

Joint Replacement Program

# Your Guide to Joint Replacement Surgery: Total Knee





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# WELCOME

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PIH Health's Joint Replacement Program binder is intended to help answer some questions you may have about your diagnosis, surgery and post-operative care. PIH Health designed this teaching guide with the goal to inform and empower you to manage your own health. Not all the information applies to all patients so it is important that you discuss your individual treatment plan with your doctor.

**Be sure to bring this binder with you to all of your appointments, class and to the hospital during your stay. Use this material as a reference guide in addition to instructions provided by medical staff.**

\*Resources for content used is from Krames On Demand, the American Association of Orthopedic Surgeons and PIH Health.

## Important Contact Information

For questions regarding scheduling and appointments, please call:

\_\_\_\_\_, Surgery Scheduler

562.698.0811 Ext. \_\_\_\_\_

For questions regarding hospital stay, pre-surgical preparation and discharge planning or if you have any changes in your health or surgery plan, please email:

**Aimee Lee RN BSN**, Joint Replacement Coordinator

**JointReplacement@PIHHealth.org**

To reach the post-surgical unit, please call:

**562.698.0811 and ask for Post-Surgical Unit.**

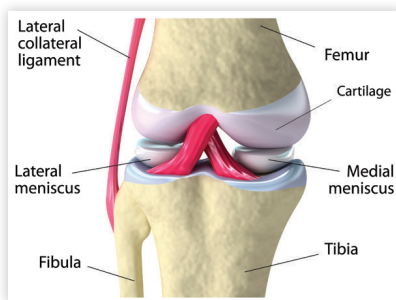
**In the event of a life-threatening emergency, please call 911.**

# PRE-SURGICAL INTRODUCTION

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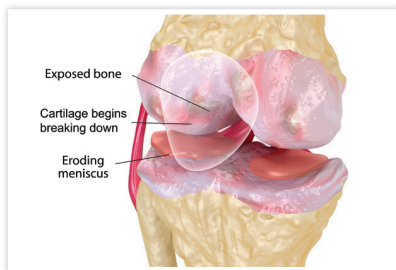
# Understanding A Total Knee Replacement

The knee is a hinge-like joint, formed where the thighbone, shinbone and kneecap meet. It is supported by muscles and ligaments and lined with cushioning cartilage. Over time, cartilage can wear away. As it does, the knee becomes stiff and painful. A knee prosthesis (artificial joint) can replace the painful joint and restore movement.



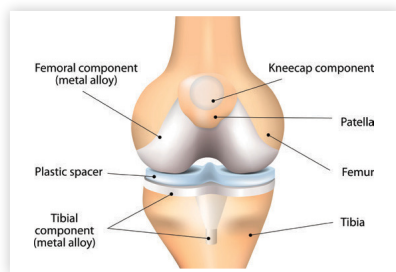
## A Healthy Knee

A healthy knee joint bends easily. Cartilage, a smooth tissue, covers the ends of the thighbone and shinbone and the underside of the kneecap. Healthy cartilage absorbs stress and allows the bones to glide freely over each other. Joint fluid lubricates the cartilage surfaces, making movement even easier.



## A Problem Knee

A problem knee is stiff or painful. Cartilage cracks or wears away due to usage, inflammation or injury. Worn, roughened cartilage no longer allows the joint to glide freely, so it feels stiff. As more cartilage wears away, exposed bones rub together when the knee bends, causing pain. With time, bone surfaces also become rough, making pain worse.



## A Knee Prosthesis

A knee prosthesis lets your knee bend easily again. The roughened ends of the thighbone, shinbone and the underside of the kneecap are replaced with metal and strong plastic components. With new smooth surfaces, the bones can once again glide freely. A knee prosthesis does have limitations. But it can let you walk and move with greater comfort.

## What Happens During Surgery

After you receive anesthesia, your surgeon will make a cut over your knee to open it up. Your surgeon will then move your kneecap (patella) out of the way, then cut the ends of your thigh bone and shin (lower leg) bone to fit the prosthesis. They will then cut the underside of your kneecap to prepare it for the new pieces that will be attached there. After, your surgeon will fasten the two parts of the prosthesis to your bones. One part will be attached to the end of your thigh bone and the other part will be attached to your shin bone. The pieces can be attached using bone cement or screws. Lastly, your surgeon will attach the underside of your kneecap, repair your muscles and tendons around the new joint and close the surgical cut.



# Informed Consent

As a patient, you have the right to know what the potential complications are with any surgery or procedure. Your surgeon will go over all of the risks and complications of a knee or hip replacement surgery. They will also discuss the possibility of the need for a blood transfusion and educate you on the risks and benefits, however, not all patients will require a blood transfusion.

## Advanced Care Planning

Advance Care Planning is for everyone, not just the elderly. According to the Coalition for Compassionate Care of California the advance care planning discussion starts at age 18 and continues for the rest of your life. As we go through life we may face medical crises or serious injuries and may not have the ability to express our healthcare wishes.

The advance care planning process allows you to:

- Explore your healthcare wishes including identifying someone who would act on your behalf if you are unable to make your wishes known
- Express your healthcare wishes by completing an Advance Healthcare Directive which can be updated at any time as your life and wishes change

An Advance Healthcare Directive is a legal document that expresses a patient's healthcare wishes and identifies a person to act on the patient's behalf if they are unable to communicate their wishes. This document should be completed by anyone 18 years or older and can be updated as the patient's life

and wishes change. This document has to be witnessed (by certain persons) or notarized.

When you're admitted to a PIH Health hospital, you'll receive a written explanation of advance healthcare directives, be asked if you have one and be given an opportunity to complete or update the Advanced Healthcare Directive form.

**An Advanced Healthcare Directive is included in the Resources section.**

Patient services can help you find information and solve problems. We can also connect you with PIH Health doctors and services.

**562.789.5401 Ext. 82199**

**Hours: 8 am to 5 pm, Monday - Friday**

# Insurance and Financial Planning

## Insurance

It is important to thoroughly review your insurance benefits and/or alternative plans for payment. Find out what your insurance plan or Medicare plan covers, including equipment, inpatient care and home healthcare. If you have questions about your health insurance benefits, call your insurance company's customer relations department, the phone number is typically located on the back of your insurance card. Joint replacement patients will also meet with a Financial Counselor to discuss financial options. Be aware that your insurance will often send a letter stating how many days you are covered for in the hospital. Regardless of your type of insurance, our goal is to always get patients out of the hospital the day after surgery because research has shown it produces the best patient outcomes. There are exceptions if there are safety issues or complications.

