



# Total Joint Replacement Surgical Guide

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# Welcome to Garnet Health Medical Center's Bone & Joint Center

Thank you for choosing Garnet Health Medical Center for your upcoming orthopedic surgery. It is our goal to improve the health of our community by providing exceptional healthcare. We are proud to work with some of the best orthopedic surgeons, who have trained at some of the most prestigious institutions across the country. The skills and experience of our staff have elevated Garnet Health Medical Center to be the leader in orthopedic care in the Hudson Valley.

Our hospital is proud to participate in the Agency for Healthcare Research and Quality Program for Improving Surgical Care and Recovery. Through standardization of care and a strong partnership with our patients, we strive to improve the patient experience and surgical outcomes. We believe that patient engagement, education and reassurance are an essential part of a joint replacement program. Understanding the procedure and what to expect afterward can ease recovery, prevent complications and ensure the maximum benefit from your joint replacement.

You can help achieve an optimal recovery from surgery by becoming an active partner with your orthopedic care team before, during and after surgery. We encourage you to ask questions, voice concerns or speak up if you do not understand any part of the process. This educational handbook will guide you along the path from preparation to recovery.



# Pre-surgical Calendar

(Use this calendar to write down important dates.)

Month: \_\_\_\_\_

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY

## You will need to:

1. Complete medical clearance and pre-surgical testing appointment.
2. Make an appointment for a dental check-up and cleaning, if needed.
3. Attend the hospital's Total Joint Replacement patient education class.
4. Make a list of all the medicines you take, with the dosage and how often you take them. Include all prescriptions, over-the-counter medications, vitamins, minerals, herbs and supplements.
5. Make a list of any major illnesses, diseases, disorders and chronic conditions you currently have or have had in the past. Include previous surgeries and any complications. Note any allergies or sensitivities to food, medicines, latex or metals.
6. Maintain a healthy lifestyle.

**Eat right. Stop smoking. Start pre-op exercises.**



# Addresses and Contact Information

**Garnet Health  
Medical Center**  
707 East Main Street  
Middletown, NY 10940

**Garnet Health Medical  
Center - Catskills**  
68 Harris Bushville Road  
Harris, NY 12742

## **Contact information**

**Scheduling Department:**  
(845) 333-7900

**Outpatient Physical  
Therapy:**  
(845) 333-7300

**Pastoral Care:**  
(845) 333-1014

**Pre-Surgical Testing:**  
(845) 333-7085

**Case Management Office:**  
(845) 333-2178

**NAPA Anesthesia:**  
(516) 370-3601

**Total Joint Replacement  
Class:**  
[garnethealth.org/tjr-class](http://garnethealth.org/tjr-class)

**Patient Experience and  
Advocacy Department:**  
(845) 333-1178

Preregistration staff will contact you regarding any out-of-pocket expenses, and to review your payment options. For further questions or concerns, please call (845) 333-7900, opt. 3.



# Your Orthopedic Care Team

Your orthopedic team has a unique and individualized approach to care, with you at the center.



At Garnet Health Medical Center, your safety and successful recovery are our top priorities. Your orthopedic care team will help you prepare for your surgery and answer any questions you may have along the way.

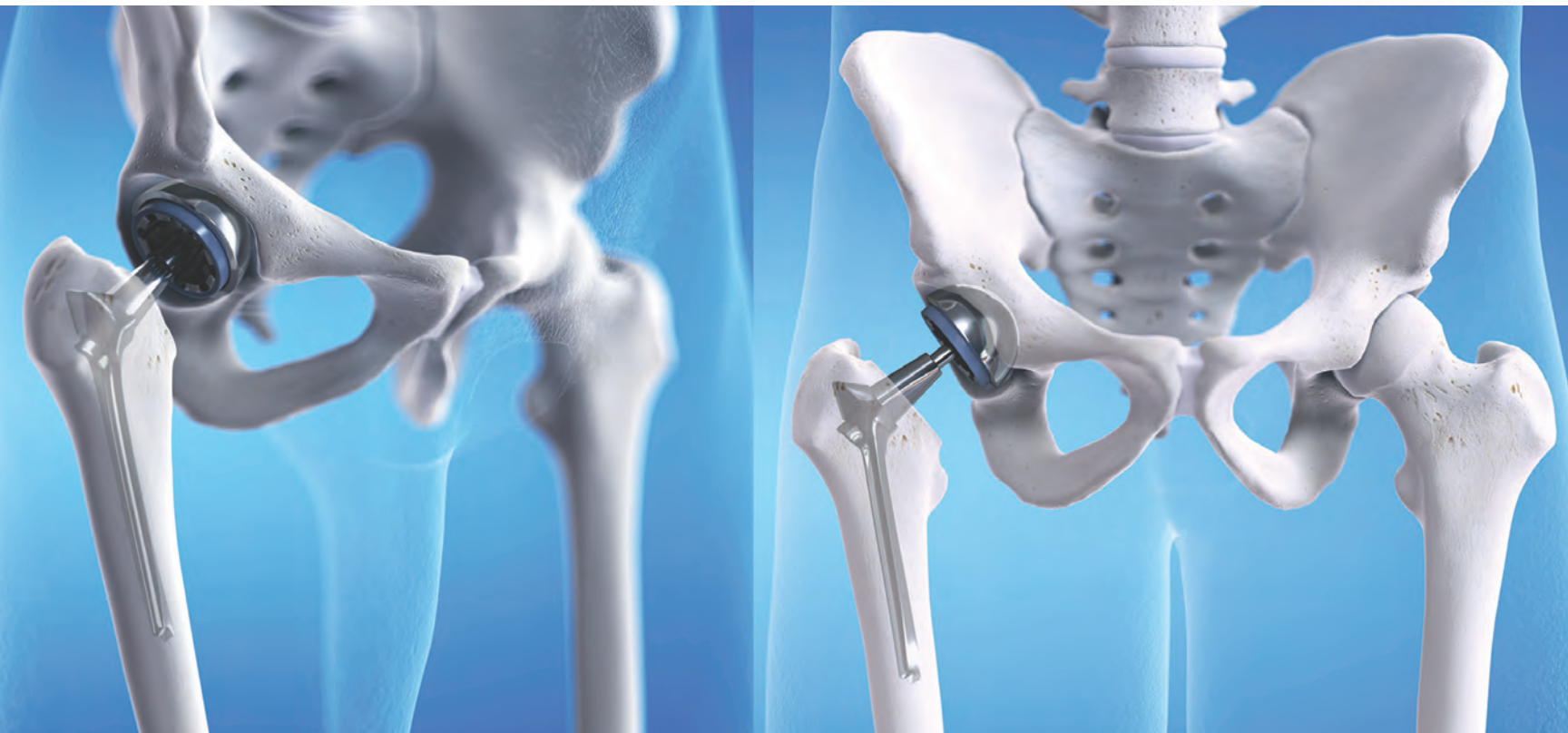
## Pre-operative Joint Replacement Education Class

Please join us for a FREE virtual pre operative patient education class, led by your Orthopedic Nurse Navigator will lead an educational class for you and your chosen caregiver, who will assist you after your surgery. This informational class provides important information about your surgery and recovery. Please review this Joint Replacement Patient Surgical Handbook before participating in the class. We recommend participating in the class three to four weeks before your surgery. To access the virtual class, visit [garnethealth.org/tjr-class](https://garnethealth.org/tjr-class).

