist at an outpatient facility or at home. In either case, you need to participate in an ongoing home exercise program as well. After each therapy session, ask your therapist to recommend changes to your program that will keep you moving toward the goals listed on the next few pages.

Weeks 1-3 Goals

During weeks one to three of your recovery, typical goals are to:

- Continue with walker unless otherwise instructed.
- Walk as much distance as comfortable with support. Don't tire yourself. Walk smaller distances more frequently in a day rather than longer distances at a stretch.
- Climb and descend a flight of stairs (12-14 steps) with a rail once a day as needed.
- Actively bend your knee at least 90 degrees.
- Straighten your knee completely.
- Independently sponge bath or shower and dress.
- Gradually resume homemaking tasks.
- Do 20 minutes of home exercises twice a day, with or without the therapist, from the program given to you

Weeks 2-4 Goals

Weeks 2-4 will see you gain more independence. Even if you are receiving outpatient therapy, you will need to be very faithful to your home exercise program to be able to achieve the best outcome.

Your goals for the period are to:

- Achieve one to three week goals.
- Move from full support to a cane or single crutch as instructed.
- Gradually increase your walking distance.
- Climb and descend a flight of stairs (12-14 steps) more than once daily as needed.
- Bend your knee more than 90 degrees.
- Straighten your knee completely.
- Independently shower and dress.
- Resume homemaking tasks.
- Do 20 minutes of home exercises twice a day with or without the therapist.

Weeks 4-6 Goals

Weeks 4 - 6 will see much more recovery to full independence. Your home exercise program will be even more important as you receive less supervised therapy.

Your goals are to:

- Achieve one to four week goals.
- Walk with a cane or single crutch.
- Gradually increase your walking distance.
- Begin progressing on stair from one foot at a time to regular stair climbing (foot over foot).
- Actively bend knee 110 degrees.
- Straighten your knee completely.
- Continue with home exercise program twice a day.

Weeks 6-12 Goals

During weeks 6-12 you should be able to begin resuming all of your activities. Your goals for this time period are to:

- Achieve one to six week goals.
- Walk with no cane or crutch and without a limp.
- Climb and descend stairs in normal fashion (foot over foot).
- Walk greater distances comfortably and independently.
- Bend knee to 120 degrees.
Improve strength to 80%.
- Resume recreational activities.
- You can resume intimate activities with your partner depending upon your comfort factor.
- Remember NO driving while taking NARCOTICS



Pre- and Post-op Exercises

1. Ankle Pumps
2. Quad Sets
3. Gluteal Sets
4. Abduction and Adduction
5. Heel Slides
6. Short Arc Quad
7. Straight Leg Raise
8. Sitting Knee Flexion
9. Extension Stretch
10. Standing Heel/Toe Raises
11. Standing Knee Flexion
12. Arm chair push ups

(1) Ankle Pumps

Flex and point your feet. **Perform 20 reps.**



(2) Quad Sets - (Knee Push-downs)

Back lying, press knee into the mat by tightening the muscles on the front of the thigh (quadriceps). Hold for 5 count. Do NOT hold breath. **Perform 20 reps.**



(3) Gluteal Sets - (Bottom Squeezes)

Squeeze bottom together. Hold for a 5 count. Do NOT hold breath. **Perform 20 reps.**



(4) Hip Abduction and Adduction - (Slide Heels Out and In)

Back lying, with toes pointed to ceiling and knees straight. Tighten the quad muscle and slide legs out to side and back to the starting position.

Perform 20 reps.



(5) Heel Slides - (Slide Heels Up and Down)

Back lying, slide your heel up the surface bending your knee. Post-op, your therapist may have you use a strap around the foot to assist gaining the knee bend.

Perform 20 reps.



(6) Short Arc Quads

Back lying, place a 6-8 inch roll under the knee. Lift the foot from the surface, straightening the knee as far as possible. Do not raise thigh off roll.

Perform 2 sets of 10 reps.

**(7) Straight Leg Raises**

Back lying, with the unaffected knee bent, and foot flat. Tighten the quad on the affected leg and lift the leg 12 inches from the surface. Keep knee straight and toes pointed towards your head.

Perform 2 sets of 10 reps.



(8) Seated Knee Flexion

Sitting in straight-back chair, bend the affected leg as far as possible under the chair (you can use the opposite foot to help). When maximum bend is reached, plant the foot and slide your hips forward further bending the knee. Hold for 20-30 seconds; **Repeat 10 times.**



(9) Knee Extension Stretch

Sitting in a comfortable chair, prop the affected foot on a chair or stool. Place a towel or roll under the ankle so that the calf is unsupported, and apply an ice pack on top of the knee. **Hold this position for 15 minutes.**



