Total Knee Replacement



Using This Guide

This guide is designed to educate you and your family about what to expect throughout your surgical experience. It seeks to prepare you for what's ahead and to help you understand some of the steps that can be taken to improve your odds for a successful recovery. We encourage you and your caregivers to use this book as a source for pre-surgical preparedness and post-surgical rehabilitation.

This total knee replacement surgical guide belongs to

Table of Contents

- 5 Your Guide to a Successful Recovery
- 6 The Care Navigator
- 8 Pre-Operative Care
- 9 Pre-Operative Care Checklist
- 9 Scheduling Your Surgery
- 11 One to Two Weeks After Scheduling Surgery
- 11 Three to Six Weeks Before Surgery
- 12 One to Two Weeks Before Surgery
- 14 Night Before and Day of Surgery
- 14 What to Bring to the Hospital
- 15 Showering/Preparing Your Skin Before Surgery

16 Hospital Care/Discharge Planning

- 17 Day of Surgery
- 18 Controlling Your Pain
- 19 Day After Surgery: Post-Op Day One
- 19 Criteria for Discharge
- 19 Coach's Discharge Checklist
- 20 Know Your Zone
- 21 Discharge Instructions

22 Post-Operative/Home Care

- 23 What You Can Do at Home
- 23 Dressings
- 23 Caring for Your Incision
- 23 Control Your Discomfort
- 23 Body Changes
- 23 Total Knee Arthroplasty Protocol (TKA)— Single and Bilateral
- 24 Blood Clots in Legs (DVT)
- 24 Blood Clots in Lungs
- 24 Decrease Your Risk of Falls
- 25 Post-Op Guide and Goals

26 Appendix A – Exercises

- 27 Arm-Chair Push-Up
- 27 Seated Long Arc Quad
- 28 Active Straight Leg Raise with Quad Set
- 28 Supine Ankle Pumps
- 29 MedBridge GO Overview

30 Appendix B – How to Move After Surgery

- 31 Lying in Bed
- 31 Standing Up From a Chair
- 32 Transfer—Bed
- 33 Transfer—Tub
- 34 Transfer—Toilet
- 34 Transfer—Automobile
- 35 Stair Climbing
- 35 Walker Ambulation

36 Appendix C-Advance Directives

- 37 Exercise Your Right to Put Your Health Care Decisions in Writing
- 37 What Are Advance Medical Directives?
- 37 Types of Advance Directives

38 Appendix D-Medications

- 39 Anesthesia
- 39 Blood Thinners
- 40 Appendix E-Nutrition
- 42 Our Health Equity Promise

Your Guide to a Successful Recovery

Preparation, education and a pre-planned discharge are very important for joint replacement surgery.

This guidebook was made to help you understand:

- · What to expect through every step of your surgery process
- What you will need to do before and after surgery
- How to care for your new joint

Remember, this is just a guide. Your care navigator, physician, physician's assistant, nurses or therapists may add to or make changes to any of the suggested care plans. Always use their recommendations first and ask questions if you are unsure of any information. Keep your guide as a handy reference for at least the first year after your surgery.

Patient Name

Surgery Date

Post-Surgical Appointment Date ____

Please bring this book with you to:

- Every office visit
- Your hospital pre-op class
- The hospital upon admission
- · All outpatient rehab appointments, home health visits or nursing home



The Care Navigator

Your care navigator is dedicated to guiding patients through their journey to orthopedic health. Our whole-person approach to care is designed to help you take your health—and your happiness—into your own hands. It's not just about healing what's wrong, it's about celebrating what's right and helping you create a life of better health, more joy and less stress. Through each new challenge and triumph, your navigator is there for you and your loved ones—dedicated to your whole recovery.

What is an orthopedic care navigator?

An orthopedic care navigator is a specially trained, registered nurse who provides expert clinical assistance and support to patients who are receiving care at AdventHealth. This confidential service is free of charge and available to all orthopedic patients.

You're not alone. We're here to help.

The orthopedic care navigator is here to ensure you receive the care you need when you need it. They are an advocate during your orthopedic health journey and will guide you through the diagnosis and treatment of your orthopedic issues. Your navigator provides the following services tailored to your individual needs.

