## Joint Replacement Guidebook

FOR TOTAL HIP AND TOTAL KNEE REPLACEMENT

TOTAL JOINT PROGRAM





## TABLE OF CONTENTS

SECTION 1: General Information		BASICSS after Joint Replacement	19
Welcome to the Pomona Valley Hospital Medical Center	2	<ul> <li>Blood Clot Prevention</li> <li>Medications</li> <li>Signs and Symptoms to Report</li> <li>Incision Care</li> </ul>	19 20 20 20
General Hospital Information Guest Information HCAHPS Partners in Safety	2 2 2 3	<ul> <li>KNEE / HIP Precautions and Safety</li> <li>Exercises and Equipment</li> <li>Follow Up with Surgeon</li> </ul>	21 21 22
Interpreters / Hearing Impaired Finances and Insurances FAQ's about Joint Replacement Surgery Overview of the Total Joint Program Your Joint Replacement Team Total Joint Preparation Class Pre Admit Testing (PAT)	3 4 5 7 7 8 8	Preventing and Identifying Potential Complications  - Blood Clots  - Pulmonary Embolism  - Infection  - Dislocation	23 23 23 23
<b>SECTION 2:</b> Preparing for Surger	у	Performing Activities of Daily	
Plan of Care 4 to 6 Weeks Before Surgery 2 Weeks Before Surgery 5 Days Before Surgery Day Before Surgery Night Before Surgery Morning of Surgery	9 9 11 12 12 12 12	Living After Surgery  - Safety and Avoiding Falls  - Ambulation  - Transfers  • Bed  • Chairs and Toilets  • Bathing and Showering  • Vehicles	24 24 25 25 25 25 25 26
SECTION 3: In The Hospital		<ul><li>Stairs</li><li>Dressing</li></ul>	26 26
Day of Surgery – What to Expect - Before, During, After Surgery - Pain Management	13 13 14	<ul> <li>Energy Conservation / Joint Protection</li> <li>SECTION 5: Helpful Resources</li> </ul>	27
Blood Clot Prevention Equipment after Joint Replacement Surgery Physical Therapy Day Of Surgery, Post-Op Day #0 Day After Surgery, Post-Op Day #1 Post-Op Day #2 Discharge Day If You Are Going Directly Home	15 15 16 16 16 16 17	Healthy Eating Before and After Surgery  - Avoiding Constipation Pain Medication Chart Side Effects of Medications Total Knee and Hip Replacement Strengthening Program Precautions after KNEE Replacement	29 30 31 31 32 32
If You Are Going To A Skilled Nursing Facility	17	Total Knee Replacement Suggestions Precautions after HIP Replacement Strengthening exercises BEFORE surgery	32 33 34
SECTION 4: Living With Your		Strengthening exercises AFTER surgery	35 36
Joint Replacement		Physical Therapy Goals for Discharge PVHMC Outpatient Physical Therapy	30
Caring For Yourself At Home  – My Coach  – After Surgery, Your Operated	18 18	and Rehabilitation Sites In-Home Care Resources Transportation Resources	36 37 38
Leg May Feel  - Minimizing Post Surgery Sleep Disorders	18 18	Meal Resources Important Phone Numbers Hospital Directions	38 39 40

# SECTION 1 GENERAL INFORMATION

## Welcome to

## Pomona Valley Hospital Medical Center

e are pleased that you and your physician have selected Pomona Valley Hospital Medical Center's Total Joint Program for your joint replacement surgery. Our Total Joint Program is certified by The Joint Commission for joint replacement of the hip and knee and includes a comprehensive, multidisciplinary team approach to standardize care and to provide optimal outcomes. We believe in providing "Expert Care with a Personal Touch."

The program is designed to return you to an active lifestyle as quickly as possible. Most patients will be able to walk the day of surgery, and move towards normal activity in six to twelve weeks. We believe that you play a key role in promoting a successful recovery. Our goal is to involve you in your treatment through each step of the program.

This guidebook, in addition to the Total Joint Preparation Class and the Pre Admit Testing, will provide you with education and information to promote a more successful surgical outcome. Remember, this is just a guide. Your physician, nurse practitioner, nurse clinical coordinator, nurses and therapist may add to or change any of the recommendations. Always use their recommendations first and ask questions if you are unsure of any information. Keep your Guidebook as a handy reference at least the first year after your surgery. The information in the Guidebook covers a lot of information so it may look overwhelming. Since it will assist you with your surgery, we recommend reading the entire guide, at a pace that suits you.

#### **PVHMC General Information**

Pomona Valley Hospital Medical Center is a 453-bed acute care, not-for-profit, teaching hospital serving Eastern Los Angeles and Western San Bernardino counties. We offer a full range of services from local primary acute care to highly specialized regional services. Our Med Surg 4, Ortho and Oncology Floor offers 17 semi-private rooms with staff specially trained to care for you after your joint replacement surgery.

**Guest Information:** Current Visitor Guidelines are available on our website at www.pvhmc.org. or call the main hospital at 909.865.9500 for the information. All visitors must be 14 years of age or older.

We ask our patients and families to adhere to these guidelines to ensure a healing environment for our patients. The hospital main entrance is open daily from 5:00 a.m.-8:00 p.m. with visiting hours from 11:00 a.m.-6:00 p.m.

In Pursuant to the California Department of Public Health's (CDPH): State Public Health Officer Order issued on August 5, 2021 and an All Facilities Letter issued on August 12, 2021, the Hospital requires all visitors to provide documentation of a completed COVID-19 vaccination or of a negative COVID-19 test.

We appreciate your understanding of our COVID-19 precautions, as they are vitally necessary in helping us to protect the health and safety of our patients, visitors, Associates, Physicians, Volunteers and community. Like all challenges that Pomona Valley Hospital Medical Center and our community have faced in the past, we will get through this together.

Your Opinion Counts: After you are released from the hospital, you may be selected to participate in the HCAHPS telephone survey. The survey asks multiple choice questions about your hospital stay. Please take the time to answer the questions for the HCAHPS survey; your feedback is valuable and is an important part of our goal of improving the care and services we provide.

You are Part of the Team: Communicate. It's your health; don't be afraid to ask your doctors and nurses questions. Participate. You are the center of your healthcare team so ask questions, understand your treatment plan and medications, and communicate with your doctors and nurses. Appreciate. There are hundreds of people in the hospital who need help; please be patient as doctors and nurses attend to everyone.

**Stay Safe While in the Hospital:** Call Before You Fall. Patients of all ages are at risk for falls in hospital. Some of the reason you might be at increased risk during your hospital stay are: generalized weakness, related to sitting or lying for too long; surgery; anesthesia; medications that might make you dizzy, confused, or disoriented; hospital environment- IV poles, equipment, drains, dressings, monitors; and history of falling before surgery.

Please help us keep you safe by following a few simple guidelines: Don't walk alone! Use the call light to get help from the nursing staff before you try to get out of bed. Request the nursing staff keep personal items you need close to you, such as eyeglasses, tissue, water, call button, telephone, etc. If you spill something, please call the nurse so he or she can promptly clean it up. Wear nonskid socks provided by your nurse.

**Interpreters:** Our interpreter phones are available in every unit. These phones provide interpretation services for more than 150 languages and are free to our patients seven days a week, 24 hours a day. Please contact your nurse for assistance.

**For the Hearing Impaired:** Sign language interpreters are available to our patients. We also have two TTY phones for hearing impaired or hard of hearing patients that can

be checked out from Patient Relations. Please contact your nurse for assistance.

Are cellular phones allowed at the hospital? Cellular phones are allowed in the lobby and waiting rooms. However, we ask that you be courteous by not speaking loudly or on speaker phone. If asked to turn off your cell phone, please do so immediately.

**Smoking:** Smoking and/or the use of any to-bacco products is not permitted anywhere in the hospital. PVHMC is a nicotine free facility. or on hospital grounds within 50 feet of any buildings. Studies have shown that smoking negatively impacts bone health, including healing after surgery. If you or a loved one smoke, we suggest you consider stopping prior to your surgery. Please speak to your doctor about your options. Other resources include: 1.800.NO-BUTTS or 1.800.456.6386 (Spanish) or logon to CaliforniaSmokersHelpline.org for assistance.

Your ID Bracelet: As our guest, you will receive a special identification (ID) bracelet that states your name and hospital number, your physician's name and other important information. Your ID bracelet will be checked often during your stay. Please wear it at all times to prevent delays with important lab tests, X-rays, and various other tests and treatments. If your ID bracelet is damaged or lost, please let your nurse know immediately.

# Patients and Families are our PARTNERS in SAFETY

During your stay, the doctors, nurses and staff will treat you and your family as partners in your own care. One important way that you can be involved is to speak up. Ask questions, voice your concerns, and don't be afraid to raise any issues relating not only to your care and treatment but also to overall hospital services.

- **P** Participate in decision-making regarding your care.
- **A** Ask if your care givers have washed their hands.
- **R** Request explanations of what tests and treatments you receive in order to understand the results.
- T Tell your doctor and caregiver immediately if you think your condition is changing for the worse
- **N** Notice if care givers check your identification.
- **E** Expect answers to your questions regarding your diagnosis, medical tests and treatment plan.
- **R** Review your medications and allergies with your caregivers.
- **S** Share your ideas for improving patient safety.

Ask to speak to the charge nurse to report any safety concerns.

#### **FINANCES AND INSURANCES**

Billing: What a Hospital Bill Covers. The hospital bill covers the cost of your room, meals, 24-hour nursing care, laboratory work, tests, medication, therapy and the services of hospital employees. You will receive a separate bill from your physicians for their professional services. These may include your surgeon, assistant surgeon, anesthesiologist, medical doctor or hospitalist, radiologist (if x-rays are performed), pathologist (if pathology specimens are examined), cardiologist, and any physicians who might interpret an exam ordered by your doctor. If you have questions about these separate bills, please call the number printed on each statement.

The hospital is responsible for submitting bills to your insurance company and will do everything possible to expedite your claim. Hospital bills are subject to review by insurance carriers. Should your bill be reviewed, the hospital will provide necessary documents to support the bill. You should remember that your policy is a contract between you and your insurance company and that you have the final responsibility for payment of your hospital bill. Questions concerning billing after surgery can be directed to the PVHMC's billing office at 909.865.9100. Questions concerning eligibility and what your insurance plan covers should be directed to your insurance company.

**Pre-Certification:** Most insurance plans now require pre-certification for most elective hospital stays and certain tests and procedures in order for you to be eligible for full policy benefits. Ask your doctor if he has obtained pre-certification before your admission. If you are unsure of your pre-certification requirements, we recommend that you contact your insurance company as soon as possible. Contact information can be found on your insurance card.

Coordination of Benefits (COB): Coordination of Benefits, referred to as COB, is a term used by insurance companies when you are covered under two or more insurance policies. Most insurance companies have COB provisions that determine who is the primary payer when medical expenses are incurred. This prevents duplicate payments. Your insurance may request a completed COB form

before paying a claim, and every attempt will be made to notify you if this occurs. The hospital cannot provide this information to your insurance company. You must resolve this issue with your insurance carrier in order for the claim to be paid.

**Medicare:** We will need a copy of your Medicare card at the Pre Admit Testing appointment and on admission to the hospital to verify eligibility and to process your claim. You should be aware that the Medicare program specifically excludes payment for certain items, such as Bedside Commode (BSC) and other personal comfort items, as well as other services. Medicare does not pay for the cost of a private room unless medically necessary. Deductibles and co-payments are the patient's responsibility.