(10) Standing Heel / Toe Raises

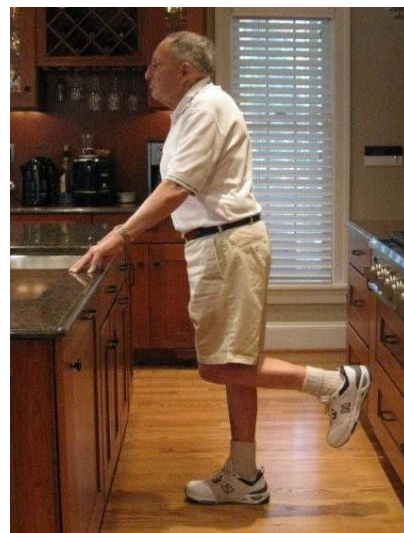
Stand, with a firm hold on the table. Rise up on toes then back on heels. Stand as straight as possible! **Perform 2 sets of 10 reps.**



11) Standing Knee Flexion – Hamstring Curls

Stand, with feet shoulder width apart, toes pointing forward and holding onto the table. Tighten your gluteal muscles, and bend the operated knee lifting your foot off the floor. Do not bend forward, or let your hip bend. Try to keep a straight line from the ear through the shoulder to the hip and knee.

Perform 2 sets of 10 reps.



(12) Armchair Push-ups

Sitting in a sturdy armchair with feet flat on the floor, place your hands on the armrests. Straighten your arms raising your bottom up from seat as far as possible. Use your legs as needed to help you lift. As you get stronger, progress to using only your arms



and the “non-operated” leg to perform the push-up. This will be how you will get up from a chair after surgery. Do not hold your breath or strain too hard. **Perform 2 sets of 10 reps.**

Activities of Daily Living

Standing up from chair

Do NOT pull up on the walker to stand!

Sit in a chair with arm rests when possible.

1. Scoot your hips to the edge of the chair.
2. Push up with both hands on the armrests. If sitting in a chair without armrest, place one hand on the walker while pushing off the side of the chair with the other.
3. Balance yourself before grabbing for the walker.

Stand to sit:

1. Back up to the center of the chair until you feel the chair on the back of your legs.
2. Slide out the foot of the operated knee, keeping the strong leg close to the chair for sitting.
3. Reach back for the arm rest one at a time
4. Slowly lower your body to the chair, keeping the operated leg forward as you sit.

Transfer – Bed

When getting into bed:

1. Back up to the bed until you feel it on the back of your legs (you need to be midway between the foot and the head of the bed).
2. Reaching back with both hands, sit down on the edge of the bed and then scoot back toward the center of the mattress.
3. Move your walker out of the way, but keep it within reach.
4. Scoot your hips around so that you are facing the foot of the bed.
5. Lift your leg into the bed while scooting around (if this is your surgical leg, you may use a cane, a rolled bed sheet, a belt, or your elastic band to assist with lifting that leg into bed).
6. Keep scooting and lift your other leg into the bed using the assistive device.
7. Scoot your hips towards the center of the bed.



Back up until you feel your leg on the bed.



Stay in a sitting position.



Scoot back on the bed, lifting the leg on the bed.

When getting out of bed:

1. Scoot your hips to the edge of the bed.
2. Sit up while lowering your non-surgical leg to the floor.
3. If necessary, use a leg-lifter to lower your surgical leg to the floor.
4. Scoot to the edge of the bed.
5. Use both hands to push off the bed. If the bed is too low, place one hand in the center of the walker while pushing up off the bed with the other.
6. Balance yourself before grabbing for the walker.

Transfer - Bath seat/Tub(if present)

Getting into the tub using a bath seat:

1. Place the bath seat in the tub facing the faucets.
2. Back up to the tub until you can feel it at the back of your knees. Be sure you are in line with the bath seat.
3. Reach back with one hand for the bath seat. Keep the other hand in the center of the walker.
4. Slowly lower yourself onto the bath seat, keeping the surgical leg out straight.
5. Move the walker out of the way, but keep it within reach.
6. Lift your legs over the edge of the tub, using a leg lifter for the surgical leg, if necessary. **Hold onto the shower seat or railing. Keep your toes pointed up.**

NOTE:

- Bath seats, grab bars, long-handled bath brushes, and hand-held showers make bathing easier and safer.
- Use a rubber mat or non-skid adhesive on the bottom of the tub or shower.
- Keep soap within easy reach.

Getting out of the tub using a bath seat:

1. Lift your legs over the outside of the tub.
2. Scoot to the edge of the bath seat.
3. Push up with one hand on the back of the bath seat while holding on to the center of the walker with the other hand.
4. Balance yourself before grabbing the walker.



Walking

1. Push the walker forward.
2. Step forward placing the foot of the surgical leg in the middle of the walker area.
3. Step forward with the non-surgical leg. DO NOT step past the front of the walker.

NOTE: Take small steps. Keep the walker in contact with the floor, pushing it forward.

You can advance from this basic technique to a normal walking pattern. Holding onto the walker, step forward with the surgical leg, pushing the walker as you go; then try to alternate with an equal step forward using the non-operated leg. Continue to push the walker forward as you walk. When you first start, this may not be possible, but as you “loosen up” you will find this gets easier. Do not walk forward past the walker center or way behind the walker’s rear legs.