If you have questions regarding financial counseling, call **562.698.0811 Ext. 13291, Monday-Friday, 8 am to 4 pm.**

## Financial Planning

If you are planning to file for disability, detailed information (including filing instructions) is available on the Employment Development Department (EDD) website: [edd.ca.gov](http://edd.ca.gov) or call **800.480.3287**. You are encouraged to go online at [edd.ca.gov](http://edd.ca.gov); however, you may also obtain forms from your physician's office. Allow five to seven business days for your request to be processed. If you are planning to file for disability benefits with your employer or any other outside entity, the necessary forms must be obtained from the employer/entity. Fill out your section and submit the claim to your surgeon's office so that they may complete their section. Keep in mind each surgeon's office processes claims differently. It is best to call your surgeon's office and verify the process to avoid delays.

## Arranging for Home Care

Studies have shown that patients have significantly better outcomes when they recover at home compared to staying in a rehabilitation (rehab) facility or nursing home. Our goal is to get you home and recovering as soon as it is safe. Because you will be doing most of your recovery at home, you must have someone with you at all times for 48 hours following your discharge. This will be a designated individual who will be your "Recovery Coach."

If you do not have any family or friends available, another option is to hire a private caregiver for those two days. A list of local caregiver services is included in the Resources section. If your family

member cannot take time off work, the FMLA entitles eligible employees to take an unpaid, job-protected leave of absence for specified family members and various medical reasons. Your family member should consult with his or her Human Resources department for eligibility requirements. It is

important to note that not having a family member or friend available is not necessarily a reason to go to a rehab facility. It is crucial to have a plan before surgery regarding who will help you at home.



## Recovery Coach Criteria and Responsibilities

Throughout your total joint replacement journey, it is important to have an individual that can be your support along the way. This individual can be a family member, friend or hired caregiver. We call this individual your recovery coach. Because this role requires certain physical duties and assistance to you both in the hospital and at home, it is important they meet these criteria:

### Healthy and able-bodied

They must be able to perform certain physical duties to assist you with your exercises and making sure you are safe when walking. They may also need to assist you with light housework including cooking and tidying up.

### Available

They are required to be present at the Joint Venture class, Prehab session and at various times throughout your hospital stay to receive training from physical therapists. The recovery coach must also stay with you for the first 48 hours after you return home. Your recovery coach may also be a team of people that switch off staying with you.

### Willing to learn and participate

They must be willing to learn how to assist you with mobilizing and performing your exercises, as well as being an encouragement to you during your recovery.

## **Question and Answer (Q & A)**

**Q: What if I do not have someone that meets these criteria?**

A: Because this is an elective surgery, you are required to either find a family member or friend, or hire a caregiver to be with you. Insurances do not cover home caregivers for elective surgeries so this would be self-pay. If you are going to hire a caregiver, ensure that you do so before your surgery and pre-operative appointments. Please see the Home Caregiver Agencies sheet in the Resources section of this booklet.

**Q: If I cannot find someone to be my Recovery Coach, can I go to a skilled nursing facility or rehab center?**

A: Due to the increased risk of post-operative complication and infections associated with skilled nursing facilities or rehab centers, our program does not allow for your discharge plan to include one of these options. It is also important to keep in mind that insurances only cover skilled nursing facilities and rehabs if there is a skilled need. This means that you physically are not safe to go home and require further physical therapy in a facility. If you are safe to go home, insurance will not cover your stay at a skilled nursing facility or rehab.

If you have additional questions regarding your recovery coach, or if you have a last-minute change or cancellation of your current recovery coach, please contact the Joint Replacement Coordinator as soon as possible.

# PRE-SURGICAL PREPAREDNESS

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# Your Pre- Surgical Appointments and Classes

After you are deemed safe to continue with surgery, you will receive a call from a surgery scheduler to schedule your other MANDATORY pre-surgical appointments. These include:

## **Joint Venture Class**

You are required to attend a pre-surgical class taught by the joint replacement coordinator. This class discusses the expectations and processes during the hospital stay and what you need to know when going home after surgery. Your assigned recovery coach must also attend. There is also an online option available for this course. If you are interested in this option, please inform your surgery scheduler. The class can be accessed at [PIHHealth.org/JointVenture](https://PIHHealth.org/JointVenture).

## **Pre-Admission Registered Nurse Appointment**

During this appointment, you will meet with a registered nurse to fill out the intake forms required for your hospital stay. You will also receive information and education regarding preparation for surgery, medication instructions and intake information. Please fill out the Home Medication Table located in the Resources section and bring it with you.

## **Physical Therapy Assessment and Training “Prehab”**

You and your Recovery Coach are required to attend a session with a Physical Therapist called “Prehab”. This is different from a typical physical therapy session, as the primary objectives are to review your current function and goals for surgery and get a head start on planning for discharge.

## **Pre-Operative Visit with the Surgeon**

If your surgeon deems necessary, you will have an appointment to review any other details regarding your surgery answer any further questions you may have and to review any expectations or last-minute details.

# What to Know About Taking Medications Before Your Surgery

## NSAIDs

It is very important that you stop taking NSAIDs one week before your surgery. These medications can reduce your body's ability to form blood clots. NSAIDs include:

- Aspirin (Bayer, Ecotrin)
- Ibuprophen (Advil, Motrin)
- Naproxen (Aleve, Naprosyn)
- Celecoxib (Celebrex)

## Anticoagulants

Anticoagulants are medications that are used to reduce your risk of blood clots. You may need to stop these medications one week before surgery. **Always confirm with your surgeon and primary care physician if and when you should stop taking these medications.** Anticoagulants include:

- Warfarin (Coumadin)
- Rivaroxaban (Xarelto)
- Dabigatran (Pradaxa)
- Apixaban (Eliquis)
- Edoxaban (Lixiana)

## Other Medications

Certain medications should be taken the morning of your surgery. The pre-admission nurse will explain which medications you need to take and will answer any questions regarding your other medications.

# Preventing Surgical Infections

## What is Staph aureus?

Staphylococcus aureus, often referred to as "Staph", is a common type of bacteria. It is found in the nose, on our skin and on many surfaces we touch. It is also one of the most common causes of surgical infections. We are all exposed.

## **What is MRSA?**

MRSA stands for Methicillin-Resistant Staphylococcus Aureus. It is a medication resistant staph bacteria that causes many infections in people throughout the country. MRSA can be present in any location, not just hospitals or healthcare facilities. This kind of bacteria can spread easily from person to person.

Note: Anyone can get this kind of bacteria. These bacteria can be present on a person without causing any symptoms or infections.

## **What does “colonization” or “being colonized” mean?**

Colonization is the presence of germs like Staph Aureus, including MRSA, on body surfaces. Colonization does not necessarily cause infection or disease. Decolonization is the removal of these germs.

## **How are we colonized with Staph Aureus or MRSA?**

We can be colonized in the nose and on the skin. Colonization can last for years, and may return even after a person has been treated.

## **What happens if I am colonized with Staph Aureus or MRSA?**

Sometimes, colonization can lead to infection, including surgical infections. To decrease the chance of an infection occurring, decolonization is sometimes recommended before surgery.