Medi-Cal: We will need a copy of your Medi-Cal card at the Pre Admit Testing appointment and on admission to the hospital to verify eligibility. Medi-Cal has payment limitations on a number of services and items. Some Medi-Cal subscribers must pay, or agree to pay, a monthly dollar amount toward their medical expenses before they quality for Medi-Cal benefits. This dollar amount is called Share of Cost (SOC). If it is determined during the eligibility verification process that there is an outstanding SOC, it is payable upon request or the recipient may enter into an SOC obligation agreement to pay for the services at a later date or through an installment plan. Medi-Cal does not pay for the cost of a private room unless medically necessary.

## FAQS Frequently asked questions about Total Joint Replacement Surgery

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

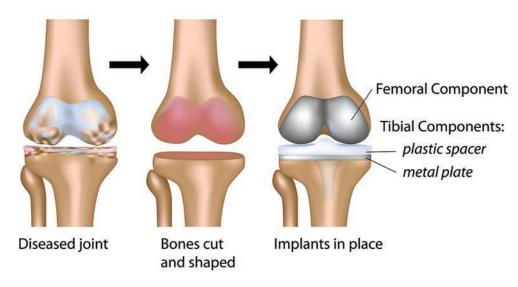
How long will my new joint last and can a second replacement be done? All implants have a limited life expectancy depending on an individual's age, weight, activity level, and medical conditions. A total joint implant's longevity will vary with every patient. It is important to remember that an implant is a medical device subject to wear that may lead to mechanical failure. While it is important to follow all your surgeon's recommendations after surgery, there is no guarantee that your particular implant will last for any specified length of time.

What are the major risks? The following is a list of potential complications and risks associated with major surgeries such as total joint replacement. This list is provided not to scare you but to inform you of the possible risk of the procedure:

- Complications from anesthesia
- Infection
- Dislocation
- Loosening of implants
- Injury to nerves
- Injury to blood vessels
- Leg length inequality (leg shorter or longer)
- Fracture of your bone during implantation
- Blood clots
- Blood loss
- Transfusion reactions
- Death

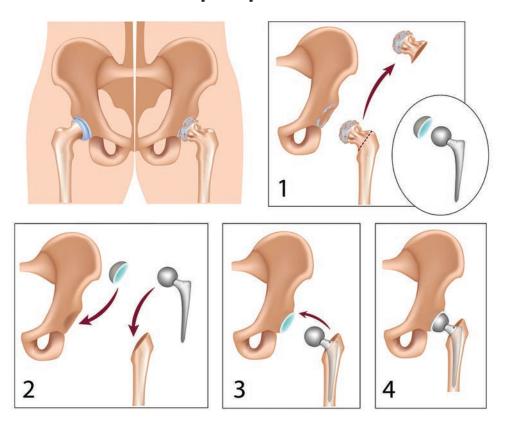
What is total knee replacement? The term total knee replacement is misleading. The knee itself is not replaced, as is commonly thought, but rather an implant is used to re-cap the worn bone ends. This is done by placing metal alloy on the femur (thigh bone) and tibia (shin bone), a plastic spacer between the metals, and a plastic "button" behind the patella (kneecap). This creates a new smooth cushion and a functioning joint that can reduce or eliminate pain.

### **Total Knee Replacement**



Please note the plan of care described in this guidebook may change based on your progress in the hospital.

### **Total Hip Replacement**



What is total hip replacement? In a total hip replacement (also called total hip arthroplasty) the damaged bone and cartilage is removed and replaced with prosthetic components.

- The damaged femoral head is removed and replaced with a metal stem that is placed into the hollow center of the femur. The femoral stem may be either cemented or "press fit" into the bone.
- A metal or ceramic ball is placed on the upper part of the stem. This ball replaces the damaged femoral head that was removed.
- The damaged cartilage surface of the socket (acetabulum) is removed and replaced with a metal socket. Screws or cement are sometimes used to hold the socket in place.
- A plastic, ceramic, or metal spacer is inserted between the new ball and the socket to allow for a smooth gliding surface.

Will my new joint set off security sensors when traveling? Your joint replacement is made of a metal alloy and may or may not be detected when going through some security devices. You can carry a medic alert card indicating that you have an artificial joint, but security at check points usually don't heed the cards, they will need to use their wand devices to check you. Check with your surgeon on how to obtain a medic alert card.

Will I need a blood transfusion? You may need blood during or after surgery. The risks are higher after hip replacement versus knee replacement. Your surgeon may choose to give you a medication called tranexamic acid, in the operating room, to help decrease the amount of blood loss in surgery. Your surgeon may recommend that you take iron pills after surgery to help your body regenerate hemoglobin, the oxygen carrying portion of your blood, after surgery.

When can I have sex after joint replacement surgery? Sexual activity is not recommended immediately after surgery. Sexual activity can often resume safely at four to six weeks after surgery, but it could be longer. Your surgeon will determine what timeframe is safe for you. Following precautions to prevent dislocation is very important.

#### OVERVIEW OF THE TOTAL JOINT PROGRAM

We offer a unique program in which each step is designed to encourage the best results leading to a discharge from the hospital one to two days after surgery. Features of the program include:

- Dedicated nurses and therapists trained to work with joint patients.
- Family and friends participating as "coaches" in the recovery process.
- Preoperative education course, called the Total Joint Preparation Class, will prepare you and your family for surgery and

- allow you to ask questions.
- A comprehensive patient guide for you to follow from six weeks before surgery until three months after surgery and beyond.
- A Nurse Practitioner who coordinates your care before, during, and after your surgery.
- A Nurse Clinical Coordinator who coordinates your preoperative education and care and follows up with you after discharge.

#### YOUR JOINT REPLACEMENT TEAM

#### **Orthopedic Surgeon**

The Orthopedic Surgeon is the skilled physician who will perform the procedure to repair your damaged joint.

#### **Anesthesiologist**

The anesthesiologist is the physician responsible for your anesthesia (putting you to sleep or numbing your lower body) for surgery. The anesthesiologist may also be involved in pain management issues before and after surgery.

#### **Medical Doctor or Hospitalist**

Your own primary care provider may request that a hospitalist be in charge of your care during your hospital stay. If that is the case you have the benefit of being seen by a physician whose practice is entirely focused on the care of the hospitalized patient. The hospitalist will be involved in every aspect of your hospital stay, including: collaborating with other physician specialists, nurse practitioner, case managers, nurses, therapists and others involved in your care; ordering tests, medications and treatments; Communicating regularly with you, your family and your doctors.

#### **Nurse Practitioner (NP)**

The Nurse Practitioner (NP) is a registered nurse with advanced skills training and education that works with your surgeon to manage your care throughout you surgical journey. A NP can diagnose and treat health care problems, prescribe medications, order and interpret needed tests. The NP also helps in coordinating a timely discharge from the hospital and can provide guidance in any post op issues.

#### **Clinical Coordinator (CC)**

The nurse Clinical Coordinator will contact you before surgery to schedule a preoperative education class. She will also act as your navigator through the course of treatment from before surgery to discharge. She will call you after discharge to check how you are doing and answer any questions.

#### Registered Nurse (RN)

Much of your care will be provided by a nurse responsible for your daily care. Your nurse will assure orders given by your physician or nurse practitioner are completed including medications and monitoring your vital signs.

#### **Physical Therapist (PT)**

The physical therapist plans your physical therapy rehabilitation after your total knee or hip replacement. This therapist will help you regain range of motion, muscle strength, and balance to walk safely with your new joint, as well as stair training. They will teach you how to use assistive devices such as a walker, crutches, or cane, which will be needed temporarily after your surgery. Your first physical therapy treatment will take place on the Day of Surgery once you are able to wiggle your toes. Starting the day after surgery, you will receive PT twice a day until you are discharged from the hospital.

#### **Occupational Therapist (OT)**

The occupational therapist will guide you in performing daily tasks such as bathing and dressing with your new joint. The OT offers ideas to assist you to create a safe home environment. Adaptive equipment is used to simplify self-care tasks while conserving energy. The OT will see you once a day, starting the day after surgery, until you have mastered the skills.

#### **Case Manager (CM)**

The Case Manager (CM) will help you with the discharge process. The surgeon will order the needed durable medical equipment (DME) and Home Health Services (HHS) immediately after surgery. The CM will communicate those orders to the insurance company who will authorize or unauthorize the ordered services and equipment. The authorization is given based on your insurance policy.

#### TOTAL JOINT PREPARATION CLASS

To reserve your space in the Joint Replacement Preparation Class please call 909.630.7403. The goal is to have this education class approximately 4-8 weeks prior to surgery.

Bring your support person who will be helping you after surgery with you to class (we call this person your coach) to receive the same education. Bring this guidebook with you to the hospital on the day of surgery. The outline of the class is as follows:

- Preparing for surgery
- What Happens in the Hospital
- What to Expect When you Go Home
- Blood Clot Prevention
- Pain Management
- Physical and Occupational Therapy
- Question and Answer Session

### PRE ADMIT TESTING (PAT) & NP Optimization Visit

Please schedule your appointment for two weeks prior to your surgery date. You will need to call 909.865.9546 to schedule this appointment.

Please allow approximately 2 hours for this appointment.

Coach is encouraged to accompany you to your PAT with NP appointment

The Pre Admit Testing unit is located at the Robert and Beverly Lewis Outpatient Pavilion, on the main hospital campus, on the 1st floor.

## Bring below information with to PAT/NP apointment:

- Physician's orders- in the Pre-Admit Testing folder the surgeon's office may have provided you with.
- Insurance Card and / or policy, Medicare or Medi-Cal card.
- Driver's licenses and / or photo ID cards of the patient and the insured.
- Emergency contact information.
- Legal Arrangements Living Will or Durable Power of Attorney, Advanced Directive.