# Hip Replacement

More than 450,000 total hip replacements are performed in the United States each year, due to arthritis, traumatic injury and other causes. The hip is one of the largest joints in the body, and is composed of a ball and socket joint. The upper end of the leg bone (femur) has a rounded head (femoral head) that fits into a socket (acetabulum) in the pelvis to form the hip joint.

During a total hip replacement, the damaged parts of the bone, including the femoral head, are removed and replaced with implants. Your surgeon will choose the components best for you, based on your age, activity level and body type. These components include a combination of cobalt-chromium steel, titanium, ultra-high-density polyethylene (plastic) and ceramic.





# Knee Replacement

More than 600,000 total knee replacements are performed in the United States each year, and the surgery is a life-changing event for many people. It can dramatically reduce the pain that people feel each day and allow them to get back to living the life they once had. Most people who have had a total knee replacement state the recovery was much quicker and easier than they expected, and they wished they had done it years earlier.

During a total knee replacement procedure, the worn cartilage is removed, then replaced with metal then polyethylene implants. During this operation, all cartilage is removed from the end of the femur bone (thigh bone) and the top of the tibia bone (shin bone). Implants cover these surfaces. By resurfacing your knee's damaged and worn surfaces, knee replacement surgery can relieve pain, correct leg deformity, and help you resume your normal activities.



# Preparing for Surgery

## ❑ **Medical clearance:**

To ensure it is safe for you to proceed with your joint replacement surgery, you will need to be evaluated to determine your specific risk for surgery. Medical problems that you may have can be identified and addressed prior to your surgery. This will help decrease your risk during and after surgery. This evaluation is done by a designated joint replacement medical clearance provider. All results will be sent to your surgeon prior to your surgery.

## ❑ **Pre-surgical testing:**

Pre-surgical testing (PST) is required for all joint replacement patients. An appointment for PST will be made by your surgeon's office, or the hospital will call you to make an appointment. At this visit, you will undergo a series of tests, including blood work (non fasting), electrocardiogram (EKG), possible urine sample and possible chest X-ray. Please bring an accurate list of all medications you take, (including any herbals, vitamins or supplements,) with the name of the medication, dose and frequency. You will be given instructions on which medications to take on the day of surgery as well as which medications you will need to stop taking before surgery. The hospital's Pre-Surgical Testing department is located in the Outpatient Building of the hospital's main campus at 707 East Main Street, Middletown.

## ❑ **Infection prevention:**

Good hand hygiene is the single-most effective way to prevent infections. Your nasal passages will be treated with a nasal antiseptic before surgery to help reduce bacteria that can potentially cause skin infections. You will also be given a surgical scrub that you will shower with three times before your surgery. The instructions for the surgical scrub can be found in the Educational Resources section.

## ❑ **Metal allergy:**

If you are allergic to metal (usually nickel), be sure to notify your orthopedic surgeon. A special implant will be ordered that does not contain nickel. A metal allergy may be exhibited by a rash, redness, swelling or itching when you are in contact with metal.

## ❑ **Identify a coach:**

He or she can be your spouse, partner, relative or friend. Your coach should attend the pre-operative class with you and review this handbook. A coach can help you by providing motivation and support, and ensure you attend all of your follow-up and physical therapy appointments. He or she can also help with shopping, cooking, cleaning, laundry and pet care.

## ❑ **Advance directives:**

An advance directive can be used to appoint a healthcare agent — someone you trust to make healthcare decisions for you — and to communicate your personal preferences about treatments that may be used to sustain your life. Advance directives are optional. If you have advance directives, please bring copies to the hospital if you want them to apply to your upcoming visit. An advance directive can be removed or revised at any time.

## ❑ **Exercise:**

Strengthening and stretching your whole body before surgery will improve your flexibility and strength prior to and after your surgery. You can refer to the procedure-specific exercises in the Educational Resources section of this handbook. These exercises have been designed for you by your physical therapists.

## ❑ **Nutrition:**

Before and after surgery, eat a healthy, well-balanced diet that is high in lean protein, low-fat dairy, whole grains, fruits and vegetables. Drink at least six 8-ounce glasses of water each day. Certain vitamins and nutrients are important in the healing process, and facilitate a quicker recovery. An anti-inflammatory diet benefits patients with different types of arthritis. Information on the anti-inflammatory diet can be found on WebMD.com.





#### **□ Blood sugar:**

If you are a diabetic, it is very important to manage your blood glucose before your surgery and throughout your recovery. You will have your Hemoglobin A1c checked in pre-surgical testing to ensure your diabetes is under control. Your orthopedic team will manage your blood sugar during your hospital stay; however, uncontrolled blood sugar can adversely affect the healing process and place you at a higher risk for infection.

#### **□ Smoking:**

If you are a smoker, quitting before surgery is crucial, and will significantly decrease your risk of impaired healing, blood clots and infection. Talk to your surgeon or primary care physician about your quitting options, or contact the New York State Smokers' Quitline at 866.NY.QUITS or at [nyssmokefree.com](http://nyssmokefree.com). If necessary, a nicotine patch will be prescribed.

**□ Deep-breathing exercises:** You will be provided with a deep-breathing tool called an incentive spirometer. This will help keep your lungs clear, strengthen your breathing muscles, and help prevent infections before and after surgery. Instructions on the use of the incentive spirometer can be found in the Educational Resources section of this handbook.

#### **□ Dental work:**

Procedures with an increased likelihood of developing bacteria in your blood are dental extractions, periodontal work, mouth surgery and dental cleaning. The American Academy of Orthopaedic Surgeons recommends having this type of dental work completed before your surgery. After a joint replacement, you will have to wait several weeks before undergoing any dental work or routine cleaning. If you are considered to be at high risk for developing an infection due to your medical history, (such as uncontrolled diabetes, a compromised immune system or a history of an infection in an artificial joint), you may need to take antibiotics prior to any dental work. If antibiotics are needed, your dentist should write the prescription for you. If not, call your surgeon.

#### **□ Physical Therapy:**

If you and your surgeon plan for you to go home the same day of your surgery, please make an appointment for a physical therapy session prior to your surgery to learn how to go up and down stairs, get in and out of a car, and get in and out of a bath tub safely after surgery. Please make your post-op physical therapy appointments prior to your surgery as well. You can start physical therapy as soon as possible and will need to attend 2 or 3 appointments a week.