## **How is Staph Aureus or MRSA spread?**

These bacteria are spread by skin to skin contact such as shaking hands; or by touching objects with the bacteria such as exercise machines, dishes, computer keyboards and door knobs.

## **What are some simple ways to prevent Staph Aureus or MRSA infection at home?**

Always wash your hands after touching your nose or face.

In order to decrease the risk of surgical infection, your doctor has prescribed chlorhexidine antiseptic cloth wipes (Sage™) for you to use before surgery. You will receive these at your pre-admission registered nurse appointment.



## Chlorhexidine Gluconate Cloth Wipes (Sage TM)

<b>About</b>	<p>This antiseptic helps reduce bacteria that can cause infection, including MRSA. It's used as a general skin cleanser and also a surgical hand scrub to cleanse the skin before surgery to help prevent infections. You will be using disposable cloth wipes moistened with rinse-free, 2% chlorhexidine gluconate antiseptic solution.</p>
<b>Before using this medicine, tell your physician</b>	<ul style="list-style-type: none"><li>• If you have any skin rashes.</li><li>• If you have an unusual or allergic reaction to chlorhexidine, other medicines, foods, dyes or preservatives.</li><li>• If you are pregnant or trying to get pregnant.</li><li>• If you are breastfeeding.</li></ul>
<b>Usage tips</b>	<p>This medicine is for external use only. Do not take by mouth.</p> <ul style="list-style-type: none"><li>• Avoid contact with your ears and eyes. If contact with the eyes occurs, rinse the eyes well with plenty of cool tap water.</li></ul> <p>This medicine should not be used on the face or head.</p> <ul style="list-style-type: none"><li>• Over-dosage: If you think you have taken too much of this medicine, contact a poison control center or emergency room immediately.</li></ul> <p>Do not share this medicine with others. Do not moisturize your skin after using this medication and avoid any body lotion.</p> <ul style="list-style-type: none"><li>• Note: This medicine binds not only to the skin, but also to many fabrics, particularly cotton. If absorbed into fabric, it may not be removed by washing.</li><li>• Keep all medicine out of the reach of children. Store at room temperature and away from direct light and heat. Do not freeze. Discard any unused medicine after the expiration date.</li></ul>
<b>Possible side effects</b>	<ul style="list-style-type: none"><li>• This medicine may cause allergic reactions. Notify a healthcare professional immediately if you think you are having an allergic reaction.</li><li>• Side effects that you should report to your healthcare professional as soon as possible include allergic reactions such as skin rash, itching or hives; swelling of the face, lips or tongue; breathing problems; coughing.</li><li>• Side effects that usually do not require medical attention include increased sensitivity to sunlight and skin irritation. Report to your doctor or other healthcare professional if they continue or are bothersome.</li></ul>

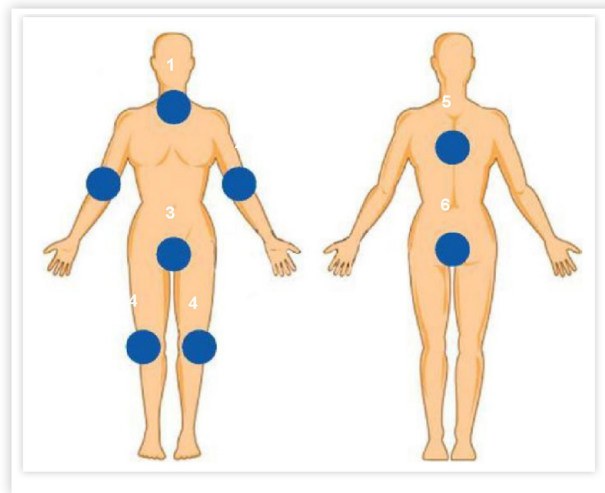
## Chlorhexidine Gluconate Cloth Wipes (Sage TM)

### Instructions for use

In the shower or bathtub, wash your body with regular soap and water first. Wash your hair as usual with your normal shampoo. Rinse the hair and body thoroughly to remove soap and shampoo residue.

Wait at least two hours before applying the chlorhexidine cloth wipes. This allows your pores to close before using this product.

- Avoid contact with your eyes, ears, mouth and mucous membranes. Do not apply to broken skin or open wounds.
- Apply the chlorhexidine disposable cloth wipes to your entire body. Start from the chin down, following the number order below. Use one cloth to prepare each area of the body. Wipe each area thoroughly in a back and forth motion, but DO NOT scrub.
- Use all six cloths in the package following the order shown in steps 1 through 6 below. Use both sides of cloth for full effectiveness/cleanliness. A family member, friend or spouse can help you apply the cloth wipes to your back and buttocks.



1. Wipe your neck, chest and abdomen.
  2. Wipe both arms, starting with each shoulder and ending at fingertips. Be sure to wipe the arm pit areas.
  3. Wipe your right and left hip followed by your groin. Be sure to wipe folds in the abdominal and groin area. Ladies – DO NOT wipe internally or between the labia. Men – avoid wiping the urethral area (tip of penis).
  4. Wipe both legs, starting at the thigh and ending at the toes.
  5. Wipe your back starting at the base of your neck and ending at your waist line. Cover as much area as possible. Assistance may be required.
  6. Finally, wipe the buttocks.
- Allow area to air dry for one minute. DO NOT RINSE. Throw out all the dirty cloth wipes in the garbage. Do not flush in the toilet.
  - Repeat these steps daily for FIVE DAYS.

# Pre-Surgical Strengthening and Conditioning

## Physical Therapy Assessment and Training (Prehab)

The Prehab program is designed to provide information to help you understand your upcoming surgery. Prehab will:

- Help you identify any home architectural barriers
- Help you prepare for hospitalization
- Train you and your care partner(s) for any transfer or mobility activities
- Train you in proper use of a walker and other assistive devices that may be necessary during recovery

### Preparation Is Key

It is very important to bring any person(s) who will help care for you after surgery to this appointment. The Physical Therapist will work with you and your care partner(s) during the assessment.

### Prehab Appointment

You will meet with a Physical Therapist for a one-on-one assessment and training. Your session will include:

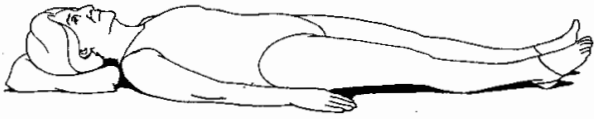
- Discussion of precautions based on the type of surgery
- Mobility and transfer training
- Discussion of proper use of cold packs, leg elevation, etc. for comfort
- Develop a plan to ensure a safe transition home after surgery
- Address any concerns or questions you or your care partner(s) have about surgery and recovery
- Provide a home exercise program to prepare for surgery

### Pre-Operative Exercises

Exercising before your surgery will help strengthen the muscles you will be using during your recovery. It is a good idea to start doing these exercises three times daily to help prepare you for surgery. Please refer to the recommended exercises. If you experience any discomfort or pain while attempting these exercises, stop immediately. If you feel unsafe performing any of these exercises, then do not attempt them:

# Pre-Surgical Total Joint Exercises

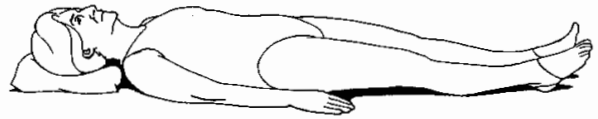
## Quad Set



Slowly tighten muscles on the thighs of the legs while counting out loud to 5.