- · Serves as the clinical liaison between you and your health care team
- Acts as a patient advocate through the surgical process and hospitalization
- · Coordinates the pre-surgical joint replacement class
- · Educates the patient on their diagnosis and treatment options
- Oversees the entire care process to help answer questions and ease patient concerns after surgery
- · Provides education on the process and expectations of recovery



PRE-OPERATIVE CARE

9 PRE-OPERATIVE CARE CHECKLIST

9 SCHEDULING YOUR SURGERY

- 9 Obtain Medical Clearance
- 9 Pre-operative Testing

11 ONE TO TWO WEEKS AFTER SCHEDULING SURGERY

11 Exercises, Goals and Activity Guidelines

11 THREE TO SIX WEEKS BEFORE SURGERY

- 11 Stop Smoking
- 11 Eat Right
- 11 Pre-Registration

12 ONE TO TWO WEEKS BEFORE SURGERY

- 12 Pre-Admission Testing
- 12 Pre-Operative Visit to Surgeon
- 12 Stop Medications that Increase Bleeding
- 12 Prepare Your Home for Your Return from the Hospital
- 13 Suggested Environments to Consider

14 NIGHT BEFORE AND DAY OF SURGERY

- 14 Special Instructions
- 14 Night Before Surgery
- 14 Morning of Surgery

14 WHAT TO BRING TO THE HOSPITAL

15 SHOWERING/PREPARING YOUR SKIN BEFORE SURGERY

15 Instructions for Pre-Operative Showers with a Chlorhexidine Prep Solution (Hibiclens)

Pre-Operative Care Checklist

Before your surgery will be scheduled:

Obtain medical clearance from primary care physician and any specialist as required. Please provide all clearance information to the orthopedic surgeon's office. Also, please keep a copy for your own records.

Within 1 to 2 weeks after receiving your surgery date:

- Begin pre-operative exercises located in
 Appendix A. These should be done twice a day.
- Attend a pre-operative education class with your care navigator. It is recommended that you also have your coach attend this education class with you.

3 to 6 weeks prior to surgery:

- Stop smoking.
- Maintain good oral hygiene.

1 to 2 weeks prior to surgery:

- Stop all medications that can increase bleeding as instructed by your physician.
- O Attend your pre-operative appointment with the surgeon's office, if applicable.
- O During the pre-operative testing/pre-registration appointment with the hospital, please have your insurance cards and your prescription card available, if it is different from your insurance card.
- Prepare your home for your return from the hospital.

Night before and the day of surgery:

- Wash with surgical soap (chlorhexidine) using the instructions in this guide.
- Do NOT eat or drink anything after midnight, unless instructed by your surgeon.
- Arrive at the hospital on time and report to surgical check-in.

Scheduling Your Surgery

OBTAIN MEDICAL CLEARANCE

If medical clearance is required, you must obtain it **before your surgery is scheduled.** Also, if recommended by the surgeon or primary care physician, you may be required to obtain clearance from a specialist, such as your cardiologist, pulmonologist, etc., prior to your surgery being scheduled.

PRE-OPERATIVE TESTING

If your pre-operative testing was completed with your primary care physician, please bring a copy of your test results to your pre-operative appointment. If the lab tests were performed more than 30 days before your surgery date, new labs must be drawn at the pre-operative testing appointment.



One to Two Weeks After Scheduling Surgery

FOR EXERCISES, GOALS AND ACTIVITY GUIDELINES-SEE APPENDIX A

Under the guidance of your surgeon, it may be recommended that you perform pre-operative exercises or attend physical therapy prior to your surgery.

There is a picture guide of the exercises in **Appendix A.** Please let the care team know during the pre-operative class if you need further guidance on completing these exercises.

STOP DOING ANY EXERCISE THAT IS TOO PAINFUL!

Three to Six Weeks Before Surgery

STOP SMOKING

It is very important to stop smoking before your surgery. Smoking makes it harder to get oxygen to your repaired joint, which is vital in the healing process. All products that contain nicotine should be stopped, including cigarettes, nicotine gum, patches and vaporizers. Smoking is not allowed in the hospital or anywhere on hospital property. If you are a smoker, now is the time to stop to ensure the best possible outcome from your surgery.

