# Joint Camp



### **CONTENTS**

1	Table of Contents		13	Surgery/ Anesthesia		
2	Things to do before surgery		15	What are all of these gadgets?		
2	Durable Power of Attorney for Healthcare		16	Anticoagulation and blood clot prevention		
3	Anatomy		17	Prevention of pneumonia: Incentive Spirometer		
	3 Anatomy of the hip					
	4	Anatomy of the knee	18	Prevention of surgical site infections		
	5	Anatomy of the shoulder				
6	Home Exercise Plans		18	After surgery		
	6	Hip	19	Discharge		
	6	Knee	20	Living with a new joint		
	7	Shoulder	25	Bathroom Safety		
8	Beyond Physical Therapy		26	Dressing tips and techniques/Car		
8	What to do Before Surgery			transfers (hips and knees)		
	8			Dressing tips and techniques/Car transfers (hips and knees)		
	9	Two nights before surgery	20	Discharge Preparation For		
	9	The day before surgery	28			
	9	The night before surgery				
	10	The morning of surgery				
10	What to bring to the hospital					
10	Your Plan of Care					

### Things to do before surgery

When preparing for surgery, the following steps will help to ensure readiness:

- Choose a coach. This person is usually a spouse, relative or friend who will provide assistance during the recovery process. This person should attend a Total Joint Class and be available for at least a week after you return home for support. This person also may help with exercises, provide positive encouragement and motivation, and may help to answer questions that may come up during the recovery process.
- Arrange for help. Make sure someone will be home with you, preferably your coach, or arrange to recover at your coach's home for one week after surgery until you are stronger and able to be more independent. It is also important to coordinate help as needed for your home, yard, pet and vehicle for a few weeks after surgery.
- Arrange for needed equipment. It is important to consider what adaptive equipment might be needed prior to
  surgery. Make plans to have the needed equipment available whether it is purchased, rented, or borrowed. Adaptive
  equipment may include a walker, cane, grabber, shower or tub chair, bathroom grab bars, etc. Your case manager can
  assist you with this process if you are unable to find the equipment that you need. This will also be reviewed with you
  prior to discharge.
- **Start exercising.** *Begin doing the exercises* listed in this handout twice daily. This will make you stronger for surgery and will assist with your recovery.
- Gather personal items. Begin assembling the personal items you may need for your hospital stay. These may include
  toiletries, reading materials, games and puzzles. Bring loose fitting clothing and sleepwear, and pack enough for 2-3
  days. A complete list of suggested items can be found on page 13.
- Complete paperwork. Complete all forms included in your folder.
- Prepare for a safe surgery. Carefully review and follow the instructions and materials included within this packet.
- Prepare your home.
  - Place frequently used items where you can get to them easily without reaching or bending.
  - Remove floor rugs, extension cords and floor clutter for clear pathways to the bedroom, bathroom and other frequently used areas.
  - If your bedroom is on an upper floor or lower floor, consider making sleeping arrangements on the main floor, if possible.
  - Consider a raised toilet seat and/or safety frame around the toilet if it sits low.
  - A shower or tub chair and safety grab bars to use after surgery will make bathing safer.
  - Stock your freezer with about a 2 week supply of microwaveable meals and easy-to-make foods.

### **Durable Power of Attorney for Healthcare**

On the day of surgery, patients are asked to complete a form that identifies whether you have a durable power of attorney for healthcare, and further clarifies healthcare desires and decisions.

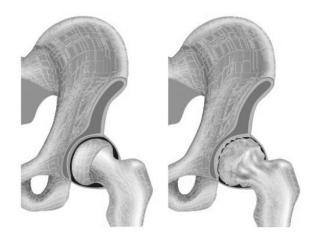
Careful thought and consideration should be given to these personal important matters.

A durable power of attorney for healthcare is a document for a person 18 years or older that appoints a trusted relative or friend to speak on the person's behalf if he or she loses the ability to communicate or decision making abilities. The appointed person is designated to make medical choices only when the patient is unable to express medical wishes or make personal medical choices. The choices made by the appointee reflect the wishes of the patient as outlined in the document.

It is important to note that a durable power of attorney for healthcare is different from someone who would make decisions regarding your finances. It is simply the person whom you appoint to speak on your behalf, who is aware of your wishes should the need arise.

### **Anatomy of the hip**

A healthy hip: Notice the smooth surfaces between the ball of the femoral head and the socket of the pelvis.

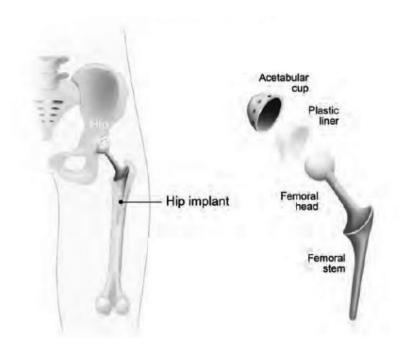


Healthy hip joint

Osteoarthritis

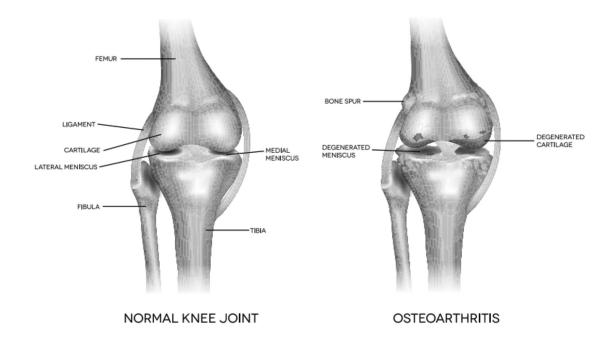
**A problem hip:** Notice above the irregular surfaces between the ball of the femoral head and the socket of the pelvis. This may cause difficulty walking, stiffness in the hip joint and pain not only in the hip, but also in the groin and thigh.

**A new hip prosthesis in place**: Notice the renewed smooth surfaces between the ball of the femoral head and the acetabulum of the pelvis.



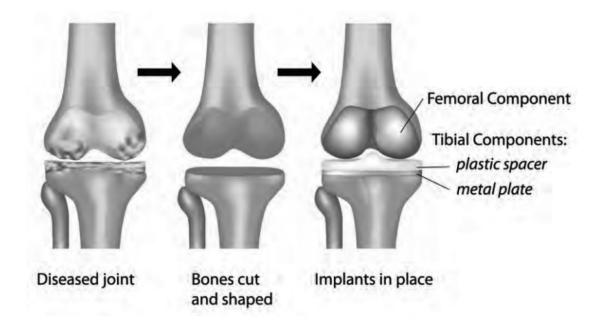
### Anatomy of the knee

**A healthy knee:** Notice the smooth surfaces of the femur and the tibia bones. Cartilage covers the bones evenly, and the joint bends freely.