Repeat the set 15 times. Do 3 sessions per day.

## Gluteal Squeeze



Squeeze buttocks muscles as tightly as possible while counting out loud to 5.

Repeat 15 times. Do 3 sessions per day.

## Heel Slides



Gently bring one knee up as far as possible, keeping foot on floor. Return. Repeat with other knee to complete set.

Repeat set 15 times. Do 3 sessions per day.

## Knee Bend

Holding a chair for balance, slowly bend knees. Keep both feet on the floor.

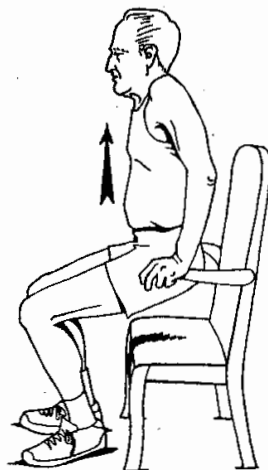


Repeat 15 times.

Do 3 sessions per day.

## Arm Chair Push Up

Put hands on arms of chair and push body up out of chair.



Repeat 15 times.

Do 3 sessions per day.

## Practice Climbing Steps

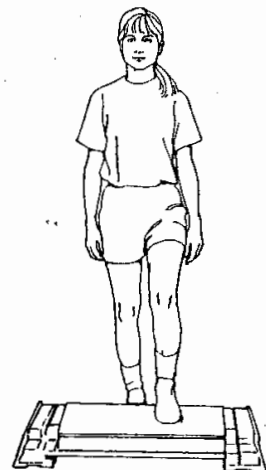
Hold onto rail or someone else for safety.

Ascending: Step up onto the first step with the non-operative leg, then bring the operative leg up to the same step.

Descending: Step down to the step below with the operative leg, then bear some weight on it while stepping down to the same level with the non-operative leg.

Repeat 15 times.

Do 3 sessions per day.



# Preparing Your Home for After Surgery

## Home Safety Tips



- Stock up on toiletries, food that is easy to prepare and other items you'll need during recovery.
- Store food and other supplies between waist and shoulder level. This makes it easier to reach things without straining.
- Keep your mobile phone within reach.
- If you have more than 5 stairs and your bedroom is upstairs, you may have difficulty going to the upper level. If you do, and you normally sleep upstairs, prepare a bedroom on the main living level.
- Make sure rooms are well lit.
- Keep items you use often within easy reach.
- Move electrical cords out of the way to prevent falling.
- Remove throw rugs to prevent slipping or tripping.
- Watch for pets or small objects on the floor.
- Add firm pillow to a low chair to help make getting up easier.

# Nutrition Before Surgery

## Healthy Eating for Your Bones

- Eat a variety of foods
  - Vegetables
  - Fruits
  - Whole grains
  - Low-fat milk, yogurt and cheese
  - Poultry, fish, eggs and nuts
- Decrease intake of sugar, fat and salt
- Do NOT go on a restrictive diet before your surgery, it is important you eat a variety of foods, however, make sure they are healthy options
- Increase calcium intake, this is to promote bone health, heart beat regulation and transmission of nerve impulses. Examples of foods rich in calcium are:
  - Milk (low-fat or non-fat)
  - Yogurt (low-fat or milk-fat)
  - Salmon
  - Broccoli
  - Tofu
- Increase Vitamin D Intake, Including:
  - Dairy products and juices
  - Egg yolks
  - Fatty Fish (salmon, mackerel, tuna)
  - Supplements
  - Sunshine!



# Pre-Surgical Timeline

## >2 Weeks Before:

- Attend Joint Venture Class
- Begin preparing your home
- Obtain proper equipment
- Attend Prehab appointment
- Attend Pre-Admission Nurse appointment

## 1 Week Before:

- Fill out Advance Directive
- Stop taking NSAIDS (aspirin, motrin, ibuprofen) and any other medications you've been instructed to stop
- Pack for your overnight hospital stay (clothes, toiletries etc.)(If applicable)
- Begin CHG wipes five days before surgery

## Day Before Surgery:

- Ensure medication list is updated with last time taken
- Write down any questions you want to ask the surgeon or anesthesiologist before surgery
- Remove all jewelry and nail polish
- Confirm surgery time and plan to arrive two hours before
- Stop eating and drinking at midnight

# Pre-Surgical Patient Checklist

- I have attended all required appointments and classes.
- I fully understand the risks and benefits that apply to my surgery, and have written down any questions to ask the surgeon or anesthesiologist before surgery.
- I understand what medications I need to start and stop before my surgery.
- I have a Recovery Coach assigned who is available to be trained to assist me for at least two days after my surgery.
- I have packed the clothes and toiletries I want to have during my hospital stay.
- I have set up my home based on the recommendations and have a bedroom set up on the first floor.
- I know what equipment I have at home and what equipment I will need to get in the hospital.
- I have a copy of my Advanced Directive (if applicable) to give to the hospital.



# SURGERY AND HOSPITAL STAY

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# Day of Surgery

## Pre-Operative Unit/Surgical Admitting Unit (SAU)

- You will be scheduled to arrive two hours before your surgery time. Please come to the pre-surgical registration desk on the lower level. You will fill out your admission documentation and meet your pre-operative nurse who will take you back to the pre-operative unit. Only one family member is allowed with you in this area. The nurse will complete a pre-surgical assessment, start an IV, and both the surgeon and anesthesiologist will meet with you before the operation.
- You will then be taken into the operating room. Your family member will be directed to our surgical waiting area on the first floor where they will be able to see your progress on a television monitor.

## Operating Room

- Once in the operating room, you will move over to the operating table and then the anesthesiologist will gently put you to sleep with anesthetic. Your hip or knee will be scrubbed with a disinfecting solution and the surgery will begin.
- The surgery usually lasts 1-1 ½ hours, but add about a ½ hour on each end, as the preparation before surgery and the placement of the bandage after surgery takes time. You will then be taken to the Post Anesthesia Care Unit (PACU) where you will gently wake up from anesthesia. The surgeon will go to the surgical waiting area and discuss your surgery and condition with your family.