Tips for Quitting Smoking

- Make a list of reasons why you want to quit smoking. Keep it handy and look at it often.
- Stick to the date you decide to quit smoking.
- Make a list of things that make you want to smoke.
- Think of ways to change the triggers that make you smoke.
- Set goals for yourself, such as going for a day, a week or more without smoking. Reward yourself when you are successful.
- Join a quit smoking group.

The state of Florida has many tips and resources to help you quit smoking at TobaccoFreeFlorida.com.

If you do not quit the first time, keep trying. Many people have to try more than once before they stop smoking for good. If you need help to quit smoking, please contact your care navigator. They will be able to guide you to the best resources.

EAT RIGHT

See Appendix E for a guide on eating healthy and preparing for surgery.

PRE-REGISTRATION

You will need to pre-register for your hospital visit.

During pre-registration you may be asked for:

- Driver's license or photo I.D.
- · Insurance cards and prescription insurance card
- Employer address and phone number
- Any co-payment required by the insurance company
- Emergency contact phone number and address

One to Two Weeks Before Surgery

PRE-ADMISSION TESTING

- You will have a pre-operative testing appointment before your surgery.
- Please note that you must pre-register before this appointment.

PRE-OPERATIVE VISIT TO SURGEON

- The pre-operative testing department will complete lab work or tests ordered by your surgeon and review your medication information.
- During this appointment, please be prepared to answer questions about your past medical history and current medications.

You may be scheduled for an appointment in your surgeon's office before your surgery. This will serve as a final check-up and a time to ask any questions that you might have.

STOP MEDICATIONS THAT INCREASE BLEEDING*

Stop all anti-inflammatory medications such as aspirin, Motrin, Naproxen, Vitamin E, fish oil, etc., as your doctor instructs. These medications may cause an increased risk of bleeding.

*If you are taking a blood thinner, you will need special instructions for stopping the medication by the prescribing physician.

PREPARE YOUR HOME FOR YOUR RETURN FROM THE HOSPITAL

1. Preparing you and your home prior to surgery

- Remove any nail polish and acrylic nails from your hands and feet.
- Prepare meals and freeze them in single-serving containers.
- Clean, do laundry and put it away.

2. Arrangements

- Arrange for someone to collect your mail, empty trash and take trash to/from curb.
- Arrange for someone to care for pets (i.e. walk the dog, empty litter boxes, give food/water).

3. Check your home for obstacles

- Remove throw rugs and tack down loose carpet.
- Remove electrical cords and other obstructions from walkways/hallways.
- Check to see if your bathroom needs grab bars. DO NOT USE SUCTION BARS as these may dislodge from the wall and cause you to fall.
- Assess stairs—if there is more than one step with no railing, consider having one installed.
 Bilateral total knee replacement patients
 MUST have a railing.
- Find appropriate chairs in which you can sit. The chairs you choose should be firm. The seat should be higher than the back of your knee. It should also have arms to help you get up and down, and should not have wheels or swivel.

- Put clean linens on the bed.
- Cut the grass, tend to the garden, and finish any other yard work.
- Install night lights in bathrooms, bedrooms and hallways.
- Arrange for someone to help complete heavy housework (vacuuming, mopping) and general housework.
- Arrange for someone to do your grocery shopping.
- Check the height of your bed. Is it too high? Too low? Is there enough space around the bed to maneuver a walker?
- Look at the layout of your bathroom.
 Will the space around your toilet accommodate a 3-1 commode approximately 19" x 28"? (Measure the interior of your tub, if there is no other shower available, and also take into account the "curvature" of the tub. The chair needs to sit flat in the tub for safety.)

SUGGESTED ENVIRONMENTS TO CONSIDER

Work

What does your job require your body to do (standing for too long, lifting, bending, etc.)? What body positions does it put you in? What type of chair do you have (casters/wheels)?

Places of worship

Pews or theater-style seats may be too low and may not have handicap-accessible bathroom stalls. Are there other chair options?

Favorite restaurants

Seats, chairs with casters, chairs vs. booths, accessibility of toilets

Homes of friends or family members' home you frequently visit

Do they have stairs/steps, even if you don't? Are there appropriate chairs to sit in? What about a secondary residence to which you might be returning or vacationing?