# Preparing Your Home Prior to Surgery

- ☐ Remove throw rugs and any other tripping hazards to help prevent falls during your recovery.
- ☐ Move furniture to ensure a wide path for a walker during your recovery.
- ☐ Make sure you have a firm chair with both a higher-than-average seat and sturdy arms. Such a chair is safer and more comfortable than a low, cushioned chair.
- ☐ Make sure you have safe handrails along all stairs in your home, both inside and outside.
- ☐ Consider installing safety bars and a hand-held hose in the shower, and purchase a shower bench so you can sit while bathing. Place a rubber mat or non skid adhesive on the floor of the tub or shower.
- ☐ Store frequently-used items at waist level.
- ☐ Prepare and freeze healthy meals before your surgery.

You will need “durable medical equipment” at home during your recovery. Please obtain a five-inch, front wheeled walker prior to surgery. During your hospital stay, you will be evaluated by a physical therapist and an occupational therapist after surgery. They may recommend other equipment if needed. Examples of durable medical equipment:

- Over-the-toilet commode.
- Shower equipment.
- Assistive devices, (such as a “hip kit” containing a long-handled shoehorn, a long-handled sponge, a sock aid and a grabbing tool), may be recommended to help you avoid bending over too far.

Obtain the walker before surgery. If you have a two-story home, it is recommended that you borrow or buy a second walker.

## The Day(s) Before Your Surgery

**You will receive a call from the hospital after 4 p.m. the day prior to your surgery to advise you of your surgical time and what time to arrive at the hospital (1½ to two hours prior to your surgical time). If your surgery is on Monday or Tuesday following a major holiday, you will receive a call the Friday before.**

- DO NOT shave your legs for three days before surgery. Abrasions can lead to infection.
- DO NOT get a pedicure for two weeks prior to surgery.
- DO remove acrylic nails.
- DO follow all instructions and complete the chlorhexidine gluconate bathing for three consecutive days before surgery. The last shower is to be taken the morning of surgery.
- DO tell your healthcare provider if you develop a fever, sore throat, skin problem, or any other infection or illness.
- DO obtain durable medical equipment necessary for your safe recovery at home.
- DO complete advance directives if you wish.





# Packing for Your Hospital Stay: What to Bring and What Not to Bring

## Checklist

Use this checklist to keep track of what you need to bring. Please leave all valuables at home. DO NOT bring money, jewelry or any medications unless otherwise instructed.

- ☐ A case for eyeglasses, dentures and hearing aids.
- ☐ Loose athletic clothing or pajamas (if you prefer to wear your own clothing rather than the hospital gown provided).
- ☐ Sneakers or shoes with flat bottoms and nonskid soles (NO open-toe footwear, slippers or heels).
- ☐ A copy of your advance directives: Power of Attorney, Medical Orders for Life-Sustaining Treatment (MOLST) form, Healthcare Proxy or Living Will.
- ☐ Insurance cards and photo identification.
- ☐ A current list of all medications with dosages and frequency (including any herbals, vitamins or supplements), noting which medications have been stopped, if any, prior to surgery. Do not bring any medications to the hospital unless otherwise instructed.
- ☐ This educational booklet.

# The Day of Surgery

- Remember to take your medications as instructed.
- Complete your third chlorhexidine shower; wear clean, loose-fitting clothing; and do not apply any lotions, powder, makeup, deodorant or hairspray.
- Remove all jewelry before surgery, including wedding rings, earrings and any other body piercings.
- You may eat solid foods up to six hours before your surgery and drink clear liquids up to two hours before your surgery.
- Complete your pre-surgery clear nutrition drink provided at least two hours before your scheduled surgery time.

Please arrive approximately 10 minutes early to allow extra time to go through our security check. Then report to the registration desk to check in. You will be asked to verify some information and medical consents. You should be prepared to pay for any deductibles or copayments due before surgery with cash, check or credit card. You will be given a welcome packet; inside this packet will be a blue card with a four-digit code written on it. This four-digit code is your HIPAA code. Please share this code with your family members so they can obtain information about you. The hospital has zero tolerance for any HIPAA violation, which is the sharing of patient information without their permission. Once you are registered, you will be directed to the pre-operative waiting area.

## Pre-operative

Your safety is our priority, please make sure your healthcare provider confirms your identity by asking for your full name and date of birth, and checking your armband before any medications are administered, treatments are rendered or procedures commence. You will meet your nurse, who will ask you a series of questions, perform a physical assessment, draw samples for laboratory tests and establish an intravenous (IV) line for fluids and medication.

- You will be asked to empty your bladder and bowels, and change into a hospital gown.
- Your surgeon will address any questions or concerns you may have and verify your procedure. Your surgical site will be identified and marked by your surgeon.
- Your anesthesiologist will discuss your anesthesia plan of care with you.

One or two adult family members will be allowed to stay with you in the pre-operative area until you go in the operating room. Your family members can wait in the surgical waiting room. They will be provided with a tracking number so they can track you during the surgical process.





# The Operating Room

You will be in the Operating Room for about two hours; the actual joint replacement takes about one hour. You will be connected to monitoring devices to monitor your heart and lungs during the procedure. Your surgical site and procedure will be verified one last time before anesthesia is administered. The anesthesiologist will administer anesthesia as discussed. Once the procedure is complete, you will be moved to the Post-Anesthesia Care Unit (PACU).

## Understanding anesthesia

**Spinal anesthesia** involves the injection of a local anesthetic to provide numbness from the waist down, as well as and a long-acting pain medication for pain control. Medications are also given through your IV to relax and sedate you. If there is any contraindication for the use of spinal anesthesia, the anesthesiologist will use **general anesthesia**, which provides complete loss of consciousness and mobility, and requires intubation and ventilation.

A long-acting local anesthetic is also administered in the Operating Room. This medication is used to provide local pain relief to your hip or knee joint, post-surgery, for up to 72 hours.

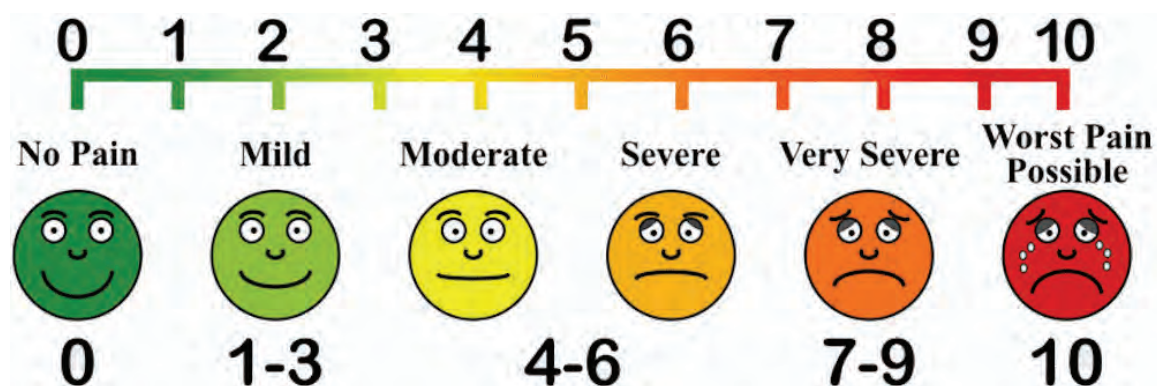
For shoulder replacement surgery, an ultrasound-guided nerve block is used to interrupt signals traveling along a nerve.