## Post Anesthesia Care Unit (PACU)

- In the PACU, you will be closely monitored as you recover from anesthesia. If needed, you will be given pain or nausea medication. One common side effect of anesthesia is nausea. The PACU nurses will work with you until the nausea subsides. You may shiver or feel cold after waking up from anesthesia, this is normal and you will be given a warm blanket or warming device if necessary.
- X-Rays will be taken of your new hip or knee in the PACU. You will also have compression devices on your legs or feet that gently squeezes and releases to promote circulation. Once your vital signs are stable, pain and nausea controlled and you are awake from anesthesia, you will be transferred to the Surgical Unit, for the rest of your hospital stay.

# Frequently Asked Questions

## **Is the surgery painful?**

Yes. There will be pain after surgery. The arthritis pain will be gone; however, surgical pain will be present for quite some time. Pain medications will be given to you to help with managing the pain so you can function with your new joint.

## **Will I need a blood transfusion?**

Requiring blood is ultimately a decision made between you and your surgeon. It is best to discuss this topic with your surgeon as soon as possible.

## **Will I have to remove all my jewelry during surgery?**

Yes. Your jewelry, including wedding ring, piercings, earrings, etc. will need to be removed before surgery. This is to prevent any risk of cutting your jewelry in case of swelling in your hands or feet. Removing your jewelry will also protect your skin from any machinery in the operating room that might cause burns or irritation from the metal.

## **Who is in the operating room with my surgeon?**

There is a team of individuals in the room with your surgeon. This team consists of your surgeon, a Physician Assistant (PA) or Registered Nurse (RN), a circulating nurse, scrub technicians, the implant vendor and the anesthesiologist. All of these individuals are responsible for ensuring the safety and smooth transition of your procedure while minimizing any major complications and risks.

## **Will I have a urinary catheter at the hospital?**

If your surgeon prefers you have a catheter, you will have it put in when you are brought into the operating room and put under anesthesia. The catheter will be taken out shortly after your surgery to reduce the risk of infection.

## **What type of anesthesia will I have?**

This is very important to discuss with the anesthesiologist when he/she visits you once you arrive to the surgical admitting unit on the day of your surgery. The anesthesiologist can go over all of your options and it is critical that you inform him/her of any preferences or objections you have at that time.

## **What is my implant made out of?**

The material of your implant depends on the manufacturer. Each surgeon also has their own preference as to which implant they like to use. The best way to find out exactly what your implant is made out of is to ask your surgeon.

## **What type of dressing will I have?**

The dressing you have depends on what your incision looks like and your surgeon's preference. Many of the dressings used now are waterproof and are left on for seven days. Your post-surgical nurse will educate you on your dressing and how to care for it.

# Hospital Stay

## Post-Surgical Unit

The Post-Surgical Unit is where you will receive physical therapy and be prepared to go home. The goal is to assist you in your rehabilitation and help you to feel safe and comfortable.

The recovery and rehabilitation varies from patient to patient, but your surgeon and joint replacement team's goal is to help you get back to the comfort of your home to recover the day after surgery. While you are at the hospital, it is essential for your recovery that you participate in all of the required activities. To help keep you informed about what to expect as you recover from your surgery, please refer to the following activity guidelines. **If you are a Rapid Recovery Program Patient, please refer to the separate information given to you regarding your hospital stay.**

## Hospital Stay Timeline

### Day of Surgery

- You will be taken to the post-surgical floor after your time in the recovery room.
- After a few hours, you will have your first physical therapy session
- You will be transitioned back to your normal diet
- The nurses and nursing assistants will assess your vital signs and incision site frequently
- You will be started on oral pain medications to establish a regimen that works for you

### Day After Surgery

- Get up in the chair for all meals with staff assistance
- Surgeon and medical provider will assess your progress
- Physical therapy sessions in the AM and PM (if necessary) with your Recovery Coach
- If ordered, begin working with occupational therapy
- Begin preparing for discharge with case manager
- Change into going-home outfit
- If all criteria are met, discharged home in the afternoon

### If Longer Stay is Needed

- Continue all activities from previous day
- Continue physical therapy sessions twice-daily
- Continue discharge planning with case manager
- When criteria are met, discharged home or to appropriate location (refer to discharge criteria on page 34)

## Daily Activities Guidelines

### Tests and Assessments

- The nurse will closely monitor your vital signs (blood pressure, heart rate, respiratory rate, pulse oximetry, temperature and pain) during the immediate post-surgical period. The nurse will do a full assessment, listening to your heart, lungs, stomach and checking your skin, pulses and strength in your arms and legs. Your surgical dressing will be checked frequently.
- Blood samples may be taken to monitor blood counts or bleeding time if your physician has ordered them. A blood transfusion may be required if your blood count is too low, your surgeon will discuss this with you in further detail.

### Medical Equipment

The IV placed in your arm or hand before surgery will be used to give you fluids. You will continue to wear the compression devices while in bed to prevent blood clots, and you will be instructed on how to use an incentive spirometer.

### Activity and Fall Prevention

- The expectation for all of our joint replacements, if they are able, is to get up in the chair for all meals and walk to and from the bathroom with staff assistance and a front-wheel walker.
- You are required to wear a gait belt (a belt that is utilized to assist patients in walking) and you will also be wearing red socks that indicate you are at an increased risk for falls because of your recent surgery. Getting up without staff is strictly prohibited.

### General & Hand Hygiene

- You will be provided with a toothbrush, toothpaste, soap, lotion and chapstick, but you may also bring your own toiletries to use.
- You will be offered warm, soapy water and washcloths to freshen up, with assistance from a nursing assistant. Patients do not shower at the hospital, but are usually able to shower once you return home if your dressing is water proof.
- One of the best ways to prevent infection after surgery is to wash your hands and encourage those in contact with you to do the same. You will be offered hand wipes before each meal to clean your hands. Hand sanitizer is also stationed near the door to your room, please encourage family and friends visiting to use it when entering the room.

### Home Medications

It is imperative that you bring a current list of your medications to the hospital so they can be resumed when appropriate. The medical provider will look through the medications you take at home and will order the ones that are safe to continue.

## **Nausea Management**

### **Nausea after Surgery**

Nausea is a very common side effect of anesthesia. Your diet can be modified as your nausea subsides. It is common to start with a clear liquid diet or crackers and then progress to your normal diet. Inform the nurse if you are experiencing nausea so they can administer medication to help.

Here are some general guidelines to help prevent nausea:

- Avoid fried and greasy foods
- Avoid excessively sweet or spicy foods
- Drink liquids separately from your meal
- Take medications with food when instructed
- Eat small and frequent meals and snacks

## **Pain Management**

### **Pain after Surgery**

You will experience pain after surgery, however, unlike the pain you are currently experiencing, this pain can be helped with medication. Our goal is to make your pain tolerable, meaning that you may still feel some discomfort, but it is not preventing you from doing activities or putting you in distress.

### **Assessing Pain**

Your nurse will assess regularly if you are in pain. They will ask you to describe your pain on a scale from 0 to 10, with 0 being no pain and 10 being the most severe pain you have ever had. This level is important because it helps determine the type and dose of pain medication you should receive, and also assists in determining what pain management regimen works for you.