Fitness centers (or home gyms)

What type of work-out routine do you do? What machines/equipment are used?

Movie theatres, concert halls, hair dresser/barber shop, and more



Night Before and Day of Surgery

SPECIAL INSTRUCTIONS

You will be instructed by your physician about medications, skin care, showering, etc.

- DO NOT take medication for diabetes on the day of surgery.
- Please take medications the morning of surgery only as directed by your physician or pre-admission nurse.
- Pack a suitcase with clothes for your hospital stay. Loose-fitting clothing is preferred; no long pants.

NIGHT BEFORE SURGERY

Do Not Eat or Drink

• Do not eat or drink anything after midnight, unless instructed by your surgeon.

Showering

• You will need to shower with Chlorhexidine Prep/Hibiclens as instructed by your surgeon. See next page for instructions.

MORNING OF SURGERY

Do Not Eat or Drink

• Do not eat or drink anything after midnight, unless instructed by your surgeon. You cannot have chewing gum, hard candy or mints.

Showering

• Do not bathe with soap or shampoo. Use the Chlorhexidine Prep again. See following page for instructions.

What to Bring to the Hospital

- Personal hygiene items are available at the hospital. Please make sure you pack shorts, tops and non-skid flat shoes or tennis shoes.
- You may bring a laptop, iPad/tablet, e-reader and cell phone to your inpatient room after surgery. However, staff cannot be held responsible for valuables during your stay.
- Bring any available assistive devices (rolling walker/front-wheeled walker/etc.) to the hospital so we may inspect them for safety and adjust them to fit your height.
- You must also bring the following to the hospital:
 - A copy of your Advance Directives (See Appendix C for information)
 - Your insurance card, prescription card, driver's license or photo I.D., and any co-payment required by your insurance company.
- A list of any medications you have taken within the last 30 days including prescription, over the counter, and any herbal supplements.
- CPAP or Bi-PAP machine if needed

Note: Please leave your suitcase, tote bag and/or personal belongings in the car. Your family/friend can retrieve these once you are admitted to your inpatient room after your surgery.

- Please leave jewelry, valuables and large amounts of money at home.
- Do not shave your leg or groin within 48 hours of surgery on the surgical leg.
- No chewing gum, hard candy or mints after midnight.

- Arrive on time. If you are late, it could result in having to move your surgery to a much later time.
- Do not wear any powder, deodorant or lotion. You may wear light makeup if you choose.

Showering/Preparing Your Skin Before Surgery

INSTRUCTIONS FOR PRE-OPERATIVE SHOWERS WITH A CHLORHEXIDINE PREP SOLUTION (HIBICLENS)

Evidence shows that pre-operative showers with an antiseptic solution can reduce the risk of infection at the surgical site. These showers decrease the amount of normal bacteria on your skin, thus reducing the risk of infection.

You will perform these showers as instructed by your surgeon.

Take a shower and wash your entire body in the following manner:

- For the first shower, wash and rinse your hair first using your normal shampoo. Make sure you completely rinse the shampoo from your hair and body. Do not wash your hair with your last shower and any additional showers.
- Wash your face with your regular soap or cleanser and rinse completely.
- Turn the shower off.
- Apply the antiseptic solution to a wet, clean washcloth and lather your entire body from the neck down.
- Never use the antiseptic solution near your eyes or ears. DO NOT apply to your face, hair or groin area.

- Gently wash your body and focus on the areas where the incision(s) will be located for three minutes. Avoid scrubbing your skin too hard.
- Once you have completed the scrub, wait three minutes. Turn the shower on and rinse the antiseptic solution off of your body completely.
- Do not wash with regular soap and shampoo after you have used the antiseptic solution.
- Pat yourself dry with a clean, freshly washed towel.
- After the last shower before surgery, DO NOT apply powders, deodorants or lotions.
- Dress in freshly washed clothes. Sleep in freshly washed sheets and linens the night before surgery.

HIBICLENS can be purchased from the following stores: Walgreens, CVS, Wal-Mart.