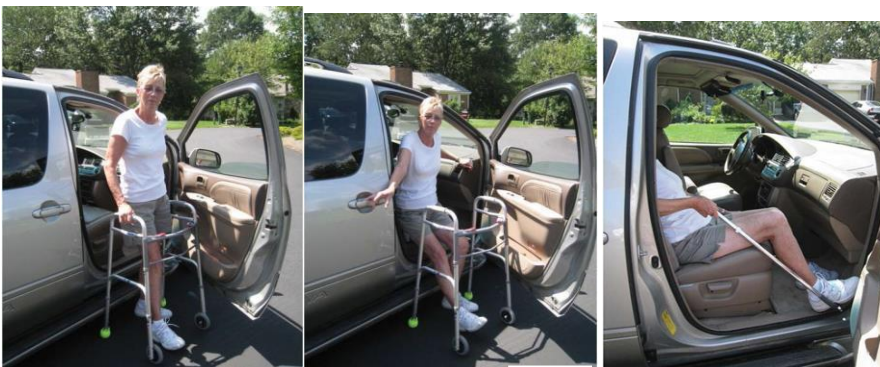
Stair climbing

1. Ascend with non-surgical leg first (Up with the good).
2. Descend with the surgical leg first (Down with the bad).
3. Always hold onto the railing!
4. If needed, cane stays on the level of the surgical leg

Transfer - Car

Getting into the car:

1. Push the front seat all the way back; recline the seat back to allow access and egress, but always have it in the upright position for travel.
2. Place a plastic bag on the seat to help you slide.
3. Back up to the car until you feel it touch the back of your leg.
4. Hold on to an immovable object – car seat, dashboard and slide the operated foot out straight. MIND YOUR HEAD as you sit down. Slowly lower yourself to the car seat.
5. Lean back as you lift the operated leg into the car. You may use your cane, leg lifter or other device to assist.



Personal Care - Using a "reacher" or "dressing stick."

Putting on pants and underwear:

1. Sit down.
2. Put your surgical leg in first and then your non-surgical leg. Use a reacher or dressing stick to guide the waistband over your foot.
3. Pull your pants up over your knees, within easy reach.
4. Stand with the walker in front of you to pull your pants up the rest of the way.
5. Ensure you are balanced before letting go of the walker to pull up pants.

Taking off pants and underwear:

1. Back up to the chair or bed where you will be undressing.
2. Unfasten your pants and let them drop to the floor. Push your underwear down to your knees.
3. Lower yourself down, keeping your surgical leg out straight.
4. Take your non-surgical leg out first and then the surgical leg.

A reacher or dressing stick can help you remove your pants from your foot and off the floor.

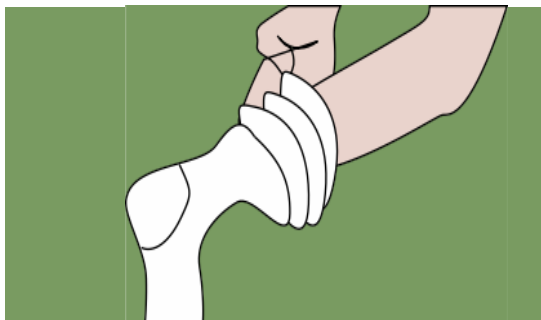


How to use a sock aid(if required/available):

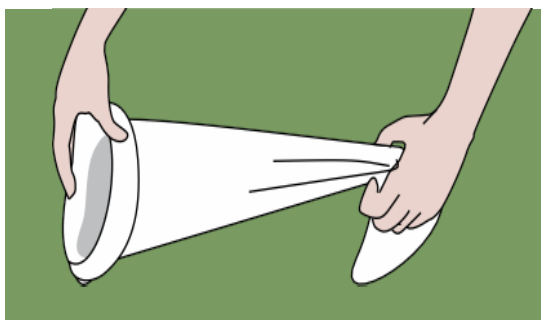
1. Slide the sock onto the sock aid. The toes should be pulled down flat. The heel should be on the round plastic side. The extra fabric should be bunched up in front of the knots, not over them (see middle picture below).
2. Hold the cord and drop the sock aid in front of your foot. It is easier to do this if your knee is bent.
3. Slip your foot into the sock aid.
4. Straighten your knee, point your toe and pull the cords. Keep pulling until the sock aid pulls out.



Application of compression stockings



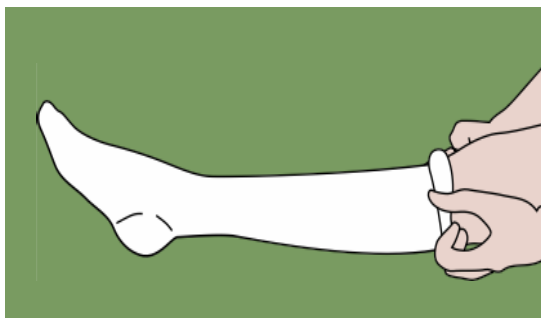
1. Insert hand into stocking as far as the heel pocket.