# The Post-Anesthesia Care Unit (PACU)

Your nurse will monitor your blood pressure, heart rate and breathing; assess and manage your pain; assess for regained sensation; encourage you to use your incentive spirometer for deep breathing; and move your feet and ankles to promote circulation.

## **Pain management:**

Our Total Joint Replacement Program uses a multimodal approach to pain control. This means you will receive two or more medications that provide pain relief, and when used together, more effectively block pain signals. You will be given medications in the pre-operative area for pain and post-surgery nausea. In the Operating Room, you will be given pain medication through spinal anesthesia and your IV. A long-acting local anesthetic is also administered surrounding your joint space after your joint replacement is complete. Post-operatively, we will assess your pain level and medicate you as needed with the prescribed pain medications. The key to effective pain control is treating the pain as soon as it begins. You will be asked to rate the intensity of your pain using a scale of 0 to 10, with 0 being no pain at all and 10 being the most severe pain you could imagine. A score of 1-3 is considered mild pain, 4-6 is moderate pain and 7-10 is severe pain. Pain medications will be ordered for every level of pain and administered appropriately. You will also be asked about your acceptable pain goal. Knowing that, post-operatively, a goal of 0 pain is not attainable, we ask what your everyday pain level was before surgery, and decrease that number by 2 or 3, and make that your pain goal. Your candid communication to help manage pain is essential and appreciated.





# Post-Operative Care

## **Eating and drinking:**

It is best to start with sips of water to be sure you can tolerate without nausea and vomiting, and then gradually increase your intake until you are able to tolerate solid foods.

## **Intravenous (IV) fluids and medications:**

Your IV will remain in place until you are discharged. You will receive IV fluids until you are able to eat and drink without nausea.

## **Cold therapy:**

You will be provided with ice packs to help with swelling, bleeding and pain. They are yours to take home. When you are not ambulating or exercising, you want to rest, ice and elevate. Remember, “toes above the nose.”

## **Sequential compression stockings:**

Sequential compression stockings will be placed on both of your lower legs. They inflate and deflate automatically, simulating muscle activity that occurs when walking. This assists in the prevention of blood clots. Your physical therapist will reinforce ankle pumps and toe curls, which also promote circulation.

## **Oxygen:**

After surgery, you may need supplemental oxygen through a plastic tube under your nose. During surgery, you will breathe slowly and shallowly, which can often deplete the oxygen level in your blood. We monitor the oxygen level in your blood with a small probe that is placed on the end of your finger.

# Post-Operative Care

## **Coughing and deep breathing:**

You will be encouraged to take deep breaths and to cough before and after your surgery. This exercise will help keep secretions in your lungs from accumulating. Fluid accumulation in your lungs can cause Pneumonia. You will be given a device called an incentive spirometer to help you with deep breathing. You will be encouraged to do this once an hour, five to 10 breaths each time, while awake. Please continue to use the Incentive Spirometer after surgery until you're back to your normal activity level.

## **Early ambulation:**

Early ambulation decreases the risk of complications after surgery. The faster you move, the better the outcome. Please take your time when getting up for the first time after surgery. Please NEVER get out of bed without assistance while in the hospital. Ring the call bell and wait for assistance to arrive. Remember "call, don't fall."

## **Physical therapy:**

A physical therapist and an occupational therapist will assess your physical abilities and home situation before making recommendations for a safe discharge home. The physical therapist will reinforce the pre-operative exercises as well as teach you additional post-operative exercises, proper use of your equipment, how to get in and out of bed and a chair, how to go up and down stairs, how to get in and out of a car and how to get in and out of a bathtub if you do not have a walk-in shower at home. The occupational therapist will help you with fine motor skills, such as dressing and bathing.

## **Discharge planning:**

Discharge planning begins before admission to the hospital. Each discharge plan is tailored to the individual and their needs. Your orthopedic team's goal is to make your transition from the hospital to home as safe and smooth as possible.



# Going Home

## **Exercise:**

Now that the surgery is done, it is your turn to do the work. Your dedication and commitment are essential for an optimal recovery. Please follow the exercise plan that your surgeon and physical therapist have established for you. When resting, be sure to elevate and ice.

## **Medications:**

Take all medications as prescribed by your physician. Discuss the medications you were on prior to surgery. Some medications may not be appropriate after surgery. Remember to check with your physician before restarting any over-the-counter medications, herbals or supplements. DO NOT drink alcoholic beverages while taking narcotic pain medication.

## **Blood thinner:**

Preventing blood clotting is important after joint replacement surgery. The blood thinner your surgeon prescribes is patient-specific and depends on your risk of developing a blood clot. You will continue taking the blood thinner for up to 30 days after surgery. If you are on a blood thinner already, we will resume the same medication after surgery. Please do not take NSAIDs (Advil, Ibuprofen, Motrin) while taking the blood thinner.

## **Swelling:**

It is normal to have swelling in your legs following surgery. Do not sit with your feet on the floor for any extended length of time. Get up and walk around. Let your soreness be your guide as to what you can handle. When you are not ambulating or exercising, remember to rest, elevate and ice. If you develop any unrelieved pain with swelling, call your surgeon.

## **Bruising:**

It is normal to have some bruising down your leg. Bruises may not appear until after you are home for a few days. The bruising should disappear after a few weeks. Your surrounding muscles and incision may feel sore for several weeks after surgery.

## **Difficulty sleeping:**

Although you may have difficulty sleeping after surgery, DO NOT take sleep medication. It can be dangerous when taken with pain medication. It is recommended to sleep with a pillow wedged between your legs when lying on either side.

## **Constipation:**

Anesthesia, pain medication and being less active than usual can cause constipation. Eating a healthy diet with whole grains, fruits and vegetables, and drinking plenty of water and other fluids, such as prune juice, are helpful in preventing constipation. You will be prescribed a stool softener and mild laxative when you are discharged. Please take as directed.