HOSPITAL CARE/ DISCHARGE PLANNING

17 DAY OF SURGERY

- 17 Before Surgery, in the Pre-Op Unit
- 17 Immediately After Surgery
- 17 After Surgery

18 CONTROLLING YOUR PAIN

- 18 Local Anesthetic
- 18 Type of Pain Medication
- 18 Alternative Pain Measures
- 18 Pain Scale
- 19 DAY AFTER SURGERY: POST-OP DAY ONE
- **19 CRITERIA FOR DISCHARGE**
- **19 COACH'S DISCHARGE CHECKLIST**
- 20 KNOW YOUR ZONE
- **21 DISCHARGE INSTRUCTIONS**

Day of Surgery

BEFORE SURGERY, IN THE PRE-OP UNIT

You will be asked to put on a hospital gown and your clothes and shoes will be placed in a belongings bag.

We will check your temperature, blood pressure, heart rate and breathing rate, as well as conduct safety checks including verifying your site of surgery and evaluating your risk for falls.

You may be provided additional skin preparation.

For information about the different types of anesthesia and what to expect before, during and after your surgery, please refer to **Appendix D.**

IMMEDIATELY AFTER SURGERY

You will be taken to a recovery area (PACU – Post Anesthesia Care Unit). During this time, pain control is typically established, and your vital signs are monitored. You can expect to have the following equipment:

- Sequential compression devices (SCD) used to prevent blood clots
- Incentive spirometer used to prevent pneumonia
- Cold therapy compress used to prevent swelling
- TED hose used to prevent blood clots and minimize swelling

Family visitation is limited in the recovery room, but the recovery team will keep your family updated on your progress. The recovery time can vary for every patient. During this time, your surgeon will speak to your family member to update them on your surgery.

AFTER SURGERY

- You should also begin using your incentive spirometer and doing the deep breathing exercises that you learned in class.
- You can expect to be assisted out of bed and walk with assistance.
- You will be receiving medication for pain, as needed.
- It is very important that you begin ankle pumps on this first day. This will help prevent blood clots from forming in your legs.



Ankle pumps: Flex foot. Point toes. Repeat.

Controlling Your Pain

Having pain is normal when recovering from surgery. Your dedicated health care team is here to control your pain so you can actively participate in your recovery through breathing exercises, getting out of bed and physical exercise.

Everyone feels pain differently. Your nurses will ask you to rate your pain on a scale from zero to 10, with zero being no pain and 10 being the worst pain you can imagine. Your nurse will also ask you to identify a goal for pain for you to participate in your recovery and daily activities like bathing, eating and talking with your family and friends.

Remember, some pain is normal during recovery; zero may not be an achievable goal.

Your nurses and care team are very dedicated to keeping you comfortable and controlling your pain during your stay. Nurses will check on you hourly during their rounds from 6 am to 10 pm and every two hours between 10 pm and 6 am. If you have any questions, please talk to your nurse.

LOCAL ANESTHETIC

A local numbing medicine may be utilized by your doctor during surgery. This will reduce your pain and ensure that you are able to do your exercises. The effects of this numbing medicine will wear off.

TYPE OF PAIN MEDICATION

You may receive a combination of medications that work together to provide maximum pain relief. Your nurses will describe any new medications to you, including what they are for and any side effects you may experience. Tell your nurse if you experience any side effects from your medications.

Oral medication is medicine given in pill form. Your surgeon may prescribe pain pills on a scheduled basis around the clock or they may be prescribed as needed.

ALTERNATIVE PAIN MEASURES

The pain after your surgery will lessen as you recover. Additional therapies may be used to help control your pain:

- Cold therapy is used to lessen pain and also decrease swelling.
- Positioning you for comfort.
- Providing distractions like soothing music, prayer, deep breathing or relaxation.

Your nurses can assist you in using these therapies to reach maximum comfort.

Members of your care team will ask you to describe your pain. You can use a pain scale of 0–10 with 0 being no pain and 10 being unbearable pain. You may also choose a "face" that matches how you are feeling. Important: You must let your nurse know early if you are having pain so they can intervene early to provide you the best relief.



PAIN SCALE

Day After Surgery: Post-Op Day One

Your morning will start early.