**A problem knee:** Notice above the femur and tibia bone surfaces are rough. Cartilage may wear away and the joint may be swollen.

A new knee prosthesis: Notice the smooth surfaces of the femur and the tibia bones. The joint bends freely.

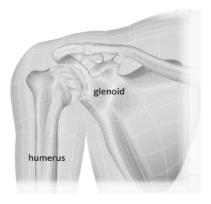


## **Anatomy of the shoulder**

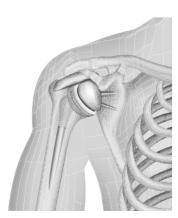
**A healthy shoulder:** Notice the smooth, joint surfaces of the glenoid and humerus. Cartilage covers the bones evenly, and the joint bends freely.



**A problem shoulder:** Notice the glenoid and humerus bone surfaces are rough. Cartilage may wear away and the joint may be swollen.



**A problem shoulder:** Notice the glenoid and humerus bone surfaces are rough. Cartilage may wear away and the joint may be swollen.



A new shoulder prosthesis: Notice the smooth surfaces of the glenoid and humerus bones. The joint moves freely.

# Home Exercise Program (Hip and Knee)

Start practicing these exercises now. After your surgery, you will continue performing them once you are cleared to do so by your surgeon. For maximum progress, aim to perform each of the following exercises 20 times each, 2-3 times per day on both the surgical and the non-surgical side.

Ankle Pumps	Flex feet up and down, moving at ankle	20 reps, 5 x per day
Glute Sets	Tighten buttock muscles and hold for five seconds. Then, relax and repeat.	2 sets of 10 reps (5 second hold)
Quad Sets	Lay with leg straight, tighten front of thigh, pushing back of knee toward bed/ surface. Hold five seconds. Then, relax.	2 sets of 10 reps (5 second hold)
Heel Slides	Lay on back with legs out straight. Bend one knee, sliding your heel toward your buttock. Return to starting position.	2 sets of 10 reps
Hip Abductions	Lay on back with legs out straight. Move one leg out to side and return to starting position. Keep toes pointing upward throughout.	2 sets of 10 reps
Long Arc Quads	Sit in chair with feet flat on floor. Kick your foot forward to straighten your knee. Return to starting position. Repeat.	2 sets of 10 reps

# **Home Exercise Program (Shoulder)**

Start practicing these exercises now. After your surgery, you will continue performing them once you are cleared to do so by your surgeon. For maximum progress, perform each of the following exercises 10-20 times each, 2-3 times per day on the surgical side.

5 Finger Flexion	Flex your fingers to make a fist. Then, extend and stretch out your fingers.	2 sets of 10 reps
Wrist Adduction/ Abduction	Keep your hand flat and and move your wrist side to side.	2 sets of 10 reps (5 second hold)
Forearm Pronation/ Supination	Keep your hand flat and alternate facing your hand toward the floor and ceiling.	2 sets of 10 reps
Wrist flexion/ Extension	Rest your forearm on a table or chair arm, letting your hand hang off the edge. Then, move your hand up and down toward the ceiling and floor.	2 sets of 10 reps
Upper Trap Stretch	Sit up straight and face forward. Bring your ear down toward your shoulder just until you feel slight stretch. Hold.	2 reps (30 second hold)
Bicep Stretch	Place your palm on the side of a doorway at hip height and step forward until you feel a stretch. Hold.	2 reps (30 second hold)
Levator Scapulae	Turn your head to the side 45 degrees and then bring your nose down toward your armpit until you feel a stretch. Hold.	2 reps (30 second hold)
Scapular Retractions	Sit up straight and squeeze your shoulder blades together. Hold and relax.	2 sets of 10 reps (5 second hold)

### **Beyond physical exercise**

There are other important steps to prepare your body for the journey toward a quick recovery.

**Stop smoking:** As soon as possible before surgery, stop, try to stop, or cut back on smoking. Eliminate nicotine of all forms, including nicotine replacement methods. Patients who smoke prior to surgery increase their risk for infection and slow healing after surgery. Quitting smoking reduces the risk for respiratory and anesthesia complications after your surgery. Do not smoke or use vaping devices/products on the evening before surgery or the day of surgery.

**Alcohol use:** Please do not eat or drink any alcoholic beverages one week before surgery, including beer and wine. Patients who regularly consume more than three alcoholic drinks per day could experience alcohol withdrawal during their hospital stay. This can result in symptoms ranging from mild shakiness or sweating to hallucinations and other more serious side effects.

**Eating healthy:** It is important to facilitate healing by eating a well-balanced diet. This will give the body the necessary nutrients to help patients heal properly from surgery and expedite the recovery process.

### One week before surgery

- Do not shave legs beginning five days prior to surgery. It is okay to shave the face and neck. Intact skin is the first defense against infection.
- Try to stop or cut back on using all tobacco products.
- Do not consume any alcohol, including beer and wine.
- Unless otherwise instructed by your provider, STOP taking the following medications:
  - · Aspirin and products containing aspirin.
  - Coumadin (check with the prescribing physician before stopping).
  - Plavix (check with prescribing physician before stopping).
  - Nonsteroidal anti-inflammatory drugs (NSAIDs), such as Motrin, Aleve, Advil, Celebrex, Naprosyn, Mobic, etc. Tylenol product or acetaminophen are safe.
  - Check with your surgeon regarding any dietary supplements and other medication whether they are prescribed or over-the-counter.
  - Mounjaro / Ozempic (or any GLP-1 receptor agonists)
- Be very cautious, if you are performing yard work or playing with pets, to avoid any scratches or cuts.

#### Inform the surgeon if:

- You have an active cold, sore throat, toothache or symptoms of any infection (such as a bladder infection), or feel ill within seven days prior to surgery. Infections can spread to your surgical site.
- You have developed a rash, or have any cuts or open wounds on your body or the operative extremity. You may need to postpone the surgery until treatment is provided. Seeking prompt treatment from your primary care physician may prevent the postponement of the surgery.

### Two days before surgery

Showering: Prior to surgery, preparing your skin properly will help reduce the risk of post-operative infection. Do not use a bath tub. It is very important to shower, starting two days prior to the surgery, as well as the morning of surgery with the antibacterial Chlorhexidine Gluconate (Hibiclens) soap. This soap is not to be used by patients who are allergic to Hibiclens.

- 1. Shampoo hair with your usual hair products, wash face and body with your usual soap, and rinse thoroughly.
- 2. Wash entire body from the neck down to toes, including the groin area, with antibacterial soap. Please read the soap directions. Remember not to use the antibacterial soap on the face or genital areas. Pay special attention to washing the surgical site area.
- 3. Wash gently for three to five minutes, paying special attention to the surgical site area.