- Medications List include dosage, how often, why you take it and the last time you took it. Include medications stopped for surgery.
- Allergies- what your reaction was to the medication (Hives, shortness of breath...)
- Reactions to anesthesia
- Doctors Names and Numbers and why you are seeing them.
- Dietary Restrictions.
- Medical & Surgical History-(i.e. Diabetes, hypertension, heart problems, asthma, Hepatitis, HIV, Sleep Apnea, CPAP machine, kidney or liver disease, MRSA, VRE, any infections you were isolated for in the past).
- Email address if you want access to your medical information through the MYHEALTH Patient Portal.
- We recommend your "coach" accompany you to your PAT/NP appointment
- Covid testing will be completed within 48 hours of surgery

# PREPARING FOR SURGERY

#### **PLAN OF CARE**

- ☐ **Prepare for Surgery** following the below lists at the suggested times.
- ☐ Joint Replacement Preparation Class at Pomona Valley Hospital Medical Center 4-8 weeks before surgery.
- ☐ Pre-Admit Testing and Meet with
  Orthopedic NP at Pomona Valley
  Hospital Medical Center 2 weeks before
  surgery. If orders were provided by your
  surgeon please bring to appointment
- Patients will meet with the NP to review

  □ past medical history, lab work,
  diagnostics, and to optimize surgical
  healing and recovery.
- CHG Showering before surgery. Shower

  ☐ the night before and the day of surgery as instructed
- □ Prepare for discharge now:
  - Depending on what you and your surgeon have discussed, you may be discharged on the same day of surgery or you may spend the night in the hospital and be discharged the next day. Either way, it is important that you discuss the plan for discharge with your coach ahead of time to prepare for your return home safely

#### **Upon Discharge HOME after Surgery**

- ☐ Depending on your plan of care:
  - Home Health Nursing visits- Provided by your insurance company. Usually 2 visits in a 2 week period when discharged home from hospital. First visit is an initial consultation. Second visit is on the day the dressing needs to be changed.
  - Home Health Physical Therapy (PT) visits- Provided by your insurance company. Usually 2 to 4 visits in a 2 week period. PT is making sure you

- know your exercise program and checking the safety of your home.
- Durable Medical Equipment- Provided by your insurance company. Make sure you have your walker in your possession before discharge from hospital / facility.
- Outpatient Physical Therapy- Provided through your insurance at one of the facilities contracted with your insurance company.
- ☐ 2 Week Follow Up Appointment with Surgeon-Your surgeon will assess your incision and recovery.
- Outpatient Physical Therapy: Patients receive
  Outpatient Physical Therapy orders, if needed,
  from surgeon's office at 2 week follow up visit.
- □ Variances: Patients who do not progress as expected may require Skilled Nursing Facility or Acute Rehabilitation care after surgery. Admission to these facilities is based on the patient's progress after surgery and patient's insurance plan and bed availability at time of discharge.

#### PREPARE FOR SURGERY

#### 4 to 8 WEEKS BEFORE SURGERY:

- Complete your Joint Replacement Preparation Class at Pomona Valley Hospital Medical Center.
- Plan for leaving the hospital.
- Check with your doctors concerning your medications. You may need to stop taking certain medications before surgery to decrease your risk of bleeding during and after surgery.
- Discontinue all anti-inflammatory medications such as Aspirin, Motrin, Ibuprofen, Naproxen, Vitamin E, Fish Oil, etc. These medications may cause increased bleeding. These medications should be stopped at 1 week prior to surgery. Consult with your doctor.
  - ☐ If you are taking a blood thinner, you will need instructions for stopping the medication prior to surgery, either from your surgeon or the doctor who prescribes this medication for you.

- ☐ Stop Taking Herbal Medicine
  - There are herbal medicines that can interfere with other medicines. Check with your doctor to understand if you need to stop taking any of your herbal medicines before surgery.
  - Examples of herbal medicines include, but are not limited to: Echinacea, ginkgo, ginseng, ginger, licorice, garlic, valerian, St. John's wort, ephedra, goldenseal, feverfew, saw palmetto, and kavakaya.
- □ Pain Medications
  - Some over the counter and prescription pain medications can continue until the time of surgery if they contain acetaminophen (Tylenol) and NOT Aspirin or Ibuprofen.
- Medical clearance from Primary Care Physician (PCP) as instructed by your surgeon.
- Dental Work- No dental work 4 weeks before surgery and not until 6 months after surgery. Ask your surgeon about questions concerning antibiotics before dental work and other procedures after joint replacement surgery. Notify any doctor or dentist caring for you about your new joint.
- Start "Healthy Eating Before and After TJR Surgery available in Section Six of this guidebook. Proper nutrition can help to prevent complications after surgery such as: infection and illness, bed sores and slow wound healing, and frailness and falling. Good nutrition can help you: maintain lean muscle and strength, support your immune system, and reduce the chance of readmission to the hospital.

If you are diabetic it is important to control your blood sugar levels. It is ideal to have your HgbA1C 7 or less. Talk to your primary care physician for help with your diabetes.

- Strengthen your muscles by doing your exercises before surgery, on both legs and arms, as instructed on the Total Knee / Hip Strengthening Program available in Section Six of this guidebook.
  - ☐ Many patients with arthritis favor the painful leg. As a result, the muscles can become up to 30% weaker. It is very important to begin an exercise program before surgery as you will learn the exercises at the optimal time and initiate the work toward improving strength and flexibility. Knowing and performing exercises before surgery can make them easier to do after surgery.

#### □ Exercising Before Surgery

- It is important to be as flexible and strong as possible before undergoing a total joint replacement. Basic exercises are outlined. Start doing these now and continue until surgery. You should be able to do them in 15 to 20 minutes and it is typically recommended that you do all of them three repetitions, three times a day. Consider this a minimum of "training" prior to your surgery.
- Remember that you need to strengthen your entire body, not just your operative leg. It is very important that you strengthen your arms because after surgery you will be relying on your arms to support you when walking with the walker, or cane, and in performing other daily activities.
- Stop SMOKING as it can cause breathing problems and decrease your rate of healing.
  - Smoking impairs oxygen circulation to your healing joint. Oxygen circulation is vital to the healing process. Please note that Pomona Valley Hospital Medical Center has only designated areas for smoking and is strictly enforced. If you or a loved one smoke, we suggest you stop prior to your surgery. Please speak to your doctor about your options. Other resources include: 1.800. NO.BUTTS or 1.800.456.6386 (Spanish) or logon to CaliforniaSmokersHelpline. org for assistance.
    - □ Tips to aid in quitting Smoking
      - Decide to quit

- Choose the date
- Cut down the amount you smoke by limiting the area where you can smoke
- Give yourself a reward each day without cigarettes
- When you are ready...
- Throw away all your cigarettes
- Throw away all ashtrays
- Don't smoke in your home
- Don't put yourself in situations where others smoke, such as bars and parties
- Remind yourself that this can be done- be positive
- Take it one day at a time- if you slip- just get right back to your decision to guit
- If you need to, consider aids to quit, such as over-the-counter products like chewing gum, or prescription aids such as patchescheck with your doctor.
- Start Deep Breathing and Coughing Exercises
  - ☐ To prevent potential problems such as pneumonia, it is important to understand and practice breathing exercises.
  - □ Deep Breathing
    - To deep breathe, you must use the muscles of your abdomen and chest.
    - Breathe in through your nose as deep as you can, fully expanding your chest.
    - Let your breath out slowly through your mouth. As you breathe out, do it slowly and completely. Breathe out as if you were blowing out a candle (this is called "pursed lip breathing"). When you do this correctly, you should notice your stomach going in.
    - Take a break and breathe normally for a few breaths and then repeat the exercise 10 times.
  - □ Coughing
    - To help you cough:
      - Take a slow deep breath.
         Breathe in through your nose and concentrate on filling

- your lungs completely, fully expanding your chest.
- Breathe out through your mouth and concentrate on your chest emptying completely.
- Repeat with another breath in the same way.
- Take another breathe, but hold your breath and then cough hard. When you cough, focus on emptying your lungs.
- Repeat all steps twice.
- Reach and maintain your desired weight.
   Excess weight can create added stress to weight-bearing joints. A desirable weight will promote optimal health and make physical activity easier. Your PCP can make a referral for you if needed.
- Ask for time off from work, minimum of 4 to 6 weeks, with them knowing rehabilitation may take longer.
- If you are the caregiver of other family members, small children or pets, arrange for help caring for them during your recovery time.

#### 2 WEEKS BEFORE SURGERY DATE:

- Complete your Pre Admit Testing & NP visit at Pomona Valley Hospital Medical Center (PVHMC). At this appointment:
  - ☐ You will receive Chlorhexidine Gluconate (CHG) showering kit and detailed instructions to shower before surgery.
  - ☐ You will be instructed on which home medications to take the night before surgery.
  - ☐ Labs, x-rays, and EKG's are completed and you are prepared for surgery.
  - ☐ Meet with Ortho NP to review medical records, orders and plan of care to optimize recovery and healing
- Prepare your home:
  - ☐ Remove / secure throw rugs, secure any existing handrails, rearrange furniture, add night lights as needed, and install grab bars in showers and tubs if needed.

Place frequently used items at waist level so you do not have to bend down or reach up.
 Prepare meals.
 Refill important medication prescriptions before surgery.

#### **5 DAYS BEFORE SURGERY:**

- Clean up your house.
- Pay bills.
- Purchase food items and needed supplies, refills of medications, for after surgery.
- Notify your surgeon if you have any signs of bladder, skin, tooth, respiratory, etc infections.
- Notify your church or synagogue as desired for requested prayers while you are in the hospital.
- Keep yourself well-hydrated the week before surgery, unless you are on fluid restrictions. Try to have a bowel movement the day before surgery. Pain medication, anesthesia and decrease in activity can cause constipation.
- Do not shave from the neck down for 3 to 4 days prior to surgery. The holding room will remove any hair from surgical site with clippers on day of surgery.
- If ordered by your physician you will need to have a Type and Screen lab test drawn 72 hours (3 days) of surgery so you receive the correct blood if needed after surgery.
- Covid testing will be conducted per current guidelines.

#### **DAY BEFORE SURGERY:**

Pack your bags: ☐ Loose fitting clothing, including socks, shoes and undergarments ☐ Closed-toed / non-skid slippers or shoes □ Personal toiletries ☐ Eyeglasses and case ☐ Hearing aid and batteries ☐ CPAP machine settings, tubing, and machine ☐ Cell phone ☐ Driver's license or photo ID, insurance card, Medicare/Medicaid card ☐ Copy of your Advanced Health Care Directive ☐ Important telephone numbers

(including person bringing you home)

- Bring the most current list of medications and supplements, noting which ones have been stopped.
- DO NOT EAT any solid foods after midnight or the time you were instructed.
- Our scheduling nurse will call you the evening before your surgery. If you do not receive a call, please call 909.865.9894 from 5:30 pm - 7:30 pm. If you are scheduled for surgery on a Monday or holiday, call the hospital on the last business day before surgery.

#### **NIGHT BEFORE SURGERY:**

☐ CHG shower as instructed BEFORE bed and put on clean pajamas.

#### **MORNING OF SURGERY:**

- ☐ CHG shower again as instructed and put on clean clothes.
- Arrive on time as instructed the evening before. If you are delayed for any reason on the day of surgery, call the hospital at 909.865.9500.
- ☐ Drink the pre operative clear beverage as instructed 3 hours before surgery to help with recovery and prevent nausea
- Take your medications- heart, blood pressure, asthma, prednisone, seizure, and thyroid medications- with a sip of water early the morning of surgery. Do not take any Aspirin or Ibuprofen (Advil or Motrin) products.
- Do not take Insulin or diabetic medications unless instructed otherwise.
- Arrange for a friend or family member to be responsible for your belongings while you are in surgery.
- Leave your jewelry, cash, credit cards, and any other valuables at home.
- Do not bring your own medications to the hospital.
- Do not wear eye makeup the day of surgery.
- Bring a case for our dentures, contact lenses, eye glasses or hearing aids.
- CHG wipes will be provided for you at the hospital to wipe your own body down prior to surgery. Notify the nurse if you had a reaction to the soap in the kit you used at home.
- Complete good oral care prior to leaving your home.

# SECTION 3 IN THE HOSPITAL

## DAY OF SURGERY – WHAT TO EXPECT

#### **Before Surgery:**

- Arrive at Pomona Valley Hospital Medical Center at the time instructed. Enter through the main hospital entrance off Garey and Willow. Check-in to OPP or main hospital lobby as instructed during your pre op scheduling phone call. After checking-in, you will be directed to the Pre-OP Room and your family will be directed to the surgical waiting room.
- In the Pre-Op room, patients are prepared for surgery which includes: hair clipped from surgical site, body wiped down with CHG medicated soap, IV started and pre-operative medications given as ordered by surgeon. Your operating room nurse as well as your anesthesiologist will interview you, reviewing your medical history and test results.
  - The preferred anesthesia for joint replacement surgery is spinal anesthesia. With this technique, a small needle is used to inject an anesthetic solution into your lower back, near the spinal canal. This numbs the body from the waist down, but you are still awake. You will also be given other medications that make you sleep during the surgery.
  - If for some reason spinal anesthesia is not the best choice for you, general anesthesia will be used. With this technique, patients are "completely under," typically requiring placement of a breathing tube and having the ventilator machine breath for them while they are asleep. The term "general" applies because it

- affects the entire body, with loss of consciousness and motionlessness.
- The anesthesiologist will review your medical history and talk to you about which anesthesia he or she feels is best for you. The decision is between you, your surgeon, and the anesthesiologist.
- Your surgeon will mark your operative leg to identify it for surgery. Once you are ready for surgery you will then be escorted to the operating room where you will see your joint replacement surgery team and where surgery will be done.

#### **During Surgery:**

- While you are in surgery, your family members and / or friends may wait in the surgical waiting room on the second floor.
- Surgery is usually 2 to 3 hours and once surgery is finished, your surgeon will speak with your family and give them an update on how the surgery went.
- Visitation guidelines may be changed.

### **After Surgery:**

• Following surgery, you will be taken to the Post Anesthesia Care Unit (PACU) where you will remain for approximately one to two hours. During this time, pain control is established, your vital signs monitored, and an x-ray may be taken of your new joint. If you had general anesthesia you may experience nausea / vomiting, blurred vision, a dry mouth, or chills. If you had spinal anesthesia you may not be able to feel or move your body from the waist down. The team will work to make you as comfortable as possible.

#### **Pain Management**

All patients have a right to have their PAIN MANAGED. Pain will change throughout your recovery process. If you need more help with your pain management, talk to your nurse, your surgeon, and / or nurse practitioner. The goal is to keep you at a comfortable level so that you can tolerate the activities you will need to participate in. We use a pain scale that uses a number to rate your pain from "0" which is no pain and "10" which is the worst pain imaginable. Communicate your pain level to your nurse so she can medicate you as ordered, keeping you comfortable enough to do your planned activities. Do not wait until the pain is too severe as it is more difficult to get the pain under control.

Most surgeons order preoperative medications to help with post-operative pain. These are given in the pre-op room prior to surgery with a small sip of water and may include medications like Celebrex, Neurotin, Percocet or Oxycontin, or Protonix. They also give injections intraoperatively into the surgical site to help with pain control after surgery.

In the PACU, patients are generally given IV medications like Fentanyl or Dilaudid to help control pain. After surgery once you are awake and able to eat food, you should take the oral medications ordered for you and use the IV medications for break through pain (pain that comes between oral doses). It is recommended to take the oral pain medication 30 to 45 minutes before Physical Therapy.

UNIVERSAL PAIN ASSESSMENT RULER						
Numeric Score	0	1 2	3 4	5 6	7 8	9 10
WONG-BAKER FACES (3 yrAdult)		(ôô)		(ôô)	<b>6</b> 8	(p)(q)
Verbal Descriptors	No Pain	Mild Discomfort	Uncomfortable but able to tolerate	Moderate Distress	Severe Pain	Worst Pain Imaginable
Spanish Descriptors	No Dolor	Poco Dolor	Molesto pero Tolerable	Estresado Moderado	Dolor Severo	Dolor Muy Fuerte
Activity Tolerance	Full Function No Pain	Activity 100% Pain can be ignored	Activity 75% Interferes with task completion	Activity 50% Pain interferes with concentration	Activity 25% Pain interferes with basic needs	Activity = 0 Incapacitated, Bedrest required

#### **Blood Clot Prevention:**

Patients having hip and knee replacement surgery are at high risk of developing blood clots after surgery due to anesthesia, surgery, and decrease in mobility. Preventing blood clots after surgery is very important. We do this with foot pumps or sequential compression devices (SCDs), exercises, activity, walking, and also with medications.

#### **Medications to Prevent Blood Clots:**

You will receive a prescription at the time of discharge for the medication the surgeon prescribes for blood clot prevention at home. Make sure to take the medication at the same time every day, as prescribed.

- Lovenox (Enoxaparin) 30 to 40 mg once or twice a day given as a shot in the fatty tissues around the abdomen starts 20 hours after surgery. Usually given for 14 to 30 days after surgery. If you are going home on Lovenox, the nurses will educate and make sure you, or a family member, are able to give the injections once you are home.
- Aspirin Enteric Coated (ASA EC) 325mg or 81mg twice a day for 30 to 42 days after surgery, if you are at low risk for developing a blood clot. Remember, the aspirin is for blood clot prevention and not for pain management and needs to be taken as prescribed by the doctor.

## **Equipment after Joint Replacement Surgery:**

#### Mepilex Dressing

- It has silicone adhesive which is hypoallergenic as well as it stretches with the skin so patients do not get blistering or rashes.
- It has absorbent padding to wick drainage away from the skin. The padding also has silver in it to help prevent bacteria from growing.
- If not saturated, the dressing can stay on for up to 7 days.

#### Wound Vacuum Device

Your surgeon may choose to place a wound vacuum dressing device over your wound. This device helps your wound heal guickly and prevent infection. The dressing and device work by holding the edges of the wound together and remove fluid from the area. This can reduce swelling, and may help clean the wound and remove bacteria. Additionally, it may stimulate the growth of new tissue that helps the wound close. A wound vacuum system has several parts. A foam or gauze dressing is put directly on the wound. An adhesive film covers and seals the dressing and wound. A drainage tube leads from under the adhesive film and connects to a portable vacuum pump. This pump removes air pressure over the wound. It may do this constantly. Or it may do it in cycles.

- Foot Pumps (usually for those having Knee Replacement)
  - Used while in the hospital on both feet to help prevent blood clots. The pump alternates from one foot to the other, squeezing to circulate the blood.
  - Should be worn when in bed.
- Sequential Compression Devices (SCDs) (usually for those having Hip Replacement)
  - Used only on both legs to help prevent blood clots. The pump alternates from one leg to the other, squeezing to circulate the blood.
  - Should be worn when in bed.

#### Incentive Spirometer (IS)

- Used to encourage deep breathing and expanding the lungs to prevent pneumonia.
- Patients should do 10 repetitions every hour while awake.

#### Ice Therapy

- Cooled therapy pad applied to the operative knee to help decrease swelling.
- When we decrease swelling we decrease pain.

#### TED Hose (White Compression Stockings)

- Some patients may have TED Hose to help prevent swelling after surgery.
- If you are wearing them in the hospital the surgeon expects you to wear them at home until he or she instructs you not to.
- At home, remove the TED hose once a day for 1 hour to air out the skin underneath. Check the skin for sores or irritations.

## **Abductor Pillow** (Posterior Approach Hip Replacement Patients ONLY)

 Placed between the legs after surgery to prevent crossing of the legs and pigeon-toeing, as this could cause dislocation of the new hip.

#### **Hip Wrap Dressing**

- Compression wrap around the hips and surgical leg to help decrease swelling. Remove daily to assess skin.
- Large pocket on the side can be used for ice application.

#### **Physical Therapy**

You will have your first physical therapy evaluation within 4 hours of surgery. This may consist of sitting on the edge of the bed with assistance from physical therapy, or walking down the hallway, depending on how you feel after anesthesia. It is very important that you begin ankle pumps on both legs, which will help prevent blood clots from forming in your legs. You should also begin using your Incentive Spirometer (IS) and doing the deep breathing and coughing exercises to prevent pneumonia. Here you will be able to have liquid diet advancing to a regular diet as tolerated.

#### Day of Surgery, Post-Op

- Clear to full liquid diet as tolerated.
- IV pain medication, progress to oral when tolerating food.
- IV fluids until tolerating oral fluids.
- Preventive IV antibiotics for next 24 hours.
- Bowel protocol initiated, laxative started to prevent constipation.

- Incentive Spirometer, 10 repetitions every hour while awake.
- Deep Breathing and Coughing exercises.
- Physical Therapy the afternoon on Day of Surgery- Walk, stand, and dangle feet at bedside as tolerated. Leg exercises.
- Blood clot prevention: SCD's or Foot Pumps, ankle pumps, and blood clot prevention medication.
- Discharge education in progress.
- Knee Replacement:
  - Knee Precautions: No pillow under your affected knee. Pillow under ankle is okay.
- Hip Replacement:
  - For Posterior Approach hip replacements an Abductor pillow between legs when in bed.
- Hip Precautions after Surgery:
  - For Posterior Approach hip replacements, no bending past 90 degrees, no pigeon
  - toeing, no crossing legs.
     For Anterior Approach hip replacements,
     no extension backwards.



#### **Discharge**

- Laboratory draws as ordered.
- Diet as tolerated.
- Preventive IV antibiotics discontinued. IV access remains in place until discharged.
- Oral pain medications encouraged.
- Pain medication taken within 30 to 45 minutes of physical therapy or activity.
- Out of Bed with Assistance for every meal.
- Physical therapy twice daily, once in the morning and once in the afternoon. Leg exercises.
- Occupational therapy once daily if ordered.
- Incentive Spirometer, 10 repetitions every hour while awake.
- Deep Breathing and Coughing exercises.
- Blood clot prevention: SCD's or Foot Pumps (while in the hospital only), ankle pumps and blood clot prevention medication.
- Bowel protocol continued.
- Case manager / discharge planner is working to plan for your discharge, working with your insurance to make sure you have the equipment and services as ordered.

You will be discharged when you are medically stable and you meet the criteria set by your surgeon and physical therapist. You will be able to go up and down stairs, get in and out of the car, get in and out of bed, and rise from a chair or toilet. These activities will be taught to you by the physical and occupational therapists in the hospital. Usual time of discharge is between 2 to 4 pm after the second physical therapy.

Please have someone arranged to pick you up on the day of discharge. You will receive written discharge instructions concerning medications, physical therapy, activity, dressing changes etc. You will have pain medication prescriptions, and possibly other medication prescriptions, to fill at your preferred pharmacy at the time of discharge.

Your insurance company will arrange for the equipment delivery. You should have a walker delivered to you before discharged home from the hospital. All other equipment can be delivered to your home.

Some patients going home will have orders for Home Health Nurse visit (1 to 2 visits) and Physical Therapy visit (2 to 4 visits) for approximately 2 weeks until you see your surgeon in the office. At which time Outpatient Physical Therapy is usually ordered, as your surgeon determines is needed.

#### **Skilled Nursing Facility**

The decision to go home or to a skilled nursing facility will be made collectively by you, your surgeon, physical therapist, case manager, and your insurance company. This decision may be delayed until discharge.

Although you may desire to go to a skilled nursing facility when you are discharged, your progress will be monitored by your insurance company. Upon evaluation of your progress, either you will meet the criteria for admission or your insurance company may recommend that you return home with other care arrangements. Therefore, it is important for you to make alternative plans preoperatively for care at home.

In the event a skilled nursing facility is not approved by your insurance company, you can choose to go and pay privately. Please keep in mind that the majority of our patients do so well that they do not meet the guidelines to qualify for skilled nursing facility. Also, keep in mind that insurance companies do not become involved in social issues, such as lack of caregiver, animals, etc. These are issues you will need to address before admission.