- Labs will be drawn
- Vital signs taken
- Bathing/dressing with help
- Help out of bed and into a chair

- · Visit from surgeon or physician's assistant
- Physical therapy assessment
- Walking with physical therapist
- · Occupational therapy assessment when indicated

Criteria for Discharge

Patients are discharged once medically and surgically cleared. Please make sure that your coach is available to provide transportation home.

You will be able to go home when you have met the following criteria:

- Cleared by physical therapy for safety
- Cleared by the orthopedic team

- Pain is managed
- Cleared by the medical doctor

Coach's Discharge Checklist

Coaches, are you ready for discharge day?

Before patient discharge, we want to make sure you know how to help the person you are coaching. Check if you feel comfortable with the following:

- What blood thinner is your loved one going home on? Does it need monitoring? If so, when and where? (See Appendix D)
- □ Is there a surgical dressing? If so, when does it need to be changed?
- □ What are the signs and symptoms of infection?
- Do you know how to put on the TED hose?

- Do you have the instructions for the On-Q pump, if the patient has one?
- How should you assist the patient in and out of bed?
- □ What exercise program should the patient follow at home?
- How should you assist the patient up and down stairs?

If you have any questions or concerns, please do not hesitate to ask a member of the Joint Care Team prior to discharge.

Know Your Zone

Daily Check

- Continue to take your medications as prescribed, such as blood thinners, pain medications and stool softeners.
- Eat a balanced diet.
- Do your exercises as prescribed by your therapist.
- Walk several times a day using a walker or cane as instructed by your physician.
- Continue doing your breathing exercises.
- Apply cold therapy as directed by your surgeon.

Green Zone

Your symptoms are under control if:

- Incision is clean and there is minimal to no drainage
- Have mild pain controlled with medications
- Able to bear weight on your surgical leg
- Can complete exercises and activities of daily living
- Are not experiencing shortness of breath, chest pain
 or fever
- Have regular frequency in bowel movements

Yellow Zone

Call your surgeon's office if:

- Have more swelling or pain than normal since surgery (It is not unusual to have swelling for up to six months after surgery.)
- Have a fever greater than 101°F
- Have drainage, redness or odor at the incision site
- Experience calf tenderness, swelling or warmth in either leg
- · Unable to walk or put weight on your leg
- New numbness or tingling

Call your health care provider if:

- · You notice excessive bruising or bleeding
- You are having nose bleeds
- You are bleeding from the gums or see blood in your urine or stool
- Its difficult to urinate or you are unable to have a bowel movement for three consecutive days or longer

Red Zone

If you experience any of the following:

- Severe shortness of breath at rest or sudden wheezing
- Pale, gray or blue skin color
- Chest pain
- · Coughing up blood

- Rapid heart rate
- Trouble speaking
- Numbness or weakness in face, arm or leg
- Severe headache
- Sudden vision trouble and/or confusion

Call 911 immediately. DO NOT DRIVE YOURSELF TO THE EMERGENCY DEPARTMENT.

Discharge Instructions

CONGRATULATIONS, YOU HAVE JUST RECEIVED A NEW JOINT!

Here is a list of things that should be in place or in your possession prior to your discharge:

- 1. You will need physical therapy after your discharge. This should be scheduled 2 to 4 times a week. (Your care navigator may help set this up or you might receive a prescription from the doctor.)
- 2. You will get prescriptions for any new medications started in the hospital.
- 3. Your care navigator should also help in getting any equipment you may need at home, including a 3:1 commode, front-wheeled walker, etc.
- 4. You should continue taking a stool softener as recommended by your surgeon (ex. Colace, Senokot S). It is important to maintain a good bowel program since constipation can occur as a result of the pain medications and decrease in mobility. Constipation lasting longer than 3 days should be reported to your physician.
- 5. You will need a follow-up appointment in the surgeon's office. If you are unsure of your follow-up appointment, please contact the surgeon's office after discharge.

POST-OPERATIVE/ HOME CARE

- 23 WHAT YOU CAN DO AT HOME
- **23 DRESSINGS**
- 23 CARING FOR YOUR INCISION
- 23 CONTROL YOUR DISCOMFORT
- **23 BODY CHANