



# Preparing For Your Knee Replacement

## Pre-Op Instructions & Exercises to Enhance Your Recovery

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## **What is Total Knee Replacement?**

Total knee replacement (TKA) is a surgical procedure referred to as a knee arthroplasty. Worn, diseased, or damaged surfaces of a knee joint are removed and replaced with artificial components. In this procedure, the joint surfaces of the tibia and the femur are involved. The artificial joint or “prosthesis” generally has two components; one made of metal, which is usually cobalt-chrome or titanium. The other component is a plastic material called polyethylene. The new joint works much like a natural knee. However, until it heals, your new knee will have limited movement and function. You may also have some discomfort. However, having a new knee means you’ll no longer experience arthritic pain in that joint, and in time, you can return to activities that you enjoy.

## **Prepare ahead for recovery**

The recovery process can be aided by planning ahead by practicing exercises and use of a walker or crutches before surgery, and making modifications in your home.

Tips/Recommendations:

- Add pillows to low chairs to assist you with standing up, or purchase risers for under legs of chairs.
- Remove throw rugs, electrical cords, and other obstacles.
- Store commonly used items within reach, between waist and shoulder level
- Use non-slip bath mats on floors
- Use an elevated toilet seat or commode. (Check Senior center loan closet, or purchase from Healthcare Accessories.)
- Sit on a bath bench or shower chair while you bathe. (Check Senior center loan closet, or purchase from Healthcare Accessories.)
- Use a hand held shower head for easier bathing.
- If bedroom is upstairs, consider sleeping in a “main floor” bed temporarily.
- You will be utilizing an assistive device (walker or crutches) for walking for a period after surgery. You may want to purchase this ahead of time from HCA or borrow from the senior citizen loan closet.

## **Post-Operative Concerns**

- Bruising/discomfort/swelling: this will likely increase when you get home. Continue ice and elevation. Some difficulty sleeping
- Constipation associated with pain meds. Communicate needs to physician, consider stool softeners, prune juice, etc.
- The “blahs”: poor stamina with rapid fatigue, decreased appetite. Monitor health.
- Use ice/cold packs 15-20 min 3-5x/day; elevate leg above heart with pillows. If you received a cryo cuff ice cooler, use as instructed on cooler instructions, or by therapist in hospital.

## **Preparation for your hospital stay**

- Take rubber soled shoes that are easy to take on and off. It is better to have a good fitting slip-on rather than lace up/tie shoes. Take into consideration your foot may be swollen after surgery. Make sure the shoe offers a decent back (heel counter) to support your heel.
- Take the name and number of your family doctor and pharmacy.
- You will receive Physical & Occupational Therapy during your hospital stay. Usually you will need Physical Therapy after you are discharged from the hospital.
- Your length of stay is determined by your Orthopedist and the treatment team. You will be discharged once your goals are met and your treatment team has deemed you safe to return home. Your discharge plans will be under constant review and communicated to you clearly on an ongoing basis during your stay.
- If you are unable to return home (ie. Limited walking ability, unable to do stairs, unable to get in and out of bed) consider a Rehab of stay either 1-2 weeks at JRMC Swingbed, or 1-2 months at local Skilled nursing facility for Rehab. Home Health is also an option if you have nursing needs, and need ongoing rehab and are home bound.

## **Your Pre-Operative Exercise Program**

The better prepared you are before surgery, the easier your rehabilitation will be. The preparatory exercises give you strength and skills you will need after surgery and can improve your general fitness and how you feel before surgery. It is important to build muscles in your arms as well as your legs in order to support your weight while using a walker or crutches. **For your benefit, make your recovery quicker and more comfortable by performing the following exercises.**

The following exercise program is designed to build strength and ease your recovery. Unless instructed otherwise by your Physical Therapist, try to perform each exercise 5-10 repetitions each once daily. Then increase to a total of 30 repetitions or 3 sets of 10, 1-2 times daily.

Call your Physical Therapist if:

- Any exercise causes increased pain or swelling in your knee or any other joint or area of your body.
- You are not sure how to safely perform the exercises.
- If you have any further related questions or concerns regarding your program.

**Discontinue any exercise if it causes sharp or increased pain, dizziness, chest pain, shortness of breath, or any unusual symptoms and contact your physician.**

This program is designed to assist you in regaining your mobility and strength following surgery.

Jamestown Regional Medical Center offers an extensive outpatient rehab program. Please call with questions.

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## Long Sitting Ankle Pumps

REPS: 10-30 | WEEKLY: 7x | DAILY: 2x

### Movement

- Slowly pump your ankles by bending your feet backward and forward.
- You can do this seated or lying on your back.

### Tip

- Try to keep the rest your legs relaxed while you move your ankles.



## Supine Quad Set

REPS: 10-30 | HOLD: 5 | WEEKLY: 7x | DAILY: 2x

### Setup

- Begin with your surgical leg straight with your knee resting on a towel roll.
- You can do this lying on your back (as shown) or sitting up.

### Movement

- Gently squeeze your thigh muscles, pushing the back of your knee down into the towel.



## Supine Isometric Hamstring Set

REPS: 10-30 | HOLD: 5 | WEEKLY: 7x | DAILY: 2x

### Setup

- Begin with surgical leg bent.
- You can do this lying on your back (as shown) or sitting up.

### Movement

- Gently press your heel into the ground. Without moving your leg, contract your muscles as if you were pulling your heel toward your buttock.

### Tip

- Make sure not to arch your low back during the exercise.

STEP 1



STEP 2



## Supine Heel Slide

REPS: 10-30 | WEEKLY: 7x | DAILY: 2x

### Setup

- Begin with your legs straight.
- You can do this lying on your back (as shown) or sitting up.

### Movement

- Slowly slide one heel toward your buttocks, until you feel a stretch in your surgical knee or upper leg, then slide it back out and repeat.

### Tip

- Make sure not to arch your low back or twist your body as you move your leg.

STEP 1



STEP 2



## Supine Knee Extension Strengthening

REPS: 10-30 | WEEKLY: 7x | DAILY: 2x

### Setup

- Begin lying on your back with your surgical knee resting on a bolster or towel roll.

### Movement

- Straighten your surgical knee by contracting your thigh muscles, keeping the back of your knee on the ball.
- Lift and lower your leg slowly.

### Tip

- Make sure not to arch your back during the exercise.

STEP 1



STEP 2



## Supine Straight Leg Raises

REPS: 10-30 | WEEKLY: 7x | DAILY: 2x

### Setup

- Begin lying on your back on a bed or flat surface with your surgical leg straight and your other leg bent.

### Movement

- Pull your toes toward your body, keeping your knee straight, and slowly lift your surgical leg off the bed until it is close to parallel with your other thigh. Hold briefly, then lower it back down to the starting position and repeat.

### Tip

- Make sure to keep your thigh muscles tight and your knee straight. Do not turn your foot or hip in or out during the exercise.

STEP 1



STEP 2



## Supine Hip Abduction

REPS: 10-30 | WEEKLY: 7x | DAILY: 2x

### Setup

- Begin with your legs straight.

### Movement

- Move your surgical leg out to the side as far as you can without bending at your side.

### Tip

- Make sure to keep your toes pointed up.

STEP 1



STEP 2



## Seated Passive Knee Extension

HOLD: 60 | WEEKLY: 7x | DAILY: 2x

### Setup

- Begin sitting upright in a chair with another chair or sturdy surface in front of you. You could also roll up a towel and place it under your ankle.

### Movement

- Slowly place the heel of your foot of your surgical leg on the chair in front of you so that your leg is as straight as possible and hold this position, relaxing the knee to let it stretch.

### Tip

- Make sure to keep your toes pointing toward the ceiling and keep your leg as relaxed as possible during the stretch.

STEP 1



STEP 2



## Seated Active Assistive Knee Extension and Flexion Foot on Floor

REPS: 10-30 | WEEKLY: 7x | DAILY: 2x

### Clinician Notes:

You should feel a stretch or pull in the surgical knee or above this on the thigh.

### Setup

- Begin sitting upright in a chair or on the edge of a bed.

### Movement

- Slide your foot of the surgical leg forward and backward on the floor to bend knee gently.