2. Grasp center of heel pocket and turn stocking inside out to heel area.



3. Carefully position stocking over foot and heel. Be sure heel is centered in heel pocket.



4. Pull stocking up and lift around ankle and calf, working up to final position (top of stocking is positioned approximately one to two inches below the bottom of knee cap). Make sure heel and toe are positioned correctly. Smooth out any excess material between top of stocking and ankle. Pull toe section forward to smooth ankle and instep area and allow for toe comfort.

Around the House

Saving energy and protecting your joints

Fall Prevention at Home

Each year, thousands of people fall at home. Many of them are seriously injured, and some are disabled. All age groups are affected, with adults over age 60 ranking highest for these injuries.

The points below address hazards found in your home that have been associated with falls. Attention to these hazards now may prevent a fall in the future.

General

- ▶ Keep pathways clear and free of clutter.
- ▶ Remove throw rugs or use double-sided tape or a non-slip backing so the rugs won't slip.
- ▶ Coil or tape wires next to the wall to avoid tripping over them.
- ▶ Keep objects off the stairs.
- ▶ Be sure carpet on stairways is firmly attached. Apply non-slip rubber treads to the stairs if there is no carpet.
- ▶ Fix loose or uneven steps.
- ▶ Fix loose handrails.
- ▶ Maintain adequate lighting.

Kitchen

- ▶ Keep things you use often on the lower shelves. **Do NOT** get down on your knees to scrub.
- ▶ climbing. Do not use a chair.
- ▶ Use a sturdy step stool when

Bathroom

- ▶ Use a non-skid mat or adhesive strips in the bathtub or shower.
- ▶ Install grab bars in the tub, shower and toilet area.

Bedroom

- ▶ Place a lamp close to the bed where it is easy to reach.
- ▶ Use a night light so you can see where you're walking.

Other

- ▶ Exercise regularly if not contraindicated by your physician. Exercise makes you stronger and improves your balance and coordination.
- ▶ Review your medications with your Doctor. Some medicines can make you sleepy or dizzy.
- ▶ Have your vision checked. Poor vision can increase your risk of falling.
- ▶ Get up slowly after you sit or lie down.
- ▶ Wear shoes both inside and outside the house.
- ▶ Keep emergency numbers near each phone.
- ▶ Consider wearing an alarm device that will bring help in case you fall and can't get up.

Do not lift heavy objects for the first three months and then only with your surgeon's

Do's and Don'ts throughout Life

Whether you have reached all the recommended goals in three months or not, you need to have a regular exercise program to maintain the fitness and the health of the muscles around your joints. With your orthopedic and physiotherapist permission, you should be on a regular exercise program three to four times per week lasting 20-30 minutes. Impact activities such as running and singles tennis may put too much load on the joint and are not recommended. High-risk activities may be discouraged because of the risk of fractures around the prosthesis and damage to the prosthesis itself. Infections are always a potential problem and you may need antibiotics for prevention. **There is no limit to walking/sitting/standing .**

What to Do for Exercise

Choose a Low Impact Activity

- Recommended exercise classes
- Home program as outlined in your Patient Guidebook
- Regular walks
- Stationary bike
- Aquatic exercises
- Regular exercise at a fitness center
- Low-impact sports

walking, gardening, swimming etc. Consult with your surgeon or physical therapist about returning to specific sport activities.



Aquatic Program

Aquatic fitness through a series of specially designed exercises that, with the aid of the water's buoyancy and resistance, can help improve joint flexibility and muscular strength. The warm water and gentle movements can also help to relieve pain and stiffness.

Low- Impact Aerobic Exercise Program

To promote increased joint flexibility, range-of-motion, and to help maintain muscle strength brief, light, low-impact aerobic exercise is beneficial. We recommend you always consult with your physician before starting any fitness or exercise program.

What Not to Do

- Do not run or engage in high-impact activities such as contact sports, etc.
- Do not participate in high-risk activities.
- Do not take up new sports requiring strength and agility until you discuss it with you surgeon or physical therapist.

What to Do in General

- **Take antibiotics one hour before you have dental work if instructed by your surgeon.**
- Although the risks are very low for post-operative infections, it is important to realize that the risk remains. A prosthetic joint could possibly attract the bacteria from an infection located in another part of your body. If you should develop a fever of more than 101 degrees or sustain an injury

such as a deep cut or puncture wound, you should clean it as best you can, put a sterile dressing or an adhesive bandage on it and notify your doctor. The closer the injury is to your prosthesis, the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your doctor if the area is painful or reddened.



Traveling guidelines:

- Check with your surgeon when allowed to travel so you don't set yourself up for greater chance of complications.
- If traveling by car, get out to stretch every 2 hours. This helps prevent stiffness. You may need to do this any time you travel for the first year after surgery.
- If traveling by plane, BEFORE you get into a security line, let them know that you had your knee replaced, as you will most likely set off the metal detector. you will be provided with an implant certificate which you can show the security authorities. ALSO request a wheelchair the first year to board and get off a plane...this aids in priority seating and you should sit on the aisle or at the bulkhead where you can easily stretch your legs and get up to walk up and down the aisles...this helps prevent blood clots and stiffness.

The Importance of Lifetime Follow-up Visits

Over the past several years, orthopedic surgeons have discovered that many people are not following up with their surgeons on a regular basis. The reason for this may be that they do not realize they are supposed to, or they do not understand why it is important.

So, when should you follow up with your surgeon?

These are some general rules:

- Every year, unless instructed differently by your surgeon.
- Anytime you have mild pain for more than a week.
- Anytime you have moderate or severe pain.

There are two good reasons for routine follow-up visits with your orthopedic surgeon:

If you have a cemented knee, we need to evaluate the integrity of the cement. With time and stress, cement may crack. You probably would be unaware of this happening because it usually happens slowly over time. Seeing a crack in cement does not necessarily mean you need another surgery, but it does mean we need to follow things more closely.

Why? Two things could happen. Your knee could become loose and this might lead to pain. Alternatively, the cracked cement could cause a reaction in the bone called osteolysis, which may cause the bone to thin out and cause loosening. In both cases, you might not know this for years. Orthopedists are continually learning more about how to deal with both of these problems.

The sooner we know about potential problems, the better chance we have of avoiding problems that are more serious.



The second reason for follow-up is that the plastic liner in your knee may wear. Tiny wear particles combine with white blood cells and may get in the bone and cause osteolysis, similar to what can happen with cement. Replacing a worn liner early and grafting the bone can keep this from worsening.

Xrays taken at your follow-up visits can detect these problems. Your new X-rays can be compared with previous films to make these determinations. This will be done in your doctor's office.

We are happy that most patients do so well that they do not think of us often. However, we enjoy seeing you and want to continue to provide you with the best care and advice. If you are unsure how long it has been or when your next visit should be scheduled, call your doctor. We will be delighted to hear from you.

Rules for Life After Your New Knee

Your knee replacement is a marvel of engineering and computer assisted design and is meant to withstand the stress of everyday life and activity. To obtain the most from your new joint it is important that you follow **THE RULES!**

So what are these rules and why have them? **THE RULES** are designed to maximize the life of your new joint and they are designed to enhance your experience with your new knee.

Rule #1: Watch your weight!

Your new knee is a mechanical device and is made of metal (yes, very advanced alloys) and plastic (polyethylene-medical grade to be exact). As you walk, metal rubs against plastic and this bearing surface is subject to wear. Excessive body weight adds to the wear of the materials in your knee; therefore, it is important to avoid unnecessary weight. Besides excessive wear on your new joint, obesity is associated with many medical conditions so it is prudent to maintain the proper weight. For help in this area, contact your medical doctor or a local weight control specialist.

Rule #2: Begin or continue a regular low impact exercise and strengthening program.

Proper exercise usually includes walking, but activities such as stair

climbing, cycling, or use of the elliptical machine are just fine. Many of our joint replacement patients are active in local walking or bicycling clubs. Hiking, swimming and golf are also encouraged. Activities that are not recommended are running and singles tennis. Avoid excessive wear on the new knee but continue with exercise. Exercise will keep you more trim and enhance the muscular control of your new knee. **As with all exercise, obtain clearance from your medical doctor before proceeding!** Seven Sensational Strategies for a Successful Exercise Program follow this section!

Rule #3: Eat RIGHT!

Proper nutrition will help keep you trim and the thought process involved with proper nutrition goes hand-in-hand with proper weight control and exercise. Your internal medicine physician or a dietician may help in this area if you need advice (who doesn't?!).

Rule #4: Take Antibiotics whenever you have a dental, urological (bladder) or GI (colon) procedure.

Be sure to take an oral or IV antibiotic approximately thirty minutes prior to any dental or surgical procedure! This is a LIFELONG recommendation. There is a chance of bacteria seeding or contaminating the knee prosthesis. If this happens, hospitalization and

surgery are required to clean out your knee! Simply contact our office for your antibiotic prescription prior to any invasive procedure or dental work.

Rule #5: Follow up with your Orthopaedic Surgeon YEARLY.

It is important to see your surgeon yearly for an exam and x-ray of your knee. This allows your surgeon to check the integrity of the knee prosthesis.

Rule #6: Attend our yearly Total Joint Party.

This event is well attended and is packed with good information, good food, camaraderie and good will!. Invitations are mailed approximately one month prior to the date. We hope to see you then!

Strategies for a Successful Exercise Program

1. Enjoy yourself.

Find an exercise or exercises that you enjoy. If you are having fun, you are more likely to stick with your program.

2. Pick the right buddy.

There is nothing like a dedicated partner or a good friend to spur you on when a little extra motivation is needed. The right partner can make or break a successful exercise routine.

3. Be consistent.

Create a schedule and stick to it. It may be best to schedule exercise appointments. Try to exercise three or four times per week.

4. Be kind to your joint.

Walking is a great activity that does not unusually stress your joint replacement. Other suggested activities include cycling (as long as you are skilled in this activity), stationary cycling, and swimming. It is important to avoid activities involving running and jumping.

5. Mix it up a bit!

Change your routine; pick another activity, exercise in a different place or exercise with a new friend. Variety is the spice of life!

6. Create the right tempo!

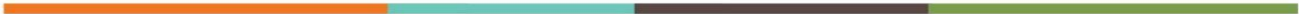
You may have been a world class athlete prior to this knee replacement but remember, this is a new experience for your new knee and for you. It is necessary to start slowly with your new joint and then gradually progress as you feel up to it and then rev it up some as you become more accustomed to the new joint and as your energy and strength increase.

7. Obtain medical clearance.

Check with your medical doctor and get his or her OK before starting any aerobic exercise program.

Section Five:

Helpful Resources



PATIENT TASK CHECKLIST

We believe that patients receive the best care when they are active participants in the care process. Our aim is to make your care and transition home as smooth as possible by planning ahead and involving you in the process. With this in mind, we strongly encourage you to complete the following tasks to the best of your ability.

I understand that before my surgery I should:

- Try to improve my exercise tolerance as I am able
- Read the patient education material
- Attend the Joint class
- Prepare my home as suggested
- Obtain the recommended assistive devices
- Complete the chlorhexidine washes
- Arrange transportation to and from the hospital
- Identify one person who will be my Coach, if possible

I understand that during my hospital stay I should:

- Follow the advice of the health care team members so that complications are reduced
- Try to improve my level of functioning by taking an active part in my exercise program so that the best possible results will be obtained from my surgery
- Discuss any questions or concerns with my health care team

PRE-ADMISSION TESTING (PAT) DAY INSTRUCTIONS

Pre-admission testing, including lab work and medical clearance, is required 7 to 10 days before your joint replacement surgery. If your pre-admission testing is to be done in the hospital, the appointment will be made for you by the surgeon's office staff. You will receive a phone call from the pre-admission staff confirming your appointment.

PRE-ADMISSION TESTING DAY

This may be long day so you should

- A. Eat breakfast or lunch before arriving/Fasting 6 hrs.**
- B. Take your regular medicines (you may want to bring your pain medicine with you).**
- C. Wear comfortable, easy to remove clothing.**
- D. Bring with the PAT:**
 - **Your completed health history form.**
 - **Results of any test you may have had outside this hospital and/or copies of any chest x-rays or EKGs done within the last year.**
 - **Your insurance card or forms.**
 - **This booklet and your list of questions.**
- E. Report to the office of the hospital at the assigned time**

You will have:

A nurse review your health history with you and provide preoperative instruction.

Lab work- blood and urine tests.

X-rays

Cardiac workup including ECHO if advised

PAC-Anesthetist visit

If you are taking any medication, be sure to ask the doctor if you should take it the morning of your surgery.

If you have not already attended one of the pre-admission Patient/Family Education sessions, you should arrange to attend one now so that you will be well prepared for your surgery.

HEALTH HISTORY

Name _____

Birth Date _____ Gender _____

Name of family doctor _____

Doctor's phone number _____ Date of last visit _____

List any drugs, foods or items that you are allergic to and the type of reaction they cause.

Allergic to:	Type of reaction
_____	_____
_____	_____
_____	_____
_____	_____

List **ALL** medications, including eye drops, vitamins and over-the-counter drugs that you are currently taking.

Medication Name	Dosage (milligrams)	Frequency and specific times taken
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Do you use any of the following?

	What?	How much?	How often?
Tobacco	_____	_____	_____
Alcohol	_____	_____	_____
Drugs	_____	_____	_____

Do use any of the following?

	Yes	No
Dentures	—	—
Glasses	—	—
Contact Lenses	—	—
Hearing Aid	—	—
Braces	—	—
<u>Assistive Devices</u>		
Cane	—	—
Crutches	—	—
Walker	—	—
Other (describe)	_____	

Family History

	Living	Deceased	Age	Cause of Death
Mother	_____	_____	_____	_____
Father	_____	_____	_____	_____
Siblings'	_____	_____	_____	_____
	_____	_____	_____	_____

Has anyone in your family been treated for any of the following?

	Yes	No	Relationship
Bleeding Disease	—	—	_____
Cancer	—	—	_____
Diabetes	—	—	_____
Heart Disease	—	—	_____
High Blood Pressure	—	—	_____

List your previous hospitalizations for surgery or illness.

When	Reason for Hospitalization	Where
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Have you ever been treated for any disease/condition?

When	Disease/Condition
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Date of last dental check-up: _____

Date of last x-ray: _____

Date of last cardiogram (EKG) _____

If you have had a chest x-ray, cardiogram, echocardiogram or stress test in the last year, please bring a copy of the film or reading with you to PAT. If you have had other health problems, please bring the appropriate records such as lab results or consultation reports.