**Tip:** While showering, turn off the water while washing to prevent rinsing off the soap too soon. Try to leave soap on for at least one minute, then turn the water back on and rinse thoroughly.

- 4. Do not use regular soap after washing with the antiseptic soap.
- 5. Pat dry with a fresh, clean, soft towel.
- 6. Do not use lotions, creams or powders after showering.
- 7. Dress in freshly-washed clothes. Sleeping on freshly-washed sheets and pillowcases is also recommended.

### The day before surgery

Your physician's office will contact you the day prior to your surgery if there has been a change to your surgery schedule.

### The night before surgery

**Medication:** Follow the instructions provided by your physician and the nurse during the pre-surgical phone interview. You may take something for sleep the night before if it has been safely used in the past.

**Eating and drinking:** Follow the instructions provided during the pre-surgical phone interview. This includes restricted eating and drinking past a specified hour. Surgery patients are NPO after midnight prior to surgery. This stands for "nothing per os" (nothing by mouth) and includes: all food, drinks, gum, candy, ice chip, water, chewing tobacco, vaping, and smoking. If instructed by your surgeon to take medications, use only a small sip of water. If you do consume anything by mouth, let the surgery team know as they may need to postpone your surgery for your safety.

Showering: Follow the same showering instructions as the previous night. (see above)

#### **Shaving:**

- Men: Shave face and neck only. Please trim any beard.
- Women: Please do not shave legs or apply lotion to the surgical leg.

### The morning of surgery

If there is a change in schedule on the day of surgery, the surgical department will call you. Specific arrival times are communicated by surgeons.

Smoking: Please do not smoke or use any nicotine products.

**Eating and drinking:** Surgery patients are NPO after midnight prior to surgery; no food, drinks, gum, candy, ice chip, water, chewing tobacco, vaping, and smoking. If instructed by your surgeon to take medications, use only a small sip of water. If you do consume anything by mouth, let the surgery team know as they may need to postpone your surgery for your safety.

**Mouthwash:** Use mouthwash, being careful not to swallow any.

**Medications:** Follow the instructions provided by your physician and by the nurse during the pre-surgical interview. If you are directed to take medications the morning of surgery, take them with a sip of water only. If using inhalers, you may swish with water and spit. Do not swallow any water.

**Showering:** Shower, following the instructions exactly as the previous two nights.

Hair: Wear hair loose, without clips, bands, hair spray, wigs or hair pieces. A head cover will be provided on the way to the operating room.

Makeup: Do not wear makeup.

**Dentures:** Do not use dental adhesive on the day of surgery. Bring a labeled dental container for safe storage. The surgical department can provide a denture cup, if needed.

**Nails**: If using nail polish, leave one clear polish nail on surgical extremity so the surgical team can accurately monitor oxygen levels during surgery. Nail polish may need to be removed.

**Jewelry:** Remove all jewelry, including piercings and rings. If jewelry/ piercings cannot be removed or are permanent, *do not cause bodily injury.* Staff will assist you in pre-op.

**Hearing aids:** Wear your hearing aid/s to the hospital. Bring the case if you have one.

**Eyewear**: Please do not wear contact lenses, if possible. Glasses are preferred. If glasses are not available, please bring a contact lens case and solution for easy removal prior to surgery. Bring an eyeglass case, if you have one.

#### Patients with diabetes:

- If you have an insulin pump, ask your physician for instructions.
- On the morning of surgery, follow surgeon's instructions regarding insulin dose/ diabetic pill or consult pre-admission testing nurse.
- If you are not feeling well, notify the check-in staff that you have diabetes and are insulin-dependent.

### What to bring to the hospital

A list of Items to bring with you to surgery

- A list of medications you are taking or have recently stopped taking.
- A list of medicine and food allergies.
- Driver's license or photo ID.
- Insurance cards and prescription coverage cards.
- Glasses case, or contact lens case and solution do not wear contact lenses on the day of surgery.
- Hearing aid and case labeled with name.
- Patients with asthma or COPD should bring inhalers to use as directed.
- Any special devices, such as CPAP, or appliances, such as a brace.

- Information cards for implanted devices, such as a pacemaker.
- Dentures and a case labeled with name.
- A copy of your advanced directive, if you have one.
- Any equipment provided by the office for post-op care, taking care to store in a way to keep it clean.

A list of Items to have prepared for your assigned hospital room (after surgery)

- Personal toiletries: hairbrush, toothbrush, toothpaste, deodorant, etc.
- Comfortable, loose clothing, undergarments, enclosed walking shoes and socks, elastic waist shorts, capris or sweatpants.
- Reading materials, playing cards, crossword puzzles, etc. to use during free time if desired.
- Shoulder replacement patients:
  - Please, consider button-zip front shirts or oversized pullover shirts.
- Hip and knee replacement patients:
  - Please, consider relaxed fitting sweat shorts/ pants, t-shirt dresses, or night gowns that can be put on easily.

### Your plan of care

As soon as you arrive in the hospital room, nursing staff will monitor your pulse, respirations, temperature and blood pressure. These vital signs will be taken frequently at first. During this time, the team will also complete a brief medical history and a physical head-to-toe assessment. Then they will develop a personalized care plan.

The multidisciplinary team will follow evidence-based joint replacement practices to ensure you have the highest quality and most effective treatment. The length of stay in the hospital varies for each patient. Prior to surgery, you will have created a plan with the surgeon. Most patients arrive for surgery knowing how many days they plan to stay in the hospital. Depending on individual progress and with help from the interdisciplinary team, you will return home as soon as you are ready.

**Nausea control:** Nausea can occur after anesthesia or when taking certain medications. You will be given clear liquids after surgery until you feel you can tolerate solid foods. If you are nauseated, the nurse will give you medication to manage it.

**Constipation:** Pain and anesthesia medications can slow bowel activity after surgery. Losing blood and body fluid during surgery can also cause constipation. While in the hospital, you may be given fiber supplements and a stool softener. Walking and drinking plenty of fluids after surgery will help with constipation. If you notice a change in bowel habits after surgery, please inform the nurse.

**Pain management:** Proper and effective pain management is very important. When you inform us that you have pain, we will address that pain. Your reports of pain will be responded to quickly.

We work with you to meet the following goals regarding pain while you are in the hospital. You have:

- 1. The right to have your pain controlled, however, it may not be possible to be completely free of pain.
- 2. The right to take an active part in your pain control plans.
- 3. The right to make suggestions for changes in pain management treatment.
- 4. The right to be informed about the risks, benefits, and side effects of medications and treatments you will be given.
- 5. The right to have your pain questions answered.
- 6. The right to refuse treatment.
- 7. The right to receive pain medications on a timely basis.