### **Types of Pain Medication**

- There are many different types of pain medications that work very differently. Most patients will be put on scheduled Tylenol as well as an oral pain medication such as Oxycodone or Tramadol, which can be safely taken together for more affective pain control. It is important that you begin taking oral pain medications as soon as possible because they last longer and it is crucial to determine the medications that will help you when you go home.
- If oral pain medicine does not fully control your pain, IV pain medication can be used if necessary, but only after the oral pain medications fail. You cannot go home with IV pain medication, so it is best to avoid its frequent use in the hospital.

## Non-Medication Pain Control Methods

The surgeon will usually order ice to be placed on your surgical site to help in reducing pain and swelling. Relaxation and massage can also help in pain control, as well as distraction through music, TV or visitors.

## Preventing Blood Clots After Surgery

After a hip or knee replacement, you are at an increased risk for getting blood clots. Blood clots can lead to serious health problems, which is why preventing them is very important.

There are three things that are crucial in preventing blood clots:

### Walking

Movement of any kind allows blood to circulate throughout your body and prevents blood from pooling and clotting. One of the reasons you are expected to begin walking quickly after your surgery is to assist in preventing blood clots. It is important you are getting up and moving every 1-2 hours while awake especially in the hospital.

### Compression devices

You will be wearing compression devices that fit around your feet or lower legs after surgery. These devices fill up with air, gently squeezing your legs or feet and promoting blood circulation. These devices must be worn at all times in bed, as they assist in reducing your risk for blood clots.



### Medications

While movement and compression devices help in reducing blood clots, medication is usually required to bring down your risk even further. Your surgeon will choose the medication that is appropriate for you. It is important that you take this medication appropriately and for as long as it is prescribed, as your increased risk for blood clots continues for a few weeks after you leave the hospital.

## Post-Surgical Activities and Exercises

### Physical Therapy

Your first physical therapy session is usually the same day of your surgery. After you are awake and your pain and nausea is controlled, you will work with a physical therapist and learn the new precautions and exercises for your new joint. Usually the first session is getting to the edge of the bed, standing and maybe taking a few steps. Working with physical therapy on the day of surgery has been shown to dramatically improve outcomes and shorten recovery time.

Physical therapy will also educate your recovery coach on how to assist you at home—this is called “Recovery Coach Training” and will occur the morning after your surgery (or the day of surgery for Rapid Recovery Program Patients). Please keep in mind that your recovery coach is required to be there between 9 am-12 noon that day and again at an arranged time in the afternoon.

### Occupational Therapy

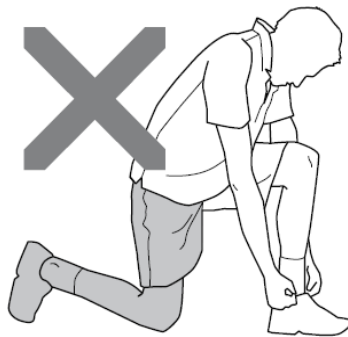
Occupational therapy is a therapy focused on every day activities, like hygiene, eating and dressing. Some patients may be ordered occupational therapy if needed, which is determined by your surgeon.

### Precautions Following a Total Knee Replacement

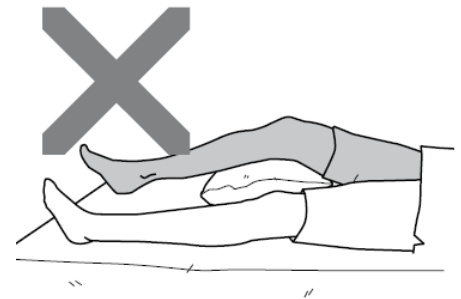
After a Total Knee Replacement, you only need to adhere to the following precautions:



1. Twist your new knee



2. Do not kneel on your new knee



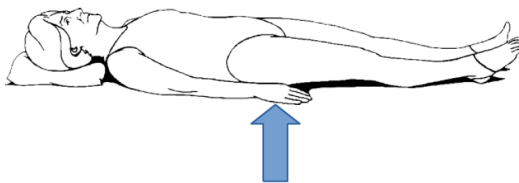
3. Do not place pillows under your new knee

4. Do not jump on your new knee



## Exercises to Perform in Bed

### Gluteal Squeeze



Squeeze buttocks muscles as tightly as possible while counting out loud to 5 \_\_\_\_\_.

Repeat 10 times every hour you are awake.

### Quad Set



Slowly tighten muscles on the thighs pushing the knees downward into the bed while counting out loud to 5.

Repeat 10 times every hour you are awake.

### Ankle Pump



Bend ankles to move feet up and down, alternating feet or together.

Repeat 10 times every hour you are awake.

### Hip Abduction



Slide operated leg out to the side. Keep kneecap pointing toward ceiling. Gently bring leg back to the starting position.

Repeat set 10 times. Do 3 sessions per day.

### Heel Slide



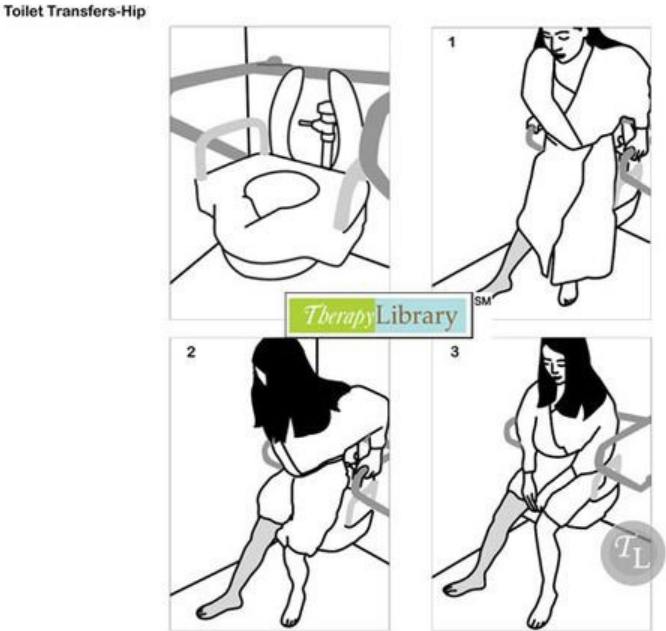
Bend knee and slide heel toward buttocks. Then slide heel along the bed until the knee is straight.

Repeat set 10 times. Do 3 sessions per day.

# Getting In and Out of Bed



# Getting On and Off the Toilet/Chair



## Using an Incentive Spirometer

Soon after your surgery, a nurse or therapist will teach you exercises using an Incentive Spirometer. The exercise includes deep breathing and helps to keep your lungs clear, strengthen your breathing muscles and help prevent complications.