#### **SECTION 4**

## LIVING WITH YOUR JOINT REPLACEMENT

## CARING FOR YOURSELF AT HOME

#### My Coach

- You will need assistance for the first 1 to 2 weeks for 24 hours a day after you return home.
- You will need a cheer leader when you have difficult moments.
- You will need a ride to your appointments.
- You will need help around the house with daily tasks like preparing meals, doing the laundry and dishes.
- You will need reminders to take your medications on time.
- You will need reminders to take your pain medication before PT or planned activity.
- You will need encouragement to do your home exercise program, including your ankle pumps.
- You will need reminders to do your deep breathing and coughing exercises and your Incentive Spirometer.
- You will need someone to remind you of even your smallest achievements.
- You will need someone to remind you of realistic goals and keeping a positive outlook.

## After surgery, your operated leg may feel:

- Heavy: The muscles are weak after surgery. It will become easier to move as you continue to do your exercises.
- Longer: Do not be alarmed. This may happen to a few patients who have had total hip replacement. The sensation should resolve usually by the 5th or 6th week. Continue to walk and weight bear through the operative leg.
- Tight: Your leg will be swollen for 1 to 3 months. Total hip replacement patients may experience swelling around the hip and possibly into the groin area and

- down to the knee. Patients will often feel stiff, especially with prolonged sitting. Total knee replacement patients may experience swelling around the knee and possibly down towards the foot and ankle. Performing the range of motion exercises can be difficult because of this tightness / swelling.
- Warm: Some warmth is normal, especially after walking or exercising.
- Numb: Total knee replacement patients may experience numbness on the outside of the kneecap (usually the size of a 50 cent piece). Total hip replacement patients may experience numbness on the outside of the leg. Total knee / hip replacement patients may also experience numbness along the incision line.
- "Band around the knee" for knee replacement patients. The "band-like" sensation usually subsides by 6 weeks.
- Bruising: You may notice increased bruising along the back of your leg / knee for hip patients and down the calf / shin and into your foot / ankle for knee patients. This is accumulation of blood from the surgery. Often time, it cannot be seen until 1 to 2 weeks after surgery, and may last 6 to 8 weeks.

## Minimizing Post Surgery Sleep Disorders

After surgery, one of the most frequent complaints from patients is "I have trouble sleeping." The normal activity / rest pattern becomes disturbed. Your body may not recognize when it is tired. There are several things that you can do to minimize this problem.

- 1. Have a glass of warm milk or a banana.
- Relax by reading, playing solitaire, sewing, watching TV, or working on a jigsaw or crossword puzzle may help relieve anxiety and reduce muscle tension.
- 3. No naps during the day greater than 2 hours.

- 4. Do not sleep-in in the morning.
- Avoid alcoholic beverages, caffeine, chocolate, heavy / spicy / sugar-filed foods. Avoid smoking before bedtime. They can affect your ability to fall asleep.
- 6. Restrict fluids right before bed to avoid getting up to use the restroom.
- 7. Find a comfortable temperature for sleeping and keep the room well ventilated and eliminate light as much as possible.
- 8. Always follow the advice of your physician and other health care professionals. The goal is to rediscover how to sleep naturally.

Blood clot prevention

MedicAtions

Signs / Symptoms to report

Incision Care

PreCautions / Safety

ExerciseS / Equipment

Follow Up with Surgeon

### **BASICSS** after Joint Replacement

### **Blood Clot Prevention:**

Research has shown patients are at risk of developing blood clots for up to 30 days after joint replacement surgery. You can help prevent blood clots by:

- Taking your blood clot prevention medication as ordered by your surgeon or physician.
- Blood Clot Prevention Medications:
  - Lovenox (Enoxaparin) and Aspirin
     Enteric Coated (EC ASA) are the two
     most typical medications ordered at
     discharge.
  - Rivaroxaban (Xarelto), Eliquis
     (Apixaban) or Warfarin (Coumadin)
     may be ordered only if your medical condition requires it.
- When you are discharged from the hospital, take the written prescription given to you at the time of discharge to your pharmacy and fill it.

- Notify your surgeon or physician immediately if you cannot get this medication for any reason.
- Take the medication at the same time every day as directed. Never skip a dose or take a double dose.
- Side effects are minor bleeding or unusual bruising, which can show up 1 to 2 weeks after surgery.
- Major bleeding is an uncommon but serious side effect. Contact your doctor right away if you notice a hard bruised area, nosebleeds or blood in your urine.
- Patients should take the following precautions to avoid injury while on blood thinners:
  - Shave with an electric razor:
  - Use a soft toothbrush and waxed dental floss;
  - Wear shoes or non-skid slippers in the house:
  - Trim nails carefully, and use care with knives and scissors.

- Seek medical attention right away if you are seriously injured, if you are in a car accident or if you hit your head.
- 2. Moving your muscles helps circulate blood and also helps prevent blood clots. You move your muscles when you:
- Exercises as instructed by Physical Therapy.
- Ankle pumps 20 times every 30 minutes to 1 hour while awake.
- Walking around the house a few times every day for 5 to 10 minutes at a time and increasing the activity each day as tolerated.

#### **MedicAtions:**

#### Home Medications

- A copy of your Discharge Medication Reconciliation List will be provided to you upon discharge from hospital.
- Your discharge medication list will be reviewed with you, including which medications to resume at home and instructions on when the next dose(s) are due.

#### Pain Medications

- Pain is common and to be expected after this type of surgery.
- Take your pain medications 45 minutes before your planned activity, such as Physical Therapy.
- Take your pain medication, with food, as prescribed by your surgeon.
- Use your pain medications as needed to manage the pain. Keeping your pain managed will help you do your exercises.
- Gradually wean yourself off the prescribed pain medication. Follow a multi modal approach to pain management that includes NSAIDS, Tylenol, etc.
- Do NOT drink alcohol or drive while on pain medications.
- Pain medications may cause nausea, constipation and light-headed sensation.
  - Take pain medication with crackers to minimize nausea and stomach upset.
  - You may take laxatives or stool softeners to help with constipation, as needed.

- Getting up slowly from a chair or bed will help cope with the light-headed sensation.
- Call surgeons office if symptoms occur and you need the medication changed.

## Signs / Symptoms to Report:

Contact your surgeon's office right away for any of the following:

- Incision changes- new or increased redness, swelling, drainage, or opening of the incision
- **Temperature** over 101 degrees Fahrenheit with chills, shaking or sweating.
- Pain develops with weight bearing or if the leg looks misaligned or deformed. This could be a sign of dislocation of your new joint.
- Pain, excessive tenderness and /or swelling in your leg or calf that does not go away with ice and elevation. This can be a sign of a blood clot in the veins of your legs.
- IF you develop shortness of breath, chest pain, coughing up blood or have unexplained anxiety, especially with breathing, a blood clot may have moved to the lung-

**CALL 911 for this medical emergency.** 

### **Incision Care:**

- Hand washing is the most important step to preventing infection.
- Follow the Discharge Incisional Care provided by your surgeon.
- If your surgeon used staples to close your surgical incision
  - Keep dressing clean, dry and intact.
  - You may shower when your surgeon tells you it is okay to shower.
  - Do not place any lotion, ointments or alcohol on or near the incision.
  - Staples are removed about 10 to 16 days after surgery, depending on how the incision is healing at your first postoperative office visit.

- If your surgeon used glue to close your surgical incision,
  - Keep dressing clean, dry and intact.
  - You may shower when your surgeon tells you it is okay to shower.
  - Incisions that are closed with surgical glue, should be allowed to scab and fall off naturally
  - Avoid picking or scratching the surgical wound to prevent any infections at the surgical site
  - Do not place any lotion, ointments or alcohol on or near the incision.
- If your surgeon placed a dressing on your surgical incision,
  - The dressing can stay on for up to 7 days if it is not saturated with drainage and it is kept clean and dry.
- Do not soak in bath tubs, hot tubs, or pools until your incision is completely healed and your surgeon has given you permission.

## KNEE / HIP PreCautions and SAFETY:

#### **KNEE Precautions:**

- Do not place a pillow under your operated knee.
- DO NOT stand, plant legs, bend and twist at the same time.

#### **Hip Precautions after Surgery**

- For Posterior Approach hip replacements, no bending past 90 degrees, no pigeon toeing, no crossing legs.
- For Anterior Approach hip replacements, no extension backwards.

#### **Pointers:**

- Okay to elevate leg by placing a pillow under the ankle or foot (ankles higher than heart level).
- Ice for 20 minutes and elevate operated leg after exercise / activity.
- It is normal for some degree of swelling to persist for several months after surgery.

- Any activity that leaves your feet on the floor, such as sitting in a chair or walking, can lead to swelling. This swelling can be reduced by lying down intermittently throughout the day with your legs elevated and performing ankle pumps.
- Stairs: Use the handrail or banister for stability. Go up with your good (nonoperated) leg and down the stairs with your affected (operated leg). Go up or down stairs one stair at a time.

#### **SAFETY:**

- Avoid falls by: removing throw rugs and cords from walkways, use nightlights, use chairs with arms to help you get up and down.
- Get up slowly from a chair or bed.
- Change positions frequently to avoid stiffness.
- **Use your walker** at home after surgery, until your Physical Therapist or Surgeon instructs you otherwise.
- **Driving:** You should not drive for at least 4 to 6 weeks after surgery.

#### **Body Changes**

- Your appetite may be poor for a while after surgery.
- Drink plenty of fluids to keep from getting dehydrated.
- Pain medications can cause constipation.
   Use a stool softener or laxative as needed.
- Eat a healthy diet with fruits and vegetables and increase fiber to also help with constipation.
- It is not uncommon to have difficulty sleeping or low energy levels the first month after surgery.
- Your leg may feel longer as the new joint likely gained some height that was lost before surgery.

### **Exercise 5** / **Equipment**:

#### **Exercises:**

- Joint Replacement surgery requires a lifelong commitment to exercising, stretching and low impact activities to get the best results possible.
- Exercises as directed by Physical Therapy at least 3 times a day.
- Increase activities and walk gradually as instructed by your health care provider, following the heel-toe walking pattern.

#### **Equipment:**

- Front Wheeled Walker (FWW)\*\* will be ordered. You will need you walker before we can safely discharge you home. Physical therapy will utilize your walker for training and ensure proper settings.
- Bedside Commode (BSC)\*\* may be ordered.
   (Not all insurances cover this cost.)
- Your insurance company's contracted provider will contact you to deliver the equipment that is ordered by your surgeon. Save your equipment as insurance companies may not provide it again if you have another surgery.

#### **Home Health Services:**

Home Health Nursing\*\* visitsIf ordered by your surgeon and
approved by your insurance, the First
visit is an initial consultation. Second
visit is on the day the dressing needs to

- be changed. The insurance company's contracted provider will call you to schedule the visits.
- Home Health Physical Therapy (PT)\*\*
   visits- Usually 2 to 4 visits in a 2 week
   period when discharged home from
   hospital. PT is making sure you know
   your exercise program and is checking
   the safety of your home. The insurance
   company's contracted provider will call
   you to schedule the visits.
- \*\* Cost covered for equipment and home health services varies and is based on your insurance policy.