You are responsible for:

- 1. Working with the physician and nurse to develop a pain management plan.
- 2. Asking the physician or nurse what to expect of pain and pain management.
- 3. Helping the physician and nurse assess your pain.
- 4. Discussing pain relief options with the physician and nurses.
- 5. Telling the physician or nurse about any concerns you have about taking pain medication.
- 6. Asking for pain relief when pain first begins.
- 7. Complying with physician orders regarding medication.
- 8. Telling the physician or nurse if and when pain is not relieved.

Tips on when to request oral pain medication:

- Your pain is strong enough to make you feel uncomfortable.
- You feel that you cannot participate in daily activity or physical therapy.
- Before pain gets too severe.
- About a half hour before a scheduled activity, such as physical therapy.
- Regularly for the first 24 hours after surgery to allow it to build up in your system.

#### How will my pain be controlled after surgery?

Pain will be controlled by a team that includes anesthesiology, the surgeon and the nurses caring for you.

- Pain medication can be taken by mouth or given through an IV.
- You may have pain medications given through the IV by a nurse, if you need rapid pain control.
- You may have a nerve block using a long-acting medication. These can last 24 to 72 hours. Additional medications
  may be administered by anesthesiology.

#### Other methods of pain control:

**Cryotherapy:** Cold therapy is frequently used for pain control after surgery. Most pain after surgery is due to inflammation, the body's natural response to healing at a surgical site. Cooling the knee, hip or shoulder after surgery decreases the pain and swelling due to inflammation significantly. Ice packs or commercial cryotherapy devices are often used. The hospital will provide a polar care ice machine and educate you on how to use it prior to discharge. Buy small water bottles and keep 4-6 in your freezer. These can be rotated as the bottles melt. They last longer and are less messy than tray ice. When the bottles melt, put them back in your freezer to reuse.

**Movement of the body:** Movement is very important for pain control. Movement reduces pain by keeping the joint from stiffening as well as interfering with some pain signals before reaching the brain through a process called pain-gaiting.

### Surgery - Anesthesia

Anesthesia is the practice of medicine dedicated to ensuring the patient's pain is controlled, and the surgery is medically safe. The anesthesia care team controls the body's reaction to stress, minimizes side effect and makes recovery easier. The team will meet you to discuss medical history, perform an examination and discuss options for your total joint replacement surgery.

#### What type of anesthesia can be expected for your total joint replacement?

The anesthesiologist will discuss several anesthesia options for your surgery. It may be one, or a combination of the following:

- **General anesthesia** creates a deep state of unconsciousness during which the patient does not feel nor remember. Anesthesia gases and/or intravenous (IV) medications are used in general anesthesia. This type of anesthesia can stop you from breathing naturally, so you may breathing tube placed in your airway to ensure you receive oxygen during surgery.
- **Regional anesthesia** involves an injection near a nerve bundle to numb the area of the body that requires surgery. This technique is similar to what a dentist would do prior to working on teeth. Examples of regional anesthesia typically performed for joint replacements are spinal anesthesia, combination spinal/epidural anesthesia or a peripheral nerve block.
- Local anesthesia numbs a specific part of the body by preventing nerves from communicating pain signals to the brain.

#### What is spinal anesthesia?

- **Spinal anesthesia** is a type of anesthesia using a single injection of numbing medication in the lower back, near the nerves that control the lower half of the body.
- It numbs the pain sensation and makes it difficult to move the legs. The affect can last for several hours after awakening from surgery.
- It can be combined with a light general or sleep sedation anesthesia so you are asleep during surgery.
- Complications are uncommon. They include headache, back ache, nerve injury (1 in 2,000 chance), bleeding and bruising of the back, and infection at the injection site. Paralysis from this procedure is extremely rare.

#### What is a peripheral nerve block?

- A peripheral nerve block involves injecting local anesthesia near a nerve controlling the pain in the area where surgery is to be performed.
- The correct nerve is found using a tiny electrical pulse causing the muscles to twitch in the surgical area. Once the nerve is found, numbing medication is injected near the nerve.
- The most common peripheral nerve block involves the femoral nerve at the top of the thigh, which numbs the knee.
- A nerve block usually lasts 8 hours, but can last longer (12 to 24 hours) depending on the medication used, as well as other factors.
- Complications are uncommon and include the risk of nerve damage, infection at the injection site, and bleeding/ bruising at the top of the thigh.

#### When is a patient not a candidate for regional anesthesia?

- Allergic to local anesthetics or narcotics
- Disease or deformity of the spine or nervous system
- Bleeding tendency or disorder
- Infection in the lower back or groin region
- Previous lower back surgery
- Very overweight

# What will be monitored in the operating room during surgery and in the recovery room after surgery?

- EKG or heart monitor
- Blood oxygen levels
- Blood pressure
- Breathing patterns
- Pain
- Sedation level
- Nausea

#### What are the normal side effects of anesthesia?

- Dry throat/mouth
- Sore throat
- Sore jaw
- Nausea and vomiting
- Short-term memory loss

#### What is the risk of complications of anesthesia?

The risk and complications of anesthesia are dependent on the patient's overall health. Healthy individuals have a very low risk and few complications. Individuals with medical conditions such as high blood pressure, heart disease, lung disease, kidney disease, sleep apnea and other such diseases may have a higher risk of complications.

Those with medical conditions may be required to see their primary care physician or other medical specialist prior to surgery to ensure their health is properly addressed and managed before, during and after surgery.

It is **imperative** that you complete any requested cardiology, neurology, or primary care appointments to ensure that any clearances required by anesthesia are obtained. These clearances are necessary to proceed and need to be completed in a timely manner to prevent your surgery from being delayed/ postponed.

Surgical complications can be greatly reduced with proper pre-surgical treatment of any medical conditions, the use of new anesthesia medications and techniques, and the use of specialized monitoring equipment during and after surgery. Patients with sleep apnea are encouraged to bring their CPAP.

### What are all of these Gadgets?

When looking around while in the hospital, you may notice unfamiliar apparatus. Here are some of the "gadgets" that may play an important role in the healing process.

**IV access device**: You will notice an intravenous access device (IV). This is a fluid in a bag connected by tubing to a vein that keeps you supplied with fluids. The nurse or anesthetist starts the IV, and it will be continued until you are drinking and eating well. This also provides a route for the administration of pain medications, antibiotics, anti-inflammatory products, blood and/or blood products, if needed, and other medications.