BEFORE YOU GO HOME CHECKLIST

You should have completed the following goals prior to discharge:

- ☐ Able to walk safely with the appropriate aid; i.e. cane, crutches, walker
- ☐ Have the necessary equipment to allow you to manage safely at home (e.g. raised toilet, bath seat)
- ☐ Able to get in and out of bed on your own or with the help of your caregiver or coach
- ☐ Safely manage stairs (unless no stairs)
- ☐ Know what exercises to continue at home and how to progress them after discharge
- ☐ Know what activities you can perform safely and what to avoid
- ☐ Review discharge instructions with your nurse

Ensure you have:

- ☐ Your prescriptions (e.g. pain medication, anticoagulant)
- ☐ **Your own medications returned**
- ☐ Your appointment card for follow-up visit
- ☐ Arranged for your escort to pick you up by 9:30 a.m
- ☐ All your belongings

Medication Record

Fill out the first three (3) columns before coming to your pre-op evaluation

Third column "Instructions for Surgery" filled in during pre-op evaluation

Medication (Name)	Dose (mg)	Frequency (Times per day)	Instructions for Surgery
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

SYMPTOMS REQUIRING IMMEDIATE ATTENTION

Visit your nearest Emergency Department if you have any of the following:

- Shortness of breath or difficulty breathing
- Chest pain, tightness or pressure
- A significant increase in pain, swelling or redness in your calf/calves
- A sudden, severe increase in pain in your new joint

Notify your surgeon / family doctor immediately if you have any of the following:

- Increased redness, swelling or a sudden increase in bruising around the incision site
- A foul odor or yellow or green drainage at the incision site
- Excessive bleeding
- Any other signs or symptoms of infection (i.e. bladder infection, tooth infection, etc.)
- A persistent increase in your temperature (over 38°C)

MEDICATIONS TO STOP BEFORE SURGERY AS DIRECTED BY YOUR SURGEON AND PRESCRIBING PHYSICIAN

Anticoagulants and Anti-platelets (Blood thinners)

- Plavix (Clopidogrel)
- Prasugrel (Effient)
- Warfarin (Coumadin)
- Dabigatran (Pradaxa)
- Rivaroxaban (Xarelto)
- Anagrelide (Agrylin)
- Dipyridamole (Persantine)
- Cilostazol (Pletal)
- Ticagrelor (Brilinta)
- Ticlopidine (Ticlid)
- Vorapaxar (Zontivity)
- Apixaban (Eliquis)
- Acenocoumarol
- Aggrenox (Aspirin/Dipyridamole)

NSAIDS (nonsteroidal anti-inflammatory drugs)

- Ibuprofen (Advil, Motrin, Midol, Nuprin, Pamprin)
- Naproxen (Aleve, Naprosyn, Anaprox)
- Oxaprozin (Daypro)
- Aspirin (Bufferin, Ecotrin, Bayer, ASA)
- Declofenac (Cataflam, Voltaren, Arthrotec)
- Ketorolac (Toradol)
- Etodolac (Lodine)
- Nabumetone (Relafen)
- Indomethacin (Indocin)
- Piroxicam (Feldene)
- Meloxicam (Mobic)
- Diflusal
- Fenoprofen (Naflon)
- Floctafenine
- Flurbiprofen (Alti-Flurbiprofen, Ansaid, Apo-Flurbiprofen, Froben)
- Froben (SR, Novo-Flurprofen, Nu-Flurprofen)
- Ketoprofen (Active-Ketoprofen)
- Meclofenamate (Meclomen)
- Mefenamic Acid (Ponstel)
- Sulindac
- Tiaprofenic Acid
- Tolmetin

Glossary of Terms

Abdomen: the part of the body commonly thought of as the stomach; it is situated between the hips and the ribs.

Ambulating: walking.

Anticoagulants: blood thinners taken after joint replacement to prevent blood clots

Assistive Devices: walker, crutches, cane or other device, to help you walk.

Cartilage: A smooth material that covers bone ends of a joint to cushion the bone and allow the joint to move easily without pain

Compression Stockings: special stocking that encourage circulation and decrease circulation

Continuous Pulse Oximeter: device to measure your oxygen level most commonly placed on your finger.

Degenerative Arthritis: The process that causes gradual impairment and loss of use of a joint.

Dorsiflexion: bending back the foot or the toes.

Dressings: bandages.

Embolus: blood clot that becomes lodged in a blood vessel and blocks it.

Fracture: A break in a bone

Incentive Spirometer: breathing tool to help you exercise your lungs.

Incision: wound from your surgery.

Inflammation: A normal reaction to injury or disease which results in swelling, pain and stiffness

Ligaments: Flexible band of fibrous tissue that binds joints together and connects various bones.

NSAIDS: non-steroidal anti-inflammatory drugs (See list in appendix)

Osteolysis: a condition in which bone thins and breaks down.