### Follow Up with Surgeon

- You should <u>follow up with your surgeon</u> at approximately <u>2 weeks</u> from the date of surgery.
- Call the office for appointment if you do not already have one scheduled. When you call the office for the appointment, inform them you are coming in for your first postoperative visit.
- Follow up with Primary Care Physician or Specialist for medical conditions within 2 weeks after surgery.
- Outpatient Physical Therapy: Patients receive Outpatient Physical Therapy orders, if needed, from surgeon's office at the 2 week follow up visit. The amount of Outpatient Physical Therapy visits is based on your needs at the time of the service and your insurance policy.



## PREVENTING AND IDENTIFYING POTENTIAL COMPLICATIONS

#### **Blood Clots in a Vein**

Blood clots form along the walls of the veins in your legs when blood is stagnant. Blood may become stagnant as a result of anesthesia, surgery and decreased activity. Keep in mind, blood clots could form in either leg.

#### Prevention of blood clots:

- Ankle pumps, quad sets and other home exercises as instructed on both legs.
- Blood thinning medications as instructed.
- Walking several times a day and increasing as tolerated.

## Signs and symptoms of blood clots in the legs:

- Swelling in thigh, calf, or ankle that does not go down with elevation.
- Pain, heat, and tenderness in calf, back of knee or groin area.
- The physician may or nurse practitioner have you go to the ER and order an ultrasound to rule out clots in the vessels of the lower leq.

### **Pulmonary Embolism**

A pulmonary embolism occurs when a blood clot from the leg travels to the lungs. When this occurs, the lungs blood supply is compromised and the affected area of lung tissue may die. The lungs ability to provide oxygen to the body is decreased. This is an emergency and you should call 911 if suspected.

## Prevention of pulmonary embolism (blood clots in the lungs):

- Prevent blood clot in the legs.
- Recognize if a blood clot forms in your leg and call your physician immediately.

## Signs and symptoms of pulmonary embolism (blood clots in the lungs):

- Sudden chest pain.
- Chest pain that worsens with deep breathing.

- Difficulty and/or rapid breathing.
- Shortness of breath.
- Sweating.
- Confusion.
- Unexplained anxiety.

#### Infection

Your surgeon may recommend that you take antibiotics to prevent infection before you undergo future dental procedures or other invasive medical procedures. Make sure you discuss this during your first postop visit with your surgeon. Make sure to let your dentist know you have a new joint as well.

#### Prevention of infection:

- Hand washing.
- Keep incision clean and dry.
- Eat a healthy diet.
- Drink plenty of fluids.

#### Signs and symptoms of infection:

- Increased redness or hotness to incision.
- Increased drainage from incision.
- Opening of the incision.
- Foul smelling odor from incision.
- Yellow or green drainage from incision.
- Persistent fever that exceeds 101 degrees Fahrenheit.
- Chills or shaking.
- Increased pain in knee.
- Excessive swelling.

#### Dislocation

Follow the precautions taught to you by your therapists. Practice the exercises taught to you to strengthen the muscles around your new joint. Ask your surgeon how long you need to follow your knee precautions.

#### **HIP Replacement Patients:**

- Do NOT bend forward more than 90 degrees at the hip for posterior approach patients.
- Do NOT lift your knee higher than your affected hip for posterior approach patients.
- Do NOT bring your legs together or cross your legs for posterior approach patients.
- Do NOT turn your affected leg inward for posterior approach patients.
- Do NOT reach across your affected leg for posterior approach patients.
- Do NOT twist your body when standing.
- Do NOT put more weight on your affected leg than instructed.

#### Signs and symptoms of dislocation:

- New onset of severe pain
- Turning in or out of your leg that is new
- Unable to walk or put weight on your leg
- Increase numbness or tingling of the leg
- Change in length of the leg
- Knee or hip appears deformed
- A bulge felt over the hip

Contact your surgeon right away if you happen to fall or for any of the above symptoms.

## PERFORMING ACTIVITIES OF DAILY LIVING AFTER SURGERY

#### **Safety and Avoiding Falls**

There are many things you can do to keep your joints safe. Please follow these suggestions to avoid injury and falls:

- Keep throw rugs put away.
- Be aware of floor hazards such as small objects, pets, and uneven surfaces.
- Provide good lighting; use nightlights and a flashlight as needed in the halls, bathroom, and bedroom.
- Keep cords out of the walking path.
- Wear slippers or shoes with backs; soles should be rubber for good traction.
- Use chairs with arms to help you get up and down.
- Get up slowly from a chair or the bed in case you are dizzy.
- Do not lift heavy objects for at least 3 months; discuss with your surgeon first.
- Stop to think before taking on a new task.
- Change positions frequently to avoid stiffness.
- Get out of the car every 1 to 2 hours during travel for a short walk to lessen stiffness
- Keep your appointments with your surgeon as instructed.
- If surgeon allows you to sleep on your side, use pillow(s) between your knees. Hip Replacement patients should use abductor pillow to follow the hip precautions and prevent dislocation.
- Bend your unaffected leg to help push yourself to a new position.

#### **Ambulation**

#### Walker

- When rising from a sitting position, start from a chair with arms, pushing up.
- Never pull on the walker to get up from a sitting position.
- Keep all four legs of the walker on the ground at all times.
- Stand up straight with the walker.
- Place each hand on the hand grips of the walker.
- Take a step into the walker with your affected leg, following the heel-toe walking pattern.
- Lean on the walker to give balance and support.
- Take a step with your unaffected leg.
- Move the walker forward one step.
- Repeat the above until you've reached your target.

#### Cane

- Stand up straight with the cane held by your hand on the unaffected side.
- Move the cane forward one step.
- Move your affected leg forward, following the heel-toe walking pattern.
- Move your unaffected leg forward.
- Repeat the above until you've reached your target.

#### **Transfers**

#### Bed

#### Getting into bed:

 Back up to the bed until you feel it behind your legs.
 Place yourself halfway between the foot and head of the bed. Slide your affected leg out in front of you before sitting down.



- Reach back with both hands and sit down on the edge of the bed. Scoot back toward the center of the mattress.
- Move the walker out of your way. Keep it close by.
- Scoot your hips around to face the foot of the hed
- Lift the close leg into bed while scooting around.
- Lift the other leg into bed.
- Scoot your hips towards the center of the bed.

#### Getting out of bed:

- Slowly move your legs towards the edge of bed while sliding shoulders in the opposite direction (pivoting on your buttocks).
- Come up to your hands while lowering legs to the floor.
- Scoot to the edge of the bed while using your hands behind you.
- Use both hands to push off from the bed.
   Slide the affected leg out in front of you before standing up.

#### **Chairs and Toilets**

Sit in chairs with firm seats for ease of movement. An extra cushion or pillow may be needed on the seat of a low chair if there is no other choice for sitting. It's safer to keep both feet on the floor.

A raised toilet seat, a three-in-one bedside commode, or toilet safety rails may be needed over your toilet for about 12 weeks after surgery.

Hip Replacement patients must use these assistive devices as long as you are instructed to follow the hip precautions.

#### Sitting on a chair or toilet:

- Take small steps and turn until your legs are against the toilet / chair.
- Slide the affected leg out in front of you before sitting down.
- When using armrests, reach back for both armrests and lower yourself onto the toilet. If there are no armrests, keep one hand on the middle of the walker / cane while reaching back for the toilet seat with the other hand.

#### Getting up from a chair or toilet:

- Slide the affected leg out in front of you before standing up.
- When using armrests, push yourself up from the armrests. If there are no armrests, keep one hand on the middle of the walker / cane and push off from the toilet seat with the other hand.
- Gain your balance and place your hands on the walker.

#### **Bathing / Showering**

#### Entering Tub / Shower:

After your staples have been removed or instructed by your surgeon:

- Make sure your soap, shampoo, wash cloth, drying towel and any other items are in place for easy reach.
- Stand sideways to the tub with your good leg next to the tub.
- Place your walker / cane in your hand by your operated leg.
- Grasp the safety rail with your other hand
- Supporting yourself with the safety rail and walker / cane, lift and put your good leg into the tub.
- Next, supporting yourself with safety bar, good leg and walker / cane, bring your operated leg in by bending the knee and lifting your lower leg inside.
- Put your walker / cane in easy reach.
- Start the water carefully... preferably cold first, and add hot, so you will not burn yourself. Remember, you cannot move quickly.
- Wash normally, and remember your precautions.

#### Leaving Tub / Shower

Reverse the process:

- Carefully reach out for your walker / cane, and hold it in the hand next to your operated leg.
- Stand with your operated leg next to the tub edge, and put the walker / cane outside.
- Supporting yourself with your arm on a safety rail, your good leg, and walker / cane, bend the knee and lift your operated leg out. Put it out far enough so there is room for the other leg.
- Now using a safety rail and your walker / cane for support, lift your good leg out.
- Be careful not to rotate on your operated side as you begin to move around.

#### Using a shower stall

The ideal shower facility is a shower stall with only a low lip to step across.

- Use your walker / cane and hand rail to move into the shower stall.
- Put the walker / cane outside in easy reach.
- Wash, and remember your precautions.

#### Vehicle

#### Getting into the vehicle:

- Push the seat all the way back. Recline the back of the seat all the way back.
- Place a plastic trash bag on the seat to help you turn forward more easily.
- Back up to the vehicle until you feel it touch the back of your legs.
- Slide your affected leg out in front of you.
- Reach back for the back of the seat with one hand and the dashboard with the other hand. Lower yourself down onto the seat. Be sure to lower your head to avoid hitting it on the doorframe. Scoot backwards as far as you can toward the other seat.
- Turn frontward, leaning back as you lift one leg at a time onto the floorboard of the vehicle.
- Center yourself on the seat.
- Bring the seat back to a comfortable position.
- Put your seatbelt on.

#### Getting out of the vehicle:

• Push the seat all the way back. Recline the

- back of the seat all the way back.
- Scoot yourself sideways and backward as you lift one leg at a time out of the vehicle and onto the ground. Lean back as you do so.
- Slide your affected leg out in front of you. Push yourself up with one hand on the dashboard and the other on the back of the seat. Be sure to lower your head to avoid hitting it on the doorframe.
- Gain your balance and place your hands on the walker / cane.

#### Stairs

General rule of thumb: Go up with your unaffected leg and down with your affected leg.

#### **Going Up Stairs**

NOTE: Your therapist should give you detailed instructions on how to go up and down stairs with your walker, crutches or cane. Below are general reminders related to stairs.

- Face the stairs. Hold the handrail with one hand.
- Hold the walker, crutches, or cane with the other hand on the same step.
- Step up with the unaffected leg.
- Step up with the affected leg.
- Move the walker, crutches, or cane up one step.
- Repeat the above until you've reached your target.

#### Going Down Stairs

- Face the stairs. Hold the handrail with one hand.
- Hold the walker, crutches, or cane with the other hand on one step below you.
- Step down with your affected leg.
- Step down with your unaffected leg.
- Move the walker, crutches, or cane down one step.
- Repeat the above until you've reached your target.

#### <u>Dressing</u>

## Putting on pants and underwear by yourself:

- Be sure all needed items are within easy reach
- Slide your affected leg out in front of you.

- Sit down on a supportive surface to maintain your balance.
- Grasp the clothing and place your affected leg in first, followed by your unaffected leg. For Hip Replacement patients, the reacher or dressing stick can be used to guide the waist band over your feet and knees.
- Pull your pants up to your thighs.
- Stand with the walker in front of you. Pull your pants up the rest of the way.