**Antibiotics:** You will be given several doses of antibiotics through the IV in the first 24 hours. The first will be given even before the incision is made so that the antibiotic is ready and working in your blood system. This is to prevent an infection from starting. You will get additional doses after surgery. Oral antibiotics may also be needed when you go home. ALWAYS finish your oral antibiotics as prescribed. This can prevent any infections as well as antibiotic resistance (which can cause complications with future antibiotic use).

**Oxygen:** You may require short-term use of oxygen the day of surgery. This is to provide the optimal level of oxygen needed for healing. The nurse will remove the oxygen temporarily and monitor levels to ensure you are getting enough oxygen. When the optimal level is reached, supplemental oxygen will be discontinued.

**Dressings:** There may be a large dressing on the operative site. This is to keep the incision clean and protected while it heals. You may notice some bloody drainage on the surgical dressing. It will be reinforced with additional dressing or changed if necessary. Depending on the type of surgical dressing, it may stay on when you leave the hospital.

**Foley catheter:** You may have a Foley catheter, or urinary catheter, placed in your bladder during surgery. This is to drain urine and keep an accurate record of the Kidney's urine production. It will probably be removed early the first morning after surgery, unless otherwise ordered by the doctor. With any bladder catheter, there is an associated risk of bladder infection. If you experience a sensation of bladder fullness, discomfort, burning upon urinating or increased frequency of urination after the catheter is removed, let the nurse know. Getting out of bed to use the bathroom will help you to progress toward independence. Remember to call for assistance first!

**Surgical drains:** Some orthopedic surgeons insert a small tube alongside the hip or knee during surgery. This tube is then connected to a small suction container. This is a surgical drain and is used to contain excess fluid, wastes and blood from the surgical wound to decrease congestion around the hip or knee joint. This allows the wound to heal more quickly and is typically removed one or two days after surgery, which can be painful.

**Checking your blood:** The health care team may draw blood to measure potential blood loss. Some blood loss is expected during every surgery. While your body has a remarkable ability to replenish lost blood, let the nurse know if you feel short of breath, weak, have chest palpitations, or feel lightheaded or dizzy every time you're out of bed. This may indicate that your blood count is low. If it is too low, the doctor may order an iron tablet or a blood transfusion.

### **Anti-coagulation and Blood Clot Prevention**

Coagulation is the clotting ability of the blood and occurs normally in the body. All surgical patients have an increased risk of developing large blood clots for a period of time after surgery. A blood clot that forms in one of the deep veins presents a significant danger to your health as it can move suddenly and block blood flow to the heart.

Blood clot prevention: Blood clots can be prevented though various devices, therapies, and mobility.

- **Compression socks,** TED hose, or white stockings may be fitted on legs to improve blood return from the lower legs to the heart and can help prevent blood clots from forming.
- **SCD devices** are air-pumping leg wraps, which alternately squeeze the lower legs. This helps prevent blood clots and improves circulation by squeezing the large veins located deep within the calf muscles.
- **Anti-coagulants** are medications used after surgery to interfere with the blood's ability to clot excessively. There are various types of anti-coagulants, and the surgeon will inform you of which medication you will receive. Prior to surgery, you may want to check with your insurance company to verify coverage of anti-coagulants.
- **Ankle pumps** are an exercise to make the calf muscles work. When calf muscles contract, they squeeze the veins in the lower legs, pumping the blood back toward the heart.
- **Mobility** is one of the best ways to prevent blot clot related conditions. Try to periodically move throughout the day in addition to participating in physical and occupational therapy. Just remember to ask for help.

# Contact your doctor and seek medical treatment, if you experience any of the following symptoms:

- **Shortness of breath.** This symptom usually appears suddenly. Trouble catching your breath happens even when resting and gets worse with physical activity.
- **Chest pain.** You may feel like you're having a heart attack. The pain is often sharp and felt when you breathe in deeply. The pain can stop you from being able to take a deep breath. You also may feel it when you cough, bend or lean over.
- Fainting. You may pass out if your heart rate or blood pressure drops suddenly. This is called syncope.
- Extremity swelling (beyond the normal swelling associated with joint replacement surgery)
- **Cramping or soreness** that starts in calf and doesn't start or stop quickly
- **Leg pain or swelling**, usually in the back of the calf, beyond or different than that which is normally associated with joint replacement surgery.
- Change in skin color of the leg or arm (red or purple, depending on the color of your skin)

Other symptoms that can occur with various types of blood clots include:

- A cough that may include bloody or blood-streaked mucus
- Rapid or irregular heartbeat
- Lightheadedness or dizziness
- Excessive sweating
- Fever

**Anticoagulants:** Your doctor may decide a blood thinner or anticoagulant is necessary when you return home. As activity increased, the risk of forming a blood clot decreased and the need for blood thinners should also decrease. Your doctor will let you know when it is safe to stop taking this medication. Some examples of anticoagulants include Coumadin, Lovenox, Xarelto and aspirin.

While taking an anticoagulant:

- Follow the dose and time carefully. Take the medication at the same time every day.
- 2. Read the instructions provided with the medication thoroughly.
- 3. Unless instructed by a doctor, do not take any other medications containing aspirin.
- 4. Avoid all herbal medicines and teas for one month.
- 5. Use an electric shaver not razor blades.
- 6. Avoid large servings of green leafy vegetables and alcohol.

If you have any of the following signs or symptom, call the doctor immediately:

- 1. Bleeding from gums or nose
- 2. Blood in urine or stool
- 3. A cut that does not stop bleeding
- 4. Chest pain, shortness of breath or heart palpitations (call 911)

# Prevention of Post-Operative Pneumonia: Incentive Spirometer

The nurse will instruct you and remind you when it is time to use this breathing exercise device. The spirometer is one of three ways to prevent pneumonia and other lung complications. Use the spirometer for 10 breaths every hour while you are awake.

First, blow out all of your air. Place the mouthpiece in your mouth with a good seal. Slowly inhale at a steady rate until you are unable to expand your lungs any further, and then hold your breath for a moment. Now remove the mouthpiece and exhale slowly. Take a moment to rest and catch your breath before repeating the process so you do not hyperventilate. After the tenth round of inhales and pauses, try to produce a strong cough. This will clear the secretions that have been loosened with the exercise.

The second method is simple: coughing and deep breathing exercises. Every hour, take a deep breath, hold and exhale. After several breaths, try to produce a strong, deep cough. Try to remember to do this every hour.

The third method is spending more time out of bed by sitting in a chair or walking with the therapy and nursing staff. Keep in mind that all three are exercises you can do to prevent getting pneumonia.