Osteoporosis: A condition that develops when bone is no longer replaced as quickly as it is removed

PCA Pump: patient controlled analgesia pump (pain medicine tool that the patient controls).

PCT: Patient Care Technician (nursing assistant)

POD #: refers to what day after surgery you are on. POD#1 is the first day after surgery, POD #2 is the second day after surgery, etc.

Prothrombin: a protein component in the blood that changes during the clotting process

PT: physical therapy.

Pulmonary embolus: life threatening condition where a blood clot becomes lodged in the blood vessels in the lungs

SCD's: Sequential compression device (on your legs) to prevent blood clots

Sprain: A partial tear of a ligament

Strain: A partial tear of a muscle or tendon

TED stockings: Compression stockings (white) to decrease leg swelling and help prevent blood clots

Tendon: The tough cords of tissue that connect muscles to bone

TKR: Total knee replacement

Ultrasound: A diagnostic technique which uses high frequency sound waves to create an image on the internal organs

X-rays: A diagnostic test which uses invisible electromagnetic energy beams to produce images of internal tissues, bones and organs onto film.

Exercise Log

Exercise # or Activity	# of Sets/ # of Repetitions	Activity Length	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Examples as below:									
#1 Ankle Pumps	3 sets/10 reps			√		√		√	
Walking		10 mins	√						

ROM Log for Physical Therapy

Date of Surgery: _____	Prosthesis Type: _____
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Date of Surgery: _____	Prosthesis Type: _____
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[illegible]

Specific Recommendations for My New Knee

[illegible]

Nutrition recommendations for before and after your surgery

Optimal nutrition leading up to your surgery can help you to better tolerate your procedure, promote wound healing, and prevent complications. After your surgery, adequate nutrition can help to speed up recovery by providing the energy and nutrients needed for wound healing and increased physical activity.

Recommendations Prior to Surgery:

- **Ask your doctor if weight loss or weight restoration should be achieved before your procedure.** If so, consider requesting a consult for outpatient nutrition counseling.
- **Stay hydrated.** Most adults need at least 8 (8 oz) glasses of water per day (64 oz total). Try flavoring water with fruit, mint, or cucumbers. Avoid sugary beverages that raise your blood sugar and add extra calories to your diet.
- Focus on foods that are full of healthy nutrients including whole grains, fruits, vegetables, legumes, heart-healthy fats, low fat dairy products, and lean proteins like fish and chicken.
- **Avoid foods that are high in calories and offer few nutritional benefits** such as sweets and desserts, sugary beverages, fried foods, red meats (especially high fat cuts of meat), and full-fat dairy products.
- **The day before your surgery,** follow your doctor and nurse's instructions on when to stop eating and drinking before your procedure.

Recommendations After Surgery:

- Some patients follow a "clear liquid diet" after surgery. You can eat more when your nurse and physician feel you are ready to tolerate solid foods.
- **Stay hydrated.** It is very important to drink enough fluids following your procedure.
- **Make sure to eat enough protein.** Your protein needs increased after your procedure because proteins help your body to build healthy, new tissue and heal wounds. Include a serving of protein with every meal. Foods that are high in protein include meats, fish, legumes (beans and lentils), tofu, milk, nuts, and yogurt.
- **Eat at least 3 times per day.** Eating more frequently during the day will help to promote gastrointestinal motility and will help to stabilize blood sugar. Try to eat a moderate sized meal or a snack at least 3 times per day.
- Some medications may affect your appetite following surgery; however, it is important to continue eating nutritious foods throughout your stay. Good nutrition helps your body to heal!

Pay attention to portions!/Tentative intake per meal:

Grains: 1-2 slices bread, 1/2-1 cup cooked grain, cereal, or starchy vegetable

Proteins: 100-200 Gms. Meat, fish or cheese, 1/2 to 1 cup beans, 1 Tablespoon nuts

Fats: 1 teaspoon butter, 1 Tablespoon oil or dressing.

Fruits: 1 small piece of fruit, 1/2 – 3/4 cup fresh fruit, 1/4 cup dried fruit

Vegetables: unlimited (non-starchy)

Dairy: 250 Gms milk or yogurt, 30 Gms cheese.

**Dietitians are available to answer any questions that
you might have during your stay.**

**Please let your doctor or nurse know if you would
like to meet with a Dietitian.**

Phone Numbers

Health Care Provider	Name	Phone Number
Nurse		
Occupational Therapist		
Physical Therapist		
Surgeon		
Primary Care Doctor		

Other Phone Numbers

Name	Phone Number	Comment

IMPORTANT DATES

Appointment List

Appointment	Date	Time	Comment
PRE ADMISSION TEST			
JOINT CLASSESS			
BLOOD DONATION			
SUTURE REMOVAL			
3 MONTH VISIT			
9 MONTH VISIT			

1 YEAR VISIT

OTHER IMPORTANT DATES

Notes

[illegible]