## Taking off pants, underwear, or socks by vourself:

- Be sure all needed items are within easy reach.
- Back up to a chair or bed.
- Unfasten your pants and allow them to fall to the floor. Push your underwear off your hips.
- Slide your affected leg out in front of you.
   Lower yourself down to a chair or bed.
- Use a reacher or dressing stick to grasp the clothing.
- Remove your unaffected leg first, followed by your affected leg.

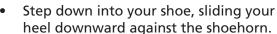
## Putting on socks by yourself after Hip Replacement Surgery (only):

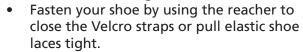
- Be sure all needed items are within easy reach.
- Slide your affected leg out in front of you.
- Sit down on a supportive surface to maintain your balance.
- Slide the sock fully onto the sock aid.
- Bend your knee slightly.
- While holding the cord with both hands, drop the sock aid in front of your foot.
- Slide your foot into the sock aid.
- Point your toes and straighten your knee.
   Pull the sock on and keep pulling until the sock aid pulls out of the sock.

#### Putting on shoes by yourself:

NOTE: Shoes should have rubber soles. Do NOT wear high heels or shoes without backs. Wear one of the following: sturdy slip-on shoes, Velcro closure shoes, or shoes with elastic shoe laces.

- Be sure all needed items are within easy reach.
- Slide your affected leg out in front of you.
- Sit down on a supportive surface to maintain your balance.
- Hip Replacement patients, use a long-handled shoe horn, dressing stick, or reacher to slide your shoe in front of your foot.
- Place the shoehorn inside the shoe.
- Lean back as you lift your leg to place your toes inside the shoe.





#### Taking shoes off by yourself:

- Be sure all needed items are within easy reach.
- Slide your affected leg out in front of you.
- Sit down on a supportive surface to maintain your balance.
- Hip Replacement patients, use a reacher to unfasten your Velcro straps or elastic shoe laces.
- Hip Replacement patients, use a longhandled shoe horn, dressing stick, or reacher to slide your shoe off of your foot.

## **Energy Conservation / Joint Protection**

#### **Choose low-impact activities such as:**

- Regular walks in or outdoors
- Walking on treadmill
- Recommended exercise at a fitness center
- Swimming
- Bicycling
- Dancing
- Golfing
- Cross country skiing
- Aquatics
- Joints in Motion class
- Walk with Ease program
- Upper extremity strengthening exercises



#### Avoid high-impact activities such as:

- Downhill or water skiing
- Jogging or running
- High impact aerobics
- Jumping activities
- Tennis or racquetball
- Football
- Baseball
- Lift 25 pounds or greater over and over
- 1. **DO NOT OVER DO IT!** "More is better" does not always apply. This may result in an increase in pain and swelling which can make walking, sleeping and exercising more difficult. If you over do it, decrease your activity for the next 1 to 2 days and elevate and ice your operative leq.
- 2. **DO NOT** sit up for more than an hour at a time without getting up and moving around. If you sit for prolonged periods, gravity may pull the swelling from your hip / knee into the lower part of your leg. If you notice an increase in swelling in the lower part of your leg, you must lie down with your operative leg above your heart more frequently.

#### **Household Tips:**

- Maintain clear walkways.
- Do not get down on your knees to scrub floors. Use a mop or long-handled brush.
- Keep often used cooking or working supplies where they can be easily reached.
- Plan ahead by gathering all cooking or working supplies at one time to work on a project.
- Use a high stool or use cushions to provide a better working height.
- Plan rest periods in-between periods of activity.
- Pace yourself; attempting to do too much at one time can leave you exhausted for the rest of the day.
- Note your highest energy time of day to tackle a heavier activity.
- Break down a heavy activity into smaller, more manageable ones.
- Push or pull items instead of carrying them.
- Ask for help when you need it.
- Learn to work smarter, not harder.

NOTE: Many other tips for joint protection, work simplification, energy conservation, and equipment are available from an Occupational Therapist or the Arthritis Foundation. Check your local phone book for an Arthritis Foundation chapter near you.

#### SECTION 5

## **HELPFUL RESOURCES**

#### HEALTHY EATING BEFORE AND AFTER SURGERY

Nutrition is an important part of staying healthy and is especially important for healing after surgery. In preparing for surgery, the following guidelines will help improve your nutrition. This is important in order to speed healing, decrease complications, and return quickly to an active lifestyle.

Eat a variety of foods: Go to www. ChooseMyPlate.gov for help when planning your meals to include all the major food groups.

**Drink Plenty of Fluids:** Make sure you get adequate fluids; six 8-ounce glasses per day are recommended. Check this with your doctor.

Increase Protein Intake: Protein is necessary for the maintenance and repair of body tissues. Good sources of protein include milk and milk products, eggs, meat, poultry, and fish. Vegetable protein sources include soybeans, lentils, garbanzo beans, peanut butter, nuts, and seeds.

#### To increase Protein:

- Add extra chopped or pureed meats to soups, stews and casseroles.
- Add chopped nuts to salads, sandwiches or desserts.
- Use nut butter on celery, apples, bananas, crackers, or toast. Try adding nut butters to cookie recipes or frostings.
- Add powdered milk to a variety of foods such as hot cereals, soups, casseroles, puddings, sauces, gravies, and scrambled eggs.
- Try fruit with yogurt or cottage cheese for an easy nutritious snack.

#### **Increase Iron Intake:**

- It is recommended that your diet include foods high in iron to ensure an adequate blood level. These foods include:
  - Cream of wheat, or other iron fortified cereals such as "Total" (read nutritional labels)

- Meats such as liver, lean red meats, oysters, tuna in oil
- Dried fruit and prune juice
- Dark green leafy vegetables such as broccoli or spinach
- Beans such as navy or kidney beans

#### • If you doctor recommends an iron pill:

- Taking your iron pill on an empty stomach can cause nausea.
- Include an item high in Vitamin C when taking the pill.
- Wait one hour after taking the pill before drinking caffeine drinks such as coffee or tea to ensure good absorption.
- If the iron supplement you are using causes intestinal problems, i.e. constipation, diarrhea, etc., a timerelease type iron supplement may be better tolerated.

Increase Calcium Intake: The health and strength of our bones rely on a balanced diet and a steady stream of nutrients, most importantly, calcium and Vitamin D. Calcium is a mineral that people need to build and maintain strong bones and teeth. It is also very important for other physical functions, such as muscle control and blood circulation. Calcium is not made in the body — it must be absorbed from the foods we eat. To effectively absorb calcium from food, our bodies need Vitamin D.

Calcium Recommended Daily Allowance: Women and men 19 to 50 years old = 1,000 mg; Women and men 50 plus years old = 1,200 mg.

Dietary Sources of Calcium: People can get the recommended daily amount of calcium by eating a healthy diet that includes a variety of calcium-rich foods. Milk, yogurt, cheese, and other dairy products are the biggest food sources of calcium. Other highcalcium foods include: Kale, broccoli, Chinese cabbage (bok choy) and other green leafy vegetables; Sardines, salmon, and other softbone fish; Tofu; Breads, pastas and grains; Calcium-fortified cereals, juices, and other beverages.

Increase Vitamin D Intake: Vitamin D is necessary for strong bones and muscles. Without Vitamin D, our bodies cannot effectively absorb calcium, which is essential to good bone health. Adult recommended daily Vitamin D dietary intake is: Younger than age 50 = 400 to 500 IU Vitamin D daily. Older than age 50 = 2,000 to 5,000 IU Vitamin D daily. Many foods contain some Vitamin D, however, few contain enough to meet the daily recommended levels for optimal bone health. Although our bodies can make Vitamin D in our skin when it is exposed to good sunlight, it is very important to protect our skin by using sunscreen when we are outdoors. This blocks the excessive UV radiation that can cause skin cancer. Sunscreen does, however, also block our skin's ability to make Vitamin D. This is why doctors often recommend Vitamin D supplements for both adults and children.

 Calcium and Vitamin D are essential for good bone health, but must be consumed safely. If you are not sure what intake levels are right for you and your health needs, be sure to talk to your doctor.

## Other Key Nutrients in Bone Health

- Many other nutrients most found naturally and at sufficient levels in a typical diet — contribute to bone health and growth. They include:
  - Phosphorus. A major mineral in the body's bone crystal, phosphorus is found in dairy products and meat.
     Vitamin D improves phosphorus absorption in the intestine and kidney.
  - Magnesium. Primarily found in bone crystals, magnesium improves bone strength. Older adults are more likely to be deficient in magnesium. Calcium supplements that contain magnesium can help.
  - Vitamin K. Necessary for bone formation and mineralization,

- Vitamin K also is important for blood clotting, and may assist in channeling calcium directly to the bone rather than the blood vessels.
- Vitamin C. Collagen is the main protein in bone, and Vitamin C is necessary for collagen synthesis.
   Vitamin C is present in citrus fruits and tomatoes and in many vegetables.
- Vitamin A. Vitamin A is necessary for cells to differentiate normally and for normal skeletal growth, and also is extremely important for eye health. Vitamin A is available in liver, eggs, butter, green leafy vegetables and carrots. Too little vitamin A is a major cause of blindness worldwide. In contrast, too much vitamin A can cause bone loss and increase the risk of hip fracture. The animal source supplements (retinols) may cause toxicity but plant sources (B carotene) do not. Daily intake of retinols should be less than 10,000 IU.

After Surgery: Avoid excessive intake of vitamin K while you are taking the blood thinner medication. The amount of foods rich in vitamin K need to be equally balanced each day. Foods rich in vitamin K include broccoli, cauliflower, brussels sprouts, liver, green beans, garbanzo beans, lentils, soybeans, soybean oil, spinach, kale, lettuce, turnip greens, cabbage, and onions.

#### **Avoiding Constipation**

Constipation can become a problem if you are taking iron and / or pain medicines. After surgery, medications, anesthesia, and immobility can cause constipation. Here are some tips to help with this common problem:

- 1. Drink 6 to 8 glasses of water daily.
- 2. Eat plenty of fruits and vegetables.
- 3. Be aware of your bowel pattern. If you notice changes, take action. If you miss 2 or 3 of your usual movements, or you begin to feel uncomfortable, you may need a gentle oral laxative.
- 4. Eat light meals 2 days prior to surgery.
- 5. Increase activity (gradually) while reducing pain medications.
- Warmed prune juice can help stimulate a movement after surgery.