## Four Steps to Clear Lungs

### Exhale normally

Relax and breathe out

### Place your lips tightly around the mouthpiece

Make sure the device is upright and not tilted

### Inhale as much air as you can

- Inhale slowly and deeply
- Hold the breath long enough to keep the balls or disk raised for at least three seconds
- If you're inhaling too quickly, your device may make a tone. If you hear this tone, inhale more slowly

### Repeat the exercise regularly

- Perform this exercise every hour while you're awake, or as your doctor instructs
- You will also be taught coughing exercises and be asked to perform them regularly on your own

## Post-Surgical Delirium

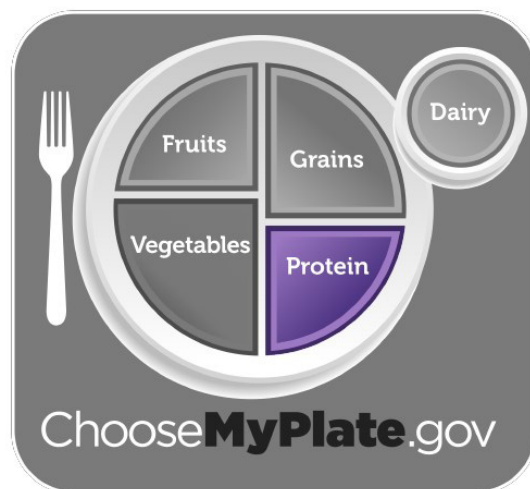
Delirium is a sudden and temporary episode of confusion that can occur after surgery.

- Deep breathing expands the lungs, aids circulation and helps prevent pneumonia. Delirium is more common in the elderly population and can last hours or weeks. It may cause the individual to have difficulty paying attention or change alertness or ability to think. Delirium is different from dementia. Anesthesia, surgery and being in an unfamiliar setting such as a hospital can increase the risk of delirium.
- If you or your family member having surgery experience delirium, our staff will work with you to maintain safety, comfort and provide education to family and loved ones.
- For more information regarding delirium, refer to the Delirium brochure provided in the Resources section of this booklet.

## Post-Surgical Diet

Once you are tolerating oral liquids, your diet will advance to your usual diet.

- You will begin by eating lighter foods like Jell-O, broth and crackers. When you are able to tolerate these foods, you will begin eating foods you normally eat.
- A dietician is available if poor nutrition is suspected or if you have certain diet restrictions.
- Remember to focus on consuming protein. Protein is extremely important in the healing process. If you usually take supplements like Ensure or Glucerna, let the staff know so they can order it.
- Let our staff know if you have special dietary restrictions or requests so we can do everything we can to help you heal quickly. Nutrition is an important aspect of your recovery.



### Protein

**5 – 6 ½ ounces each day**  
Go lean with protein

**1 ounce protein =**  
1 ounce cooked lean beef, pork, chicken  
1 sandwich slice of turkey  
1 egg  
½ ounce of nuts  
1 tablespoon peanut butter  
¼ cup cooked beans, peas  
¼ cup tofu  
2 tablespoons hummus

# DISCHARGE HOME

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# Discharge Criteria

Recovery and rehabilitation vary from patient to patient, but our goal is to get you home as soon as it is safe. For most patients, this is the day after surgery. Discharge home is dependent on meeting specific criteria, including:

- Your pain is controlled
- You are able to eat, drink and go to the bathroom.
- You have met all goals with physical therapy
- You are deemed medically stable and safe to go home

## Discharge Process

### Physician and Surgeon Visit

Your surgeon or their Physician's Assistant (PA) will visit you after surgery to assess if you are safe to discharge based on your surgical site and function. A medical provider or Nurse Practitioner (NP) will also visit you to ensure that you are safe to go home from a medical standpoint. Once you are cleared to go home by both the surgeon/PA and the medical provider/NP, you will begin the discharge process.

### Physical Therapy

On the day of discharge, you will work with physical therapy to ensure you are both safe and ready to continue recovering at home. You may need one or two sessions in order to accomplish these goals. Your recovery coach must be present for at least one of these sessions.

### Case Management

Your case manager will assist you in setting up services like home physical therapy and nurse visits. This will take place during your hospital visit and will be set up before you go home. The case manager will also help you order your equipment, which will be delivered before you leave. You do not need to obtain equipment before your surgery as PIH Health has a vendor on site that can provide you with the proper equipment before you leave.

### Discharge Education

Your nurse will go over the discharge instructions including information regarding your precautions, dressing and what medications you need to take at home. Please see the Resources section of this

booklet for a copy of the Total Joint Replacement Discharge Instructions as well as the Decision Tree. The Decision Tree will assist you at home if you are unsure of who to call with any questions or concerns.

Once you have completed all of these items, you will be ready to go home. Please refer to the Patient Discharge Checklist when preparing to go home to ensure you are fully prepared.

## Equipment

Below is an explanation of the required and recommended equipment you will need upon discharge.

### Front-Wheel Walker

Every patient must use a front-wheel walker when first learning to walk with your new hip or knee. This is shown to be the safest walker for a total hip or knee replacement. If you have a front-wheel walker that is in good condition and the appropriate size for you, you do not need to get another. You do not need to bring your walker to the hospital, there are ones there you can use.



If you do not have a front-wheel walker, you will be provided one before leaving the hospital. This walker is covered by most insurances. If for some reason your walker is not covered, your case manager will inform you and you may purchase one from the onsite vendor before you leave.

### Bedside Commode

A 3-in-1 bedside commode is not mandatory, but highly recommended. This commode can be utilized as a bedside toilet, a raised-seat for your toilet or a shower chair. The bedside commode is not usually covered by insurance and costs around \$65 depending on the size. Your case manager will see if this is covered by your insurance, and if it is not, you can purchase this through the onsite vendor before you go home.



### Hospital Bed

If you live in a home where there are no bedrooms on the first floor, a good option may be renting a hospital bed to put on the first floor during your recovery. While you may be able to walk up a few stairs, if you have to go up many stairs to get to your bedroom, this may be difficult for the first few days. Hospital beds can be rented for one-month minimum for about \$150 from our onsite vendor. This equipment is not required, but it is required that you have a bedroom set up on the main floor in case you cannot get up the stairs right away.



## Adaptive Equipment

Adaptive equipment may be helpful in your recovery. The items listed below can be purchased from any medical supply store, and most are also sold from the gift shop at PIH Health Whittier Hospital.

### Reacher

This tool is helpful when attempting to reach things from higher and lower levels. It can also help you while putting on shoes, socks, pants and underwear.



### Long-handled sponge

This can be useful in reaching body parts like your feet and back to avoid strain while washing.



### Sock aid

This tool helps to prevent bending over while putting on socks.



### Long-handled shoe horn

This tool is useful in putting on already-tied or slip-on shoes.



### Ice pack (not available in the PIH Health Gift Shop)

Ice packs aid in the treatment of post-operative swelling after you are discharged from the hospital.