### **Prevention of Surgical Site Infections**

The increased risk for surgical site infection is because the incision to the hip or knee will disrupt the protection your intact skin provides against infections. By working together, we can greatly reduce the risk. Remember the following:

- 1. **Do not shave legs** or any other area except your face for five days before surgery.
- 2. **Use the antibiotic soap** according to the instructions given.
- 3. You will receive **antibiotics** within 24 hours of surgery.
- 4. Surgery will be performed under strict sterile conditions.
- 5. See that all staff use hand sanitizer prior to providing care. If they forget, politely remind them to do so.
- 6. When performing dressing care, be sure to wash hands first and do not touch or feel the suture line until it is healed.
- 7. Until the suture line is healed and it's been approved by the surgeon, **do not <u>immerse</u> in a bathtub, swimming pool, hot tub or any standing water.** You may use a shower.
- 8. Tell the surgeon if you experience any change in the look or feel of the incision after you leave the hospital. This includes any increased drainage, redness or odor. Remember, bruising and swelling are expected.
- 9. Eat a well-balanced, nutritious diet to help your body heal.
- 10. Maintain cleanliness when toileting. Ask for Help!

**Infections**: There is much evidence that bacteria in the blood stream can cause total joint implant infections. See your primary care doctor promptly if you have any type of infection. Any infection – sinus infection, tooth infection, or urinary tract infection – left untreated can become present in the blood and settle in the new joint. In the worst cases, infected joints must be treated with many weeks of antibiotics and may possibly need to be replaced.

In addition, any surgery or dental work, including routine cleanings, should be considered as possible sources of infection. Call you surgeon a week or two prior to any dental procedure, including routine cleanings, for recommendations regarding ordering an antibiotic to guard against possible infection. This medication should be taken for the duration of the prescription as instructed by the surgeon.

### After Surgery - Day One

**Diet:** You will start with ice chips and water to see how well you can tolerate fluids. Most people are ready to resume a normal diet by the evening or the next morning. If at any time you feel sick to your stomach, let the nurse know. All patients have access to "At Your Request" dining and a menu is available.

**Sitting up and getting out of bed:** After surgery, the nursing staff or physical therapy team will help you sit up on the side of the bed. This movement will help increase blood circulation, expand the lungs and increase tolerance for activity. It also helps reduce some of the stiffness you may be feeling after prolonged inactivity.

We will advance activity by helping you sit in a chair at the side of the bed. Unless otherwise noted, you will be able to put as much weight as you can tolerate on the surgical leg. This is a first step toward rehabilitation. It will also get you ready to begin your first physical therapy session, which may be on the day of surgery or the next morning. Getting out of bed should became easier each time.

The nursing staff will also assist you to the bathroom. You will use a walker whenever you are out of bed to help with balance, mobility, and pain.

Always remember: Call! Don't Fall! You may be surprisingly unsteady from a nerve block or anesthesia. You may also have a drop in blood pressure the first few times you stand up, which can result in fainting, injury to you, and damage to your new joint prosthesis.

**Physical Therapy:** Your mobility, balance, range of motion, and strength will be evaluated by a physical therapist either the day of surgery or the next morning. The physical therapist and physical therapist assistant will help you perform early strengthening exercises, as well as range of motion exercises that are vital for a successful recovery. They will also demonstrate techniques for transfers from bed to chair.

Some patients will go home on the day of surgery if the surgeon and therapy team feel it is appropriate.

### After Surgery - Day Two

**Getting ready:** You may be going home today and there is a lot of work to do to prepare. The first task is getting out of bed with help from staff. You may need frequent repositioning, just as you did in bed, but try to stay out of bed at least until after breakfast. You can alternate periods of rest with physical therapy sessions and sitting up in your chair for all meals. This will help you regain mobility and help reduce the risk of developing blood clots and pneumonia. You will also use the bathroom with the help of a walker and your care team.

**Planning for the return home:** It's important that your recovery continues at home. If you haven't done so already, you will meet with your case manager to make sure everything is set up for your discharge for home health or outpatient physical therapy and to be sure you have all necessary equipment when you get home.

**Sub-Acute Rehab**: If you think you will need sub-acute rehab instead of home care, please let your case manager know that ASAP. It can take some time to get you accepted to a facility and have it approved by insurance. Your acceptance to a sub-acute rehab also depends on your participation in physical therapy.

Any other special needs that were identified during your hospital stay will be addressed and plans will be finalized by the time you are released from the hospital.

**Goals for the day:** Even though there is a lot of work to do today, try to take frequent rest periods and remember you're recovering from surgery. If you feel pain, let the nurse know so your care team can help before it becomes severe. Getting plenty of rest and managing pain will help you keep a positive attitude, which is essential for a strong recovery.

### Discharge

When the doctor agrees you are ready to leave, you will receive morning therapy and will likely be able to leave shortly afterward.

Make sure you have all of your personal belongings assembled and packed, and the coach, a family member or friend is available to take you home.

You will receive detailed verbal and written instructions before discharge. These instructions are important to help you continue to safely recover at home. Please take time to read them to make sure you haven't overlooked any important details. The discharge instructions will include:

- A list of all current medications, times, doses and special precautions.
- Prescriptions such as pain medications, blood thinners, and anything else you physician may order. These can be filled and delivered prior to discharge.
- A description of how to take care of the healing incision, and how to recognize signs and symptoms of infection.
- A full review of any activity restrictions, as well as any appointments and when to call the doctor.
- The name and contact information for your home health services, if applicable.
- Any other special instructions.

Remember, bruising and swelling is expected, and tends to get worse after you are home.

You will be taken to your car by wheelchair. Please make sure you have your walker in the car to help you get into your home.

**Healing can take time and be uncomfortable.** Try to have patience with yourself and know that this is a process. Staying positive will aid in your recovery. Know that your family, friends, surgeon, therapy team, care team, and the hospital are here to provide support and answer any questions.

#### Call the surgeon if you have:

- Severe pain or increased drainage from the incision
- A consistent fever over 101 degrees
- · Chest pain or shortness of breath

## Living with a new Joint

To achieve the best outcome, think of therapy as your full-time job for the upcoming weeks. Your Physical Therapy team will provide you with a home exercise program to perform. It is very important to perform your exercise plan to restore range of motion, strength and function and prevent complications after surgery.

**Keep working:** If you are starting with home health therapy, you will work with them for the next few weeks in your home, after which you may transition to outpatient physical therapy. The choice of where to receive outpatient therapy is yours.

Always ask for help! Typical activities that were once simple, like using the restroom and showering, may be difficult. While it can be embarrassing or frustrating, it is normal to need assistance. Don't let pride make you risk falling or damaging the operative site.

### **Hips**

Remember these guidelines over the next three months:

#### Things to do:

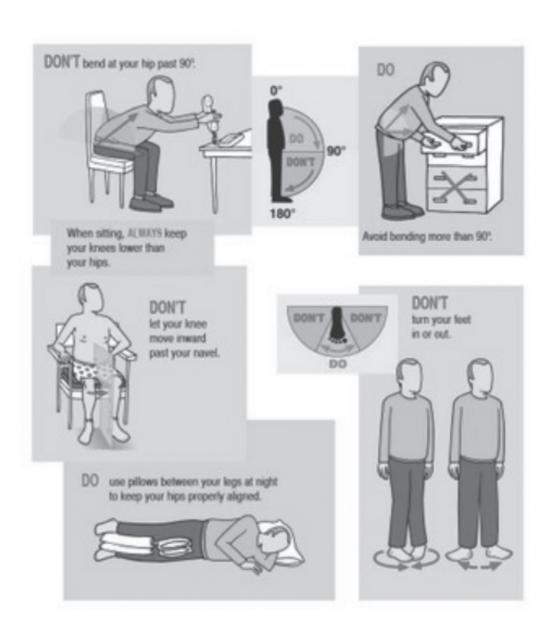
- 1. Put as much weight on your leg as the doctor has instructed.
- 2. Always slide the operated leg forward before sitting down or standing up.
- 3. Sit in higher chairs rather than lower ones preferably chairs with arms.
- 4. When sitting in a car, it may help to push the entire seat back and then recline the seat. Sit in the edge of the seat and pull your legs in afterward.
- 5. Continue to use a walker or cane until the physical therapist, physical therapist assistant, or your doctor tells you it is no longer needed.
- 6. Take a shower rather than a bath.
- 7. Use ice therapy for 20 minutes hourly. Place a cloth between the ice and your skin to prevent ice burns. You may apply ice many times throughout the day.

#### Things not to do:

#### Posterior-approach Total Hip Arthroplasty (THA) and Hemi-Hip Arthroplasty (HHA)

- 1. Do not bend the surgical hip past 90 degrees. No bending over or raising the leg as you might do to put on socks or tie shoes.
- 2. Do not let the surgical leg cross the middle of your body and do not cross your legs
- 3. Do not let the surgical leg rotate inward or point toward your other leg.

- 4. Initially, take small steps to turn around to avoid twisting or turning at the hip. Try to turn away from the surgical hip.
- 5. Do not lie on the surgical hip. If you lay on the non-surgical hip, be sure to keep pillows between the knees to avoid letting your surgical cross the middle of your body.



Posterior-approach Total Hip and Hemi-hip Arthroplasty Precautions

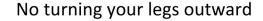
#### **Anterior-approach Total Hip Arthroplasty**

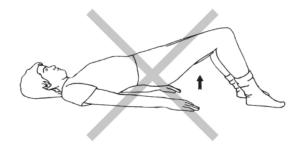
- 1. **Do not perform resisted extension** such as lifting your rear off the bed with your surgical leg
- 2. Do not stand on your surgical leg while turning away from it.
- 3. Initially, take small steps to turn around to avoid twisting or turning at the hip. Try to turn toward the surgical hip.
- 4. Do not use the foot rest of a recliner as closing it with your legs can risk injuring your new joint.
- 5. Do not lie on the surgical hip.



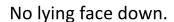


No bending backwards









### **Knees**

Remember these guidelines over the next three months

### Things to do:

- 1. Put as much weight on your leg as the doctor has instructed.
- 2. Always slide the operated leg forward before sitting down or standing up.
- 3. Sit in higher chairs rather than lower ones preferably chairs with arms.
- 4. When sitting in a car, it may help to push the entire seat back and then recline the seat. Sit in the edge of the seat and pull your legs in afterward.
- 5. Continue to use a walker or cane until the physical therapist, physical therapist assistant, or your doctor tells you it is no longer needed.

- 6. Take a shower rather than a bath.
- 7. Use ice therapy for 20 minutes hourly. Place a cloth between the ice and your skin to prevent ice burns. You may apply ice many times throughout the day.

#### Things not to do:

#### **Total Knee Arthroplasty (TKA)**

- Do not place a pillow under the surgical knee. Keep the new knee as straight as you can while resting. If sitting in a
  chair keep your surgical let propped up.
- 2. Do not apply heat to the surgical site.

### **Mobility considerations**

**Think before you move:** Once you are out of the hospital and in a familiar setting, it is easy to return to old habits. You may be used to bending or standing up from a chair quickly, but because of your new joint you will not be able to move as spontaneously as you used to. This is particularly true in the early period of your recovery. Always think before you move to avoid injury.

#### Going up stairs:

- 1. Face the stairs and hold onto the handrails.
- 2. Lift the non-surgical leg onto the first step. Use the handrails to offload some of the weight from your surgical leg.
- 3. Lift the surgical leg onto the same step.
- 4. Repeat.

#### Going down stairs:

- 1. Hold onto the handrails.
- 2. Lower the surgical leg onto the step. Use the handrails to offload some of the weight from your surgical leg.
- 3. Lower the non-surgical leg onto the same step.
- 4. Repeat.
- 5. Your physical therapy team can assist you with alternative stair climbing methods if handrails are not available.
- 6. Always have someone with you when using the stairs.



### **Shoulders**

Remember these guidelines over the next three months

#### Things to do:

- 1. Keep sling on the affected arm
- 2. Wait to try new activities until the physical therapist, physical therapist assistant, or your doctor tells you it is safe.
- 3. Take a shower rather than a bath.
- 4. Use ice therapy for 20 minutes hourly. Place a cloth between the ice and your skin to prevent ice burns. You may apply ice many times throughout the day.

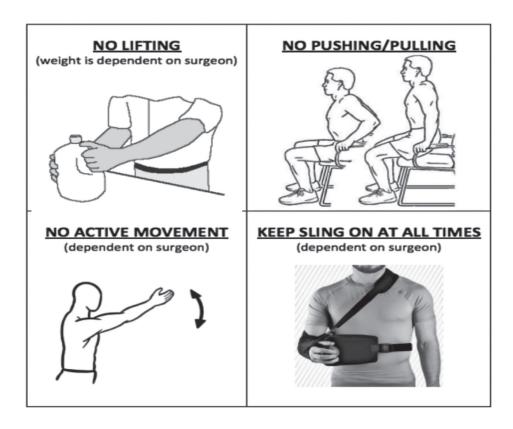
#### Things not to do:

#### **Total Shoulder Arthroplasty (TSA)**

- 1. No active movement of the shoulder.
- 2. No pushing up from the affected shoulder side.
- 3. No reaching behind the back and head with the affected side.
- 4. No lifting objects with the affected side.
- 5. No weight bearing on your surgical arm.
- 6. While lying on your back, place a small pillow or towel roll behind the elbow.

### **Total Shoulder Arthroplasty Precautions**

Follow these rules for 4-6 weeks, or until your surgeon instructs otherwise.