## Pain Medications Used after Joint Replacement Surgery

Type of Narcotic/Opioid Medication	Short Acting (given based on your reported pain level, usually every 4-6 hours as needed)	Long Acting (usually given every 12 hours)
Morphine (oral)	Morphine Sulfate     Immediate Release	· MS Contin
Oxycodone (oral)	Oxycodone IR - Roxicodone     Oxycodone/Acetaminophen     tablets (Percocet)	· Oxycontin
Hydrocodone (oral)	Hydrocodone/Acetaminophen tablets (examples: Vicodin, Lorcet, Lortab, Norco)	
Dual Action Analgesics (oral)	Tramadol Hydrochloride tablets     Ultram - Ultracet	· Ultram ER
Intravenous Narcotics / Opioids	<ul><li> Morphine</li><li> Dilaudid</li><li> Fentanyl</li></ul>	

# **Side Effects of Medications Used After Joint Replacement Surgery**

Type of Medication	Side Effects
Narcotics/Opioids (Percocet, Norco, Vicodin, Morphine, Dilaudid)	Nausea, vomiting, confusion, constipation, respiratory depression, drowsiness, dizziness, weakness, dry mouth, difficulty urinating, itching, allergic reaction to the narcotic.
General Anesthesia	Nausea, vomiting, dry mouth, sore throat, shivering, sleepiness, mild hoarseness, respiratory depression, confusion, itching, muscle aches, emotional bursts, blurred vision, short term memory loss, allergic reaction to the anesthetic.
Spinal Anesthesia	Itching, back pain, prolonged numbness or weakness, urinary retention, nausea, vomiting, headache, shortness of breath, allergic reaction to the anesthetic.
Blood Thinners (Lovenox, Aspirin, Warfarin	Bleeding, unusual bruising, rarely people may experience hair loss or skin rashes, allergic reaction to the blood thinner.
Antibiotics (Ancef, Vancomycin)	Loss of appetite, stomach pain, nausea, vomiting, diarrhea, yeast infections, skin reactions.
Antinausea/vomiting (Reglan, Zofran)	Drowsiness, dizziness, lightheadedness, and dry mouth.

# Total KNEE and HIP Replacement Strengthening Program



- PHYSICAL THERAPY (PT) Starts on the day of surgery or the morning after, depending on the time of the surgery. Frequency is twice a day until you go home. PT will work on exercises, transfers, gait and stairs, if needed.
- OCCUPATIONAL THERAPY (OT) Starts on post op day 1 (day after surgery). Frequency is once a day. OT will work on activities of daily living such as bathing, toileting, and dressing. Once you have mastered these activities OT will dismiss themselves from your case.
- EXERCISE SAFELY Exercise should not hurt, but should cause muscle fatigue. Start slowly and build up your effort. Exercise at times of the day when you feel the best. Do not hold your breath. Breathe out while working and breathe in while relaxing. Try to count out loud while exercising.
- **STRENGTHENING** All strengthening exercises should be performed at least 3 times per day. Remember to perform each repetition slowly and in a controlled manner. Perform 3 to 6 sets of 10 repetitions.

### **Precautions after KNEE Replacement**

 NEVER place a pillow under your knee as this may cause flexion contractions, or your leg may get stuck in a bent position, and require additional surgery.



 DO NOT stand, plant legs, bend and twist at the same time.



## **Total Knee Replacement Suggestions (Helpful Hints):**

- To help reduce swelling in the lower extremity, elevate the leg above the heart using pillows under the ankle.
- To help reduce pain and swelling, ice for 20 minutes 2 to 3 times a day after stretching / strengthening.
- Roll up a towel or place a pillow under the ankle to help get your knee fully straight.



## **Precautions after Posterior Approach HIP Replacement**

There are three motions and / or positions you must avoid to protect your new hip. These must be restricted until your doctor tells you otherwise.

1. Avoid bending past 90 degrees at the hips.









2. Avoid pigeon-toeing or internal rotation.







3. Avoid crossing your legs.







### **Precautions after Anterior HIP Replacement**

1. Avoid extending hip backwards.

## Strengthening exercises BEFORE surgery

Start right away. The stronger you are before surgery the less likely you are to have complications and weakness after surgery. The exercises should be performed on involved and uninvolved extremities, 3 times a day. Perform 3 to 6 sets of 10 repetitions.

 ANKLE PUMPS - Move foot up and down pumping ankle. A theraband can be used for additional resistance.





2. QUAD SETS - Tighten the muscle on top of your thigh, forcing the back of your knee down into the bed. Hold 10 seconds. Repeat 10 times.



3. GLUT SQUEEZES - Squeeze buttocks together. Hold 10 seconds and then repeat. This exercise can be done lying on your back, sitting in a chair or standing. (You do not need to lie on your stomach to do this exercise.)



4. BICEPS FLEXION - Begin with arm at side, elbow straight, palm up, weight in hand. Bend elbow up. Return slowly to starting position. (You may use weights as tolerated.)





## Strengthening exercises AFTER surgery

The exercises should be performed on involved and uninvolved extremities, 3 times a day. Perform 3 to 6 sets of 10 repetitions.

### **KNEE Replacement Strengthening Exercises AFTER Surgery:**

- 1. Ankle Pumps- (see page 34 for picture and description)
- 2. Quad Sets- (see page 34 for picture and description)
- 3. Gluteal Squeezes- (see page 34 for picture and description)
- 4. Bicep Curls- (see page 34 for picture and description)
- 5. **Passive Knee Flexion-** Gently push involved leg back until you feel a stretch. With good leg underneath involved leg, slowly straighten leg out.





6. Passive Knee Extension Stretch- Sit in bed or on the edge of a chair or sofa. Two kitchen chairs of the same height facing one another will also work for this exercise. Place a small rolled towel under your heel. Use a slow, sustained push with the hands downward on the thigh muscles above your incision and hold for 30 seconds. Lean forward at the hip and pull your toes and ankle back towards your head so that you feel a stretch down the back of the thigh and calf.





## **Strengthening exercises AFTER surgery**

#### **HIP Replacement Strengthening Exercises AFTER Surgery:**

- 1. Ankle Pumps- (see page 34 for picture and description)
- 2. Quad Sets- (see page 34 for picture and description)
- 3. Gluteal Squeezes- (see page 34 for picture and description)
- 4. **Bicep Curls-** (see page 34 for picture and description)
- 5. **Hip Abduction (Supine)** Lie on back on firm surface, legs together, but not crossing midline. Move leg out to the side keeping knee straight. Return to start position.





## **Physical Therapy Goals for Discharge**

- Safely transfer from bed to chair, etc.
- Know your precautions
- Safely walk with walker
- Able to ascend and descend steps with assistance, if you have stairs
- Independent with home exercise program
- Bend Knee 90 degrees or greater (Knee Replacement only)
- Extend / Straighten Knee 0 degrees or greater (Knee Replacement only)
- Pain manageable

## **PVHMC Outpatient Physical Therapy and Rehabilitation Sites:**

POMONA 1798 North Garey Avenue • 909.865.9810
CHINO HILLS 2140 Grand Avenue, Suite 100 • 909.630.7878
CLAREMONT 1601 North Monte Vista Ave., Suite 220 • 909.865.9104
COVINA 420 West Rowland Street • 626.251.1361
LA VERNE 2333 Foothill Boulevard • 909.392.6511

Once you receive orders for Outpatient Physical Therapy, call the above number of the site you wish to attend therapy at and they will get you started on your outpatient program.

#### RESOURCES FOR JOINT REPLACEMENT PATIENTS

#### **IN-HOME CARE RESOURCES**

Check with your insurance company to see if your insurance plan will cover in-home care or a portion of the costs. Your insurance company may be contracted with certain companies.

#### **Visiting Angeles**

131 E. Foothill Blvd Glendora, Ca 91741 Phone # 626 852-5569 www.visitingangels.com

Service Area: Glendora, Covina, San Dimas and Monrovia and surrounding areas

#### **Comfort Keepers**

420 W Baseline Rd Claremont, Ca 91711 Phone # 909 417-0021 www.comfortkeepers.com

Service Area: Claremont, Upland and La Verne and surrounding areas

#### **Motherly Comfort Home Care**

1092 E 9th St.
Upland, Ca 91786
Phone # 909 640-3311

www.motherly comforthome care.com

Service Area: Claremont, Rancho Cucamonga, San Bernardino and Riverside

#### **Angel Care**

12960 Central Avenue Suite E Chino, Ca 91710 Phone # 909 591-2777 www.angelcareonline.com

Service Area: San Bernardino, Orange, and Riverside Counties in California

#### TRANSPORTATION RESOURCES

Check with your insurance company to see if your insurance plan will cover transportation. Enrollment in these services can take time. Call as soon as you think you may require such services.

#### **Riverside Transit Agency**

P.O. Box 59968 1825 3rd Street Riverside, CA 92517-1968 951.565.5002

#### **Access Transportation**

800.883.1295 www.assessla.org

#### **Dial-A-Ride**

Area: Claremont, La Verne, San Dimas 909.596.7644

#### **Dial-A-Ride**

909.623.0183 Area: Pomona

### Pomona Transportation Authority

909.596.7664

#### **Foothill Transit**

800.743.3463 www.foothilltransit.org

#### **Get-A-Bout**

www.pvtrans.org/asp/Site/GetAbout/index.asp

## **Metropolitan Transportation Authority** (MTA)

1 Gateway Plaza Los Angeles, CA 90012 Public Transportation

### **MEAL RESOURCES**

Enrollment in these services can take time. Call as soon as you think you may require such services.

#### **Meals on Wheels- Claremont**

845 E. Bonita Avenue Pomona, CA 91768 Phone: 909.621.4018

#### Meals on Wheels - Montclair

5111 Benito Street Montclair, CA 91763

#### Meals on Wheels - Riverside

4845 Brockton Ave. Riverside, CA 92506 Phone: 951.683.7151

### **IMPORTANT PHONE NUMBERS**

Ana Marrero APRN, NP-C, ONC
Nurse Practitioner
909.630.7815
ana.marrero@pvhmc.org

Pomona Valley Hospital
Medical Center
Main Hospital Line
909.865.9500

Ortho Floor 909.865.9605

Joint Replacement Preparation Class Scheduling Line 909.630.7403

Pre Admit Testing (PAT) Unit 909.865.9546

Hospital Billing Office 909.865.9100

Surgery Scheduling Nurse 909.865.9894

Patient Relations Department 909.865.9585

**Sharps and Medication Disposal Information Website:** 

http://www.calrecycle.ca.gov/ FacIT/Facility/Search.aspx

Please note the plan of care described in this guidebook may change based on your progress in the hospital.



#### **Pomona Valley Hospital Medical Center**

(Type and Screen Lab Draw and Surgery Location) 1798 North Garey Ave. • Pomona, CA 91767

#### **Directions:**

#### From the 10 Freeway east of hospital:

10 Fwy West, exit Garey Ave (brings you to Orange Grove Avenue. Continue straight at end of off ramp onto Artesia Ave. Right onto Garey Ave (2nd stop light). Right onto Willow (1st stop light). Right at stop sign into parking lot. Hospital main entrance immediately on your left.

#### From the 10 Freeway west of hospital:

10 Fwy East, exit Garey Avenue. Left onto Garey Avenue. Right on Willow (1st stop light). Right at stop sign into parking lot. Hospital main entrance immediately on your left.

#### **Robert and Beverly Lewis Outpatient Pavilion**

(Pre-Admit Testing and Total Joint Preparation Class Location)
(Located on Main Hospital Campus)

#### **Directions:**

#### From the 10 Freeway east of hospital:

10 Fwy West, exit Garey Ave (brings you to Orange Grove Avenue. Continue straight at end of off ramp onto Artesia Ave. Right onto Garey Ave (2nd stop light). Right onto Willow (1st stop light). Left at stop sign into parking lot. Park on right side of parking lot near the 3 story building.

#### From the 10 Freeway west of hospital:

10 Fwy East, exit Garey Avenue. Left onto Garey Avenue. Right on Willow (1st stop light). Left at stop sign into the parking lot. Park on right side of parking lot near the 3 story building.





Expert care with a personal touch