## **Incision care:**

You will have a dressing over your incision to protect your wound and promote healing. This dressing is shower-proof, and can stay on for up to seven days. If the dressing gets wet or soiled, remove it. Start by washing and drying your hands, then remove the dressing by gently lifting the corner and peeling away from the incision. If the incision is clean and dry, you can leave it open to air. Your skin closure will be removed by your surgeon at your first post-surgery visit.

## **Dressing and bathing:**

Neither bath or swimming are permitted until your surgeon says it is OK. If your incision is open to air, let the soap and water run over the incision. DO NOT scrub the area. Blot it dry with a clean towel, but do not apply any lotions or creams to your incision. Dress in clean, loose-fitting clothing.

# Going Home (continued)

## **Sexual activity:**

Many people worry about resuming sexual activity after joint replacement. Generally, it is safe to resume sexual activity as soon as you are comfortable. If you have had a hip replacement, be sure to maintain your hip precautions. Please discuss any specific concerns with your surgeon or physical therapist.

## **Driving:**

Be sure to have rides arranged for physical therapy and follow-up appointments. Your surgeon is the only one who can clear you to drive. Driving while under the influence of narcotics is against the law and is considered a driving-while-intoxicated violation.

## **Be cautious when walking on uneven surfaces, snow or ice.**

### **When to see your surgeon after surgery:**

Your first post-op visit will be approximately two weeks after surgery. If you don't have a follow-up appointment already scheduled, call the office to make one.

Call the surgeon's office right away if you experience any of the following:

- Increased redness or drainage from the incision site.
- A temperature greater than 101.0 degrees for more than one day.
- Increased swelling or pain or tenderness of the thigh, calf, ankle or foot.
- Nausea or vomiting.
- Worsening or unrelieved pain.
- Abnormal bleeding of any kind.

**If you experience any chest pain or shortness of breath, call \*911\*.**

## **Other important information**

- Yes, your implant will set off alarms at the airport.
- It is safe to have a magnetic resonance imaging (MRI) after joint replacement surgery; the prosthetic implants are non magnetized.
- After surgery, inform all your physicians that you have a prosthetic implant.
- Do not drink alcohol while taking narcotic pain medication.
- Do not take any non steroidal anti-inflammatory drugs (NSAIDs) while on a blood thinner.
- If you are a diabetic, your blood sugars may be elevated after surgery. It is very important to manage your blood sugar; uncontrolled blood sugar can impair healing and increase your risk for infection.
- Be sure to keep all your follow-up appointments.



# Pre-op Checklist

Use this checklist as a guide to help you prepare for your surgery	
Action	Completed
Complete medical clearance appointment (if needed)	
Complete pre-surgical testing appointment	
Complete dental checkup (if needed)	
Notify your surgeon of metal allergy (if indicated)	
Identify your coach for home support	
Attend the free Total Joint Replacement class	
Obtain the front-wheeled walker and any other durable medical equipment if needed	
Prepare advance directives, if you wish	
Prepare your home for your safe return	
Start doing the pre-op exercises	
Start doing the deep-breathing exercises	
Within one week of surgery	
Action	Completed
Call to make your outpatient physical-therapy appointments	
Confirm you have your chlorhexidine gluconate (CHG) for your skin preparation	
Continue doing your pre-op exercises	
Continue doing your deep-breathing exercises	
Two days before surgery	
Action	Completed
Take your first shower using the CHG wash; follow the instructions in the Educational Resources section	
One day before your surgery	
Action	Completed
Take your second shower using the CHG wash; follow the instructions in the Educational Resources section	
Receive phone call from the hospital after 4 p.m. for your arrival time on day of surgery	
Midnight prior to and morning of surgery	
Action	Completed
Complete your third shower using the CHG wash; follow the instructions in the Educational Resources section	
Remove all jewelry and piercings	
No solid foods for six hours prior to your surgery time	
You may continue to drink clear liquids up until the time you leave for the hospital	
Complete your pre-surgery clear nutrition drink at least two hours before your scheduled surgery time	
Take medication, as instructed, with a sip of water	

# Educational Resources



# Hip

10–20 repetitions  
Perform each exercise twice a day

## Pre-operative and hospital-stay exercises

### Exercise pain-management guide

#### Continue

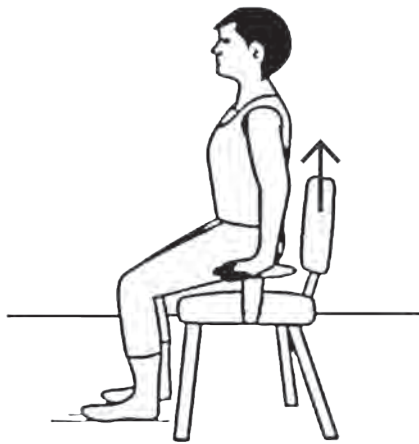
Pain remains low during and after exercise.  
*Continue mobility.*

#### Caution

Pain remains moderate during and an hour after exercise.  
*Proceed with caution.*

#### Stop

Pain remains at higher levels during and following exercise for more than an hour. *Stop.*



#### 1. Armchair pushup

Sit on a sturdy chair with arms, grasping the arms of the chair. Push down on the chair arms, straightening your elbows so that you raise your buttocks off the seat of the chair. Hold for five seconds. Lower yourself slowly back into the chair. If your arms are weak at first, use your legs to help raise your buttocks off the chair.

#### 2. Ankle pumps

Gently point your toes up toward your nose and then down toward the surface. Do both ankles at the same time or alternate feet. Perform slowly.



#### 3. Quad sets

Slowly tighten thigh muscles, pushing your knees down on to the surface. Do both legs at the same time. A good quad set will result in the knees flattening against the surface and the heels slightly elevating off the surface. Hold for five counts.

# Hip (continued)

10–20 repetitions  
Perform each exercise twice a day

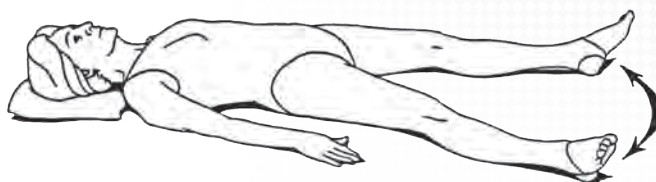


## 4. Gluteal sets

Lying on your back, squeeze your buttocks together as tightly as possible. Hold for five counts. Do not hold your breath.

## 5. Abduction and adduction

Lying on your back, slowly slide both legs out in front of you until they are hip-width apart. Keep your knee caps and toes pointing toward the ceiling. Slowly bring both legs back to the center until they meet.

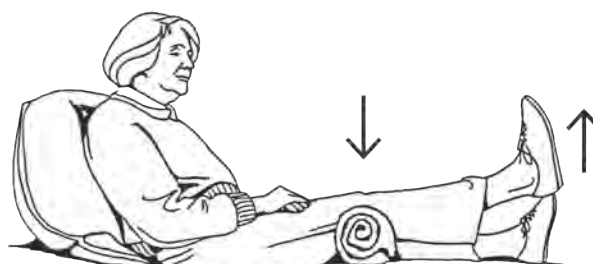


## 6. Heel slides

Bend the knee of your surgical leg, keeping your heel on the surface. Hold for five counts.

## 7. Short arc quads

Place a rolled-up towel comfortably under your surgical knee. Make sure your heel is resting on the surface before beginning exercise. Point your toes toward your nose. Straighten your knee, keeping the back of your knee on the towel while elevating your heel off the surface. Work toward fully straightening your knee. Hold for two to three counts. Have your coach assist with lifting your heel if necessary.

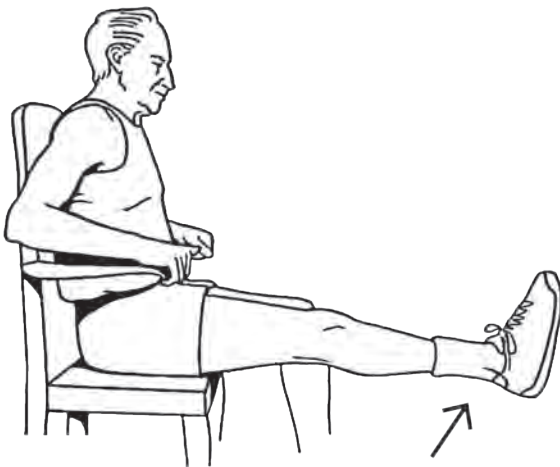
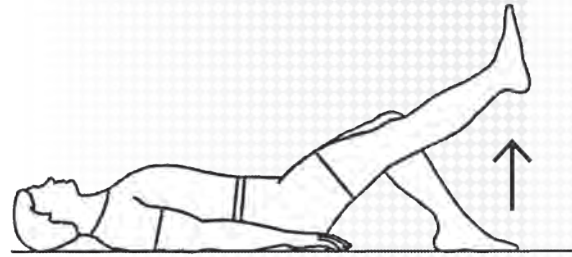


# Hip (continued)

10–20 repetitions  
Perform each exercise twice a day

## 8. Supine straight leg raise

Lie on your back with your non surgical knee bent. Raise your surgical leg to the thigh level of your bent leg. Return to your starting position.



## 9. Long arc quad stretch

Sit on the edge of a chair. Keep both knees bent at 90 degrees. Slowly straighten the knee of your surgical leg as much as possible. Hold for three to five seconds. Keep your toes pointed toward the ceiling. Slowly bend your knee back 90 degrees.

## Hip precautions

1. Do not bend your hip greater than 90 degrees.
2. Do not cross your legs.
3. Do not twist/pivot on your new hip.
4. Do not extend your leg backward if an anterior approach was used during your surgery.

## Stair/step training

1. The “good” (non surgical) leg goes UP first.
2. The “bad” (surgical) leg goes DOWN first.
3. Cane stays on the level of the surgical leg.

## Resting positions

To stretch your hip to a neutral position:

1. Lie/sleep flat on your back in bed.
2. Do NOT use pillows under your knees.



# Hip

10–20 repetitions  
Perform each exercise twice a day

## At-home exercises

### Exercise pain-management guide

#### Continue

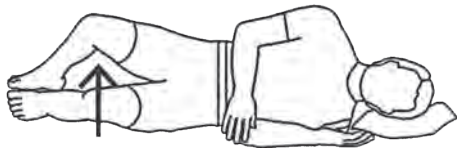
Pain remains low during and after exercise.  
*Continue mobility.*

#### Caution

Pain remains moderate during and an hour after exercise.  
*Proceed with caution.*

#### Stop

Pain remains at higher levels during and following exercise for more than an hour. *Stop.*



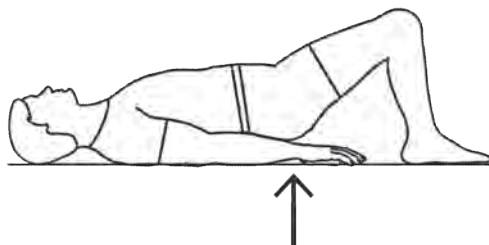
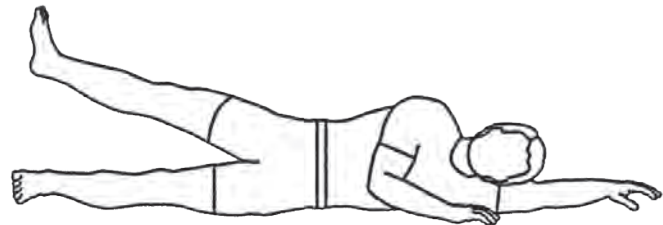
#### 1. Clam shells

Lie on your side with your knees bent, feet together. Lift your top knee upward. Lower and repeat. Repeat the exercise lying on the other side.

#### 2. Side-lying straight leg raise

Lie on your non surgical side with your knees straight, a pillow between your legs. Rotate your top leg and lift it upward. Lower your leg and repeat. Repeat the sets with your other leg.

**COACH'S NOTE** Keep hips and pelvic area stable. Keep the leg rotated upward.



#### 3. Bridging

Lie on your back with your knees bent. Lift your buttocks off the floor. Return to your starting position.

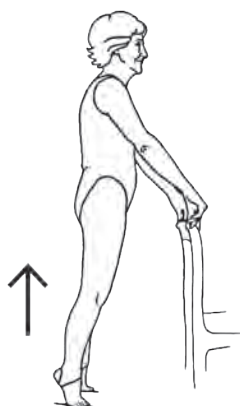
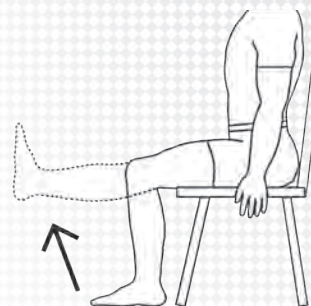
**COACH'S NOTE** Maintain a neutral spine.

# Hip (continued)

10-20 repetitions  
Perform each exercise twice a day

## 4. Knee extension long arc quad, while sitting

Sit with your surgical leg bent to 90 degrees. Straighten your leg at the knee. Return to your starting position.



## 5. Standing heel/toe raises

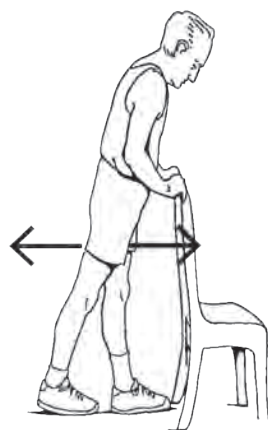
Holding on to an immovable surface, slowly rise up on your toes for five counts. Return your foot to being flat on the floor and lift your toes from the floor.

**COACH'S NOTE** When raising up on your toes, do not lean backward or forward.

## 6. Standing knee flexion

Holding on to an immovable surface, bend your surgical leg up behind you. Straighten to a full stand, with weight on both legs.

**COACH'S NOTE** The tendency is for the hip to come forward as the knee is bent. Maintain a straight line from the shoulder to knee.



## 7. Standing and rocking

Holding on to an immovable surface, step your non surgical leg forward. Rock your weight back and forth over your surgical leg, keeping your knee straight.

**COACH'S NOTE** The tendency is for the affected knee to bend. Maintain a straight knee on the surgical leg and equal weight bearing through both legs.

## 8. Standing partial squats

Holding on to an immovable surface, slowly bend your knees. Keep both feet flat on the floor.

**COACH'S NOTE** When standing up, do not lean backward.



# Knee

10–20 repetitions  
Perform each exercise twice a day

## Pre-operative and hospital-stay exercises

### Exercise pain-management guide

#### Continue

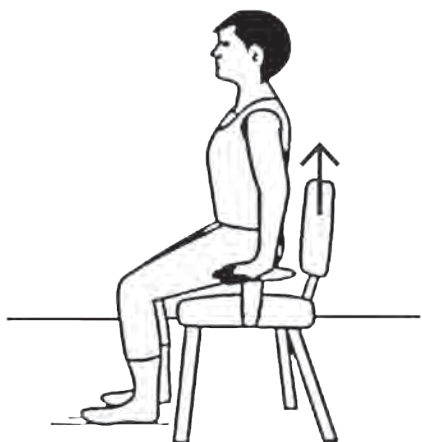
Pain remains low during and after exercise.  
*Continue mobility.*

#### Caution

Pain remains moderate during and an hour after exercise.  
*Proceed with caution.*

#### Stop

Pain remains at higher levels during and following exercise for more than an hour. *Stop.*

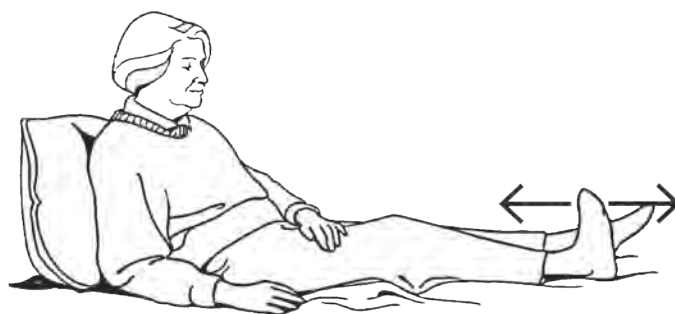


#### 1. Armchair pushup

Sit on a sturdy chair, with arms, grasping the arms of the chair. Push down on the chair arms, straightening your elbows so that you raise your buttocks off the seat of the chair. Hold for five seconds. Lower yourself slowly back into the chair. If your arms are weak at first, use your legs to help raise your buttocks off the chair.

#### 2. Ankle pumps

Gently point your toes toward your nose and then down toward the surface. Do both ankles at the same time or alternate feet. Perform slowly.



#### 3. Quad sets

Slowly tighten thigh muscles, pushing your knees down on the surface. Do both legs at the same time. A good squat set will result in your knees flattening against the surface and your heels slightly elevating off the surface. Hold for five counts.



# Knee (continued)

10–20 repetitions  
Perform each exercise twice a day



## 4. Gluteal sets

Lying on your back, squeeze your buttocks together as tightly as possible. Hold for five counts. Do not hold your breath.

## 5. Abduction and adduction

Lying on your back, slowly slide both legs out in front of you, until they are hips width apart. Keep your kneecaps and toes pointing toward the ceiling. Slowly bring both legs back to the center until they meet.

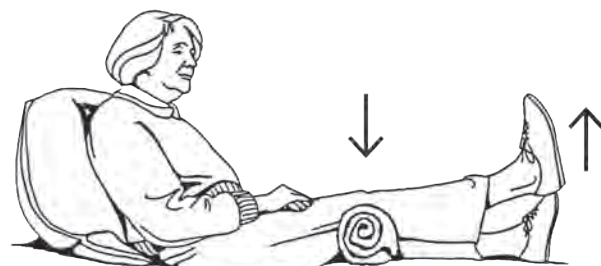


## 6. Heel slides

Bend the knee of your surgical leg, keeping your heel on the surface. Hold for five counts.

## 7. Short arc quads

Place a rolled-up towel comfortably under your surgical knee. Make sure your heel rests on the surface before beginning the exercise. Point your toes toward your nose. Straighten your knee, keeping the back of your knee on the towel while elevating your heel off the surface. Work toward fully straightening your knee. Hold for two to three counts. Have your coach assist with lifting your heel, if necessary.



# Knee (continued)

10–20 repetitions  
Perform each exercise twice a day

## 8. Extension stretch

Place a rolled-up towel under the ankle of your (surgical leg). Apply an ice pack to your surgical knee. Sit back and try to relax for 10 minutes. A 5-pound weight may be added to your knee as you progress with this exercise.



## Stair/step training

1. The “good” (non surgical) leg goes UP first.
2. The “bad” (surgical) leg goes DOWN first.
3. The cane stays on the level of the surgical leg.

## Resting positions

1. Place a pillow lengthwise to mid-thigh under your leg for elevation.
2. Lie flat on your back in bed.
3. Do not sit with your knee bent for prolonged periods of time.

# Knee

10-20 repetitions  
Perform each exercise twice a day

## At-home exercises

### Continue

Pain remains low during and after exercise.  
*Continue mobility.*

### Caution

Pain remains moderate during and an hour after exercise.  
*Proceed with caution.*

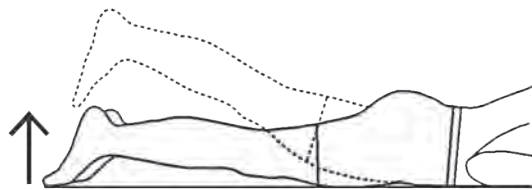
### Stop

Pain remains at higher levels during and following exercise for more than an hour. *Stop.*

### 1. Side lying straight leg raise

Lie on your side with your knees straight. Rotate your top leg and lift it upward. Lower your leg and repeat. Repeat the sets with your other leg.

**COACH'S NOTE** Keep hips and pelvic area stable. Keep leg rotated upward.



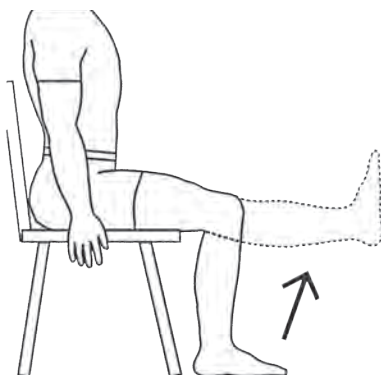
### 2. Prone straight leg raise

Lie face down, your knee straight on your surgical leg. Lift your surgical leg upward. Return to your starting position.