### Grab bars (not available in the PIH Health Gift Shop)

Bars that assist in increasing stability when standing and walking.





## **Home Health: Registered Nurse and Physical Therapy**

### **Physical Therapy**

Every patient will receive home visits from a physical therapist following discharge. A therapist will come to your house a few times a week, usually beginning the day after discharge to assist you in exercises, technique and improving mobility.

The case manager will set up these visits for you before you discharge home. It is very important you provide the most current phone number and address so the home health agency can reach you to set up the first visit.

### **Registered Nurse**

Most patients will receive home visits from a registered nurse following discharge. The nurse will review your medications, check up on your pain, perform a safety evaluation of your home and assist you in caring for your incision.

The case manager will set up these visits before you discharge home. It is very important to provide the most current phone number and address so the home health agency can reach you prior to their first visit.

# Patient Discharge Checklist

## Patient Discharge Checklist

- I have my prescriptions for my new home medications (blood thinner, pain medication, stomach protection and stool softener)
- I have discussed with my nurse what type of blood thinners I will be taking after surgery to help prevent blood clots
- I understand what my medications are for and how to use them safely
- I understand who I should call if I have any questions or concerns
- I have my follow-up appointment scheduled with my surgeon
- I know when I can shower
- I have the equipment I will need at home
- I know my home health care arrangements (physical therapy and/or RN)
- I know how to care for my incision and dressing
- I know the precautions and exercises to do for my new hip or knee
- I have help at home set up for the first 48 hours

## Recovery Coach Discharge Checklist

- I understand who I should call if I have questions or concerns
- I know how to help care for the incision and dressings
- I know how to assist the patient in getting in and out of the bed/chair/car and off the toilet
- I know how to assist the patient with the exercises and follow their precautions
- I know how to assist the patient up and down the stairs
- I will be with the patient for the first 48 hours

# Your First Few Weeks At Home

## Swelling

You will likely experience swelling after you return home. This is expected and should begin to decrease over time. Anytime you are not up and walking your surgical leg should be elevated “toes above nose”. Using an ice pack for 20 minutes at a time will also help reduce swelling.

## Feeling Down/Depressed

It is not uncommon to have feelings of depression after a joint replacement surgery. This can be due to a variety of factors, but can include discomfort, limited mobility, increased dependency on others and medication side-effects. These feelings should continue to fade over time. If your feelings of depression persist, notify your primary care doctor.

## Your Dressing and Incision

Based on the type of dressing you have, you will be educated on how to care for it after surgery. Be sure to ask the nurse if it is ok to shower with your dressing and when it will be removed or changed. The staples in your incision will be removed at your follow-up appointment. After the staples are removed, you may put creams or oils to reduce scarring, such as ones with vitamin E.

## Pain

You should continue taking the pain medication as long as you require it. The pain should continue to improve each day and you can continue to spread out your pain medication until you no longer need it. If the pain does not get better or gets significantly worse, notify your surgeon.

## Driving After Surgery

Depending on which type of surgery you had and the side affected, the time you can drive again varies. You definitely cannot drive while you are still taking narcotic pain medications. Always check with your surgeon before you resume driving.

## Going Back to Work

When you can go back to work depends on your profession. If your work is sedentary you may return within a few weeks. If your work is more rigorous you may require up to three months before you can return to your full duty. Your surgeon will give you specific instructions regarding returning to work.

## Travel After Surgery

You can travel long distances generally one month after surgery. It is important when travelling either in a car or a plane that you get up and move around every hour to prevent blood clots. Always consult with your surgeon before travelling long distances.

## Safe Sex Positions After Surgery

Always check with your surgeon if it is safe to resume having sex after your surgery. Please refer to the Sex Positions After Joint Replacement handout in the Resources section of this booklet.

## Physical Therapy After Surgery

You will begin physical therapy at home within 48 hours of going home. After a few sessions, depending on your progress, you may not need to continue to receive physical therapy or you may continue outpatient physical therapy.

## Walker or Cane After Surgery

The length of time you will need a walker or cane depends on your progress with therapy, pain and other variabilities. A typical length of time to use a walker or cane is two weeks to one month.

## If You Have Concerns After Surgery

If you are unsure of who to call about different questions or concerns, please use the Joint Replacement Decision Tree in the Resources section of this booklet.

# Life After Joint Replacement Surgery

## Things to Know About Life After Joint Replacement Surgery

### Metal Detectors

Today's sensitive screening machines will detect the implant but can also effectively identify it. It is best to tell airport security that you have had a hip replacement. The machine operator will know that it is an implant rather than an unauthorized metal object contained outside the body.

### Antibiotics Before Dental Procedures

- You must wait at least 90 days following surgery before any routine dental work is performed.
- It is important that you use antibiotic prophylaxis for two years following your surgery for all dental procedures including routine cleaning. After two years, you will only require antibiotics before any invasive dental procedures (deep cleanings, root canals, etc.).
- Always check with your surgeon before any dental procedures.

## Thank you!

We hope this booklet is helpful on your joint replacement journey. We are here to help with whatever you need, every step of the way. Please reach out to our staff if you have any questions. For more information on being a patient or visitor in our hospital, visit, [PIHHealth.org/Patient](https://PIHHealth.org/Patient).

### **PIH Health Orthopedic Services**

For more information on our wide range of services for diagnosing and treating bone and joint conditions, visit [PIHHealth.org/Ortho](https://PIHHealth.org/Ortho).

### **Can We Help Your Friends or Family?**

You may have friends or family who need to see an orthopedic specialist or a rheumatologist. You can help by referring them to a PIH Health specialist. For information on referrals, call our Customer Care Center at **888.365.4450**.



# RESOURCES

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## **Advanced Directive**

It is important to express your wishes regarding your care if you are unable to make those decisions yourself. Please fill out the Advanced Directive form and bring it with you to your appointments.

## **Home Caregiver Agencies**

If you do not have anyone available to help you after surgery, you may consider hiring a private caregiver. This is a list of local caregiver agencies that provide service to individuals at their home.

## **Home Medication Table**

It is important your healthcare team knows what medications you take when helping you prepare for surgery. Please fill out Home Medication table and bring it with you to your appointments for review by the health care team.

## **Delirium Information Sheet**

Sometimes surgery and anesthesia can make patients confused after surgery. This sheet provides information on delirium and ways to help your family members if it is experienced after surgery.

## **Total Joint Discharge Instructions**

It is very important you follow certain instructions after you leave the hospital. This form explains all that you need to know to best care for yourself after you go home.

## **Total Joint Decision Tree**

In the event that something was to happen after you return home, this resource helps you determine what to do and who to contact. Please ask the healthcare team if you have any questions regarding this information.

## **Safe Sex Positions after Joint Replacement**

It is important that you know which positions are safe to perform during sex after your joint replacement. This handout provides safe positions and information regarding sex after your surgery. Always check with your surgeon when it is safe to resume sex.