#### Tips to sleep better after shoulder surgery:

- Sleep in a recliner or reclined in a bed.
- Place a pillow behind your elbow to move your arm slightly away from your body.
- · Wear your sling.
- If sleeping on your non-surgical side, place pillows behind you to prevent from rolling over and place a pillow between the arm of the affected shoulder and your torso.

#### **After Shoulder Surgery ADL Education**

- No pushing up from a chair, toilet, bed, etc. with the surgical arm for X amount of weeks (X=doctor's recommendation).
- No hygiene tasks involving reaching back during toileting with the operative arm until cleared.
- Use the non-surgical arm for all basic ADLs until cleared (grooming, eating, bathing, dressing, cooking, etc.)
- Upper body dressing: Use hemi-dressing techniques, wear button-up loose fitting shirts or loose T-shirts, loose elastic waistband pants/shorts, and slip/on shoes. See page 33.

### **Bathroom Safety**

**Toilet:** Depending on how tall you are, you may need to raise the height of the toilet seat. This will help to avoid flexing the hip beyond 90 degrees (recommendations may be different for anterior approach total hip replacements). You can do this by adding a raised toilet seat or placing a toilet safety frame or a bedside commode over the toilet. If when sitting, the knee is not above the height of the hip, then you may not need to adjust the seat height. If you cannot access the bathroom, you will want to get a bedside commode.

**Bathing:** Sit on a bath or shower chair when taking a shower. Typically, shower doors on bathtubs must be removed to use a bath chair. Be sure the bath chair you select is the correct style for your bathtub or shower, has rubber tips on the bottom and has the correct weight capacity.

**Standard bathtubs:** Sit on the edge of a transfer bench and carefully lift your legs into the tub without flexing your hip more than 90 degrees. A shower chair can be used if you can safely step in and out of the bathtub and follow all applicable precautions.

**Walk-in or stall shower:** Use a shower chair. A wall-mounted grab bar may be needed for support when stepping in and out of the shower.

### **Bathing safety Tips:**

- If possible, receive additional instructions from the home health physical therapist before attempting to bathe for the first time at home.
- You may need to have grab bars beside the toilet and on the shower walls.
   They must be securely attached to the walls, typically in the studs.
- Do not use towel racks as grab bars. They are not securely attached to the wall to provide a safe weight support.
- Have someone available to assist until you are independent and your therapy team tells you it is safe to do it alone.
- Put non-slip suction mats or rubber silicone decals in the tub to prevent falls.
- Start with a dry bathtub or shower floor.
- Use a non-skid bath mat outside the tub for firm footing.



- Keep the floor outside the tub or shower dry.
- Place soap and shampoo where you do not need to stand up, reach or twist.
- Use a long-handled sponge to wash your legs and feet.
- Use a handheld shower hose.
- Do not shower in excessively hot water or let water directly hit incision
- Follow incision/ dressing instructions per surgeon as for as when to shower and change dressings.

### **Dressing Tips and Techniques (hips and knees)**

If you are experiencing pain or stiffness in the knee/hip that interferes with getting dressed, you may want to use some of the equipment and techniques that are listed below:

- 1. Begin by putting pants/slacks/underwear on the surgical leg first.
- 2. Using a dressing stick or reacher, catch the waist of the garment and lower it to the floor. Step into the leg hole with the surgical leg first.
- 3. Pull the garment up to your hips, and then take over pulling them up with your hands.
- 4. After a hip replacement, it is recommended that a sock aid be used to put the sock on the surgical leg, or both legs. To use a sock aid, slide the sock onto the device then lower it to the floor by the cords. Slip your foot into the device then pull your sock up using the cords. (Recommendations may be different for anterior approach patients.)
- 5. Use a dressing stick or reacher to remove the sock from the operated leg.
- 6. To avoid tying, consider wearing enclosed slip-on style shoes.
- 7. If needed, use a long shoehorn to slip on shoes.
- 8. If needed, a dressing stick or long-handled shoe horn can be used to remove shoes.

**Driving:** Driving may be resumed when you are no longer taking narcotic pain medication and with approval from the surgeon. Return to drive time estimates are typically four to six weeks for hip and knee replacements. This may differ depending on the side involved and each individual case.

#### **Car Transfers:**

- 1. Make sure the seat is all the way back.
- 2. Lower yourself onto the seat, allowing it to support you, with the surgical leg slid forward.
- 3. Slide yourself back in a semi-reclined position toward the driver's seat.
- 4. Pivot your body and legs around front.
- 5. Reverse these steps to get out of the car.



### **Dressing Tips and Techniques (Shoulder)**

#### Hemi-dressing: Donning a shirt:

Step 1: Lay the shirt face down with the bottom of the shirt facing you.



Step 2: Start from the bottom of the shirt, use non-operative arm and thread the operative arm through the first sleeve.



Step 3: Find the head opening of the shirt. Pull the shirt over your head with the non-operative arm.



Step 4: Insert the non-operative arm through the other sleeve.



### Hemi-dressing: Doffing a shirt:

Reverse this process to remove the shirt: To take the garment off, use your non-surgical arm to grab the bottom of the garment and move it up toward your chest. Then bring this same arm toward you inside the shirt in order to get it out of the sleeve. Bend over at the hips as you pull the garment over your head with your non-surgical arm. Finally, work the garment down you surgical arm with the use of your non-surgical arm.

## **Discharge Preparation form**

# Please answer the following questions to help us plan for your discharge when you leave the hospital

Name	Date of Birth		-
Do you live at home alone?	Υ	N	
Family/Caregiver available to assist?	Υ	N	
Who is your family doctor?			
Current Pharmacy?			
Address you will be going to (if differen	t from your home ad	dress)	
			_
# of outside stairs?	Handrail?	_	
# of inside stairs?	Handrail?	_	
Do you have a preference for a home h	ealth agency? Please	e see attached list: _	
*Please note, acceptance with preferre preferred agency cannot accept, you w			ntracts and staffing availability. If your
If you plan to go to rehab, which facility	do you prefer? Pleas	se see attached list:	
*Please note, acceptance for rehab is	dependent on bed a	vailability and insur	ance approval.
If you plan to go to outpatient PT, whic	h clinic do you prefer	?	
Will you have a ride home?	Υ	N	
Do you have the following at home:			
Walker with wheels	Υ	N	
Rollator	Υ	N	
Bedside Commode	Υ	N	
Shower Chair	Υ	N	
Do you have a preference for the media	cal equipment agenc	cy?	



<sup>\*</sup>If you have HUMANA, all medical equipment requests must go through Adapt/McFarland's.

# Get you better, faster.

Covenant Health
Therapy Center Morristown

4355 Durham Landing Morristown, TN 37813

423-492-8200