### 3. Supine straight leg raise

Lie on your back with your non surgical knee bent. Raise your surgical leg to the thigh level of your bent leg. Return to your starting position.



### 4. Knee extension long arc quad

Sit with your surgical leg bent to 90 degrees. Straighten your leg at the knee. Return to your starting position.



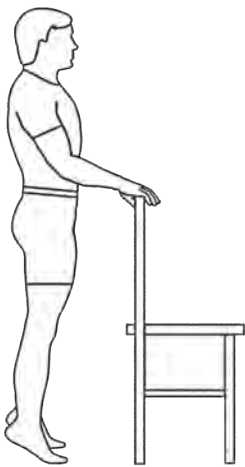
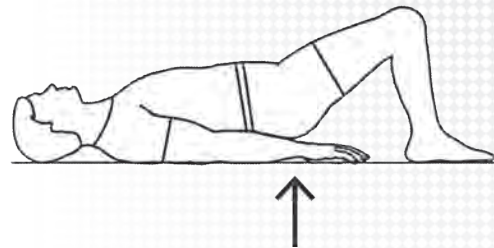
# Knee (continued)

10–20 repetitions  
Perform each exercise twice a day

## 5. Bridges

Lie on your back with your knees bent. Lift your buttocks off the floor. Return to your starting position.

**COACH'S NOTE** Maintain a neutral spine.

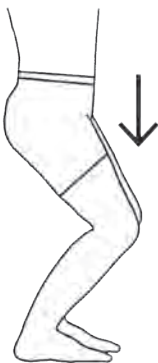


## 6. Standing heel raise

Stand with both feet shoulder-distance apart. Raise up on your heels. Lower and repeat.

## 7. Standing toe raise

Stand with both feet shoulder-distance apart. Raise your toes. Lower and repeat.



## 8. Mini-squat

Stand with feet shoulder-distance apart. Hold on to a chair or counter. Slowly bend your knees to 90 degrees. Hold for five seconds, and return to a standing position. Repeat.

**COACH'S NOTE** Maintain proper lower back alignment.

# Chlorhexidine Gluconate Showering Instructions Before Surgery

To reduce the amount of bacteria on your skin and help prevent a surgical site infection, you will need to take three special showers. You will be given this shower gel at the pre-operative education class.

\*\*\*Do not get the soap in your eyes, ears, nose or mouth. Do not wash your genital area with the chlorhexidine gluconate.\*\*\*

\*\*\*Discontinue use of the chlorhexidine gluconate and call your physician if you experience wheezing; chest tightness; swelling of the face, lips or tongue; very bad skin irritation or a rash.\*\*\*

## **The first shower — two days before surgery**

- Wash your hair with normal shampoo; Thoroughly rinse it from your hair and body. Wash your face with regular soap or cleanser.
- Using a fresh, clean washcloth and 1/3 of the chlorhexidine gluconate, wash from your neck down. This is very important.
- Rinse your body thoroughly. This is very important.
- Using a fresh, clean towel to dry your body.
- Dress in freshly washed clothes or pajamas.
- Do not use lotions, powders or creams after this shower.

## **The second shower — one day before surgery**

- Wash your hair with normal shampoo; Thoroughly rinse it from your hair and body. Wash your face with regular soap or cleanser.
- Using a fresh, clean washcloth and 1/3 of the chlorhexidine gluconate, wash from your neck down. This is very important.
- Rinse your body thoroughly. This is very important.

- Using a fresh, clean towel, dry your body.
- Dress in freshly washed clothes or pajamas.
- Sleep on fresh, clean sheets and pillow cases.
- Do not use lotions, powders or creams after this shower.

## **The final shower — the morning of surgery**

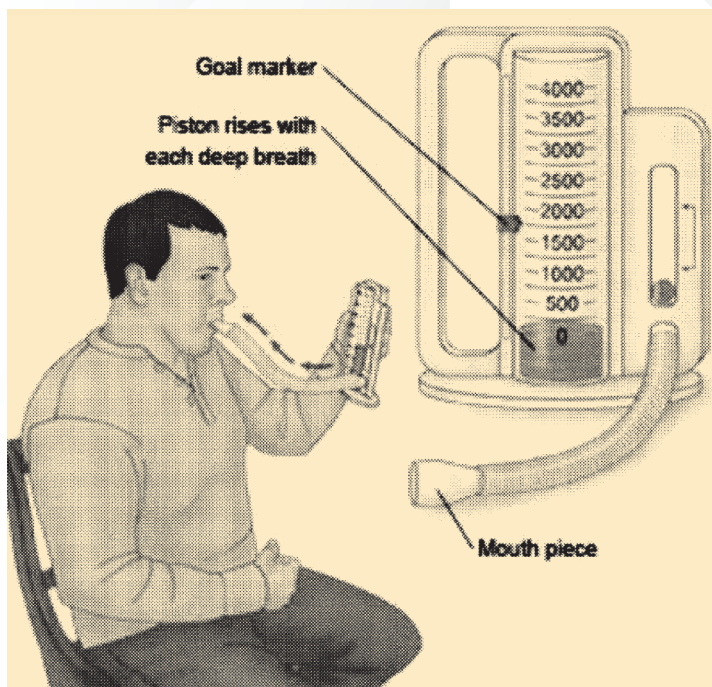
- Wash your hair with normal shampoo; Thoroughly rinse it from your hair and body. Wash your face with regular soap or cleanser.
- Using a fresh, clean washcloth and 1/3 of the chlorhexidine gluconate, wash from your neck down. This is very important.
- Rinse your body thoroughly. This is very important.
- Using a fresh, clean towel, dry your body.
- Dress warmly in freshly washed clothes. Keeping warm before surgery decreases your risk of developing a post-operative infection.
- Do not use lotions, powders, creams, hair products, makeup or deodorant after this shower.

**Remember to check off your checklist when you have completed the three showers.**





## Using an Incentive Spirometer



To decrease your chances of breathing problems after surgery, please now begin practicing deep-breathing exercises using the incentive spirometer provided. This will help keep your lungs clear, strengthen your breathing muscles and help prevent infections after surgery.

Breathe in through your mouth, not your nose. The incentive spirometer works correctly only if you breathe in through your mouth.

### **Four steps to clear your lungs**

1. Relax and breathe out.
2. Place your lips tightly around the mouthpiece. Make sure the device is standing up straight.
3. Breathe in as much air as you can through the mouthpiece. Don't breathe through your nose. Breathe in slowly and deeply. Hold your breath long enough to keep the disk raised — for at least three seconds. Then take your mouth off the mouthpiece and breathe out.
4. Repeat this exercise every hour, five to 10 breaths each time, while you are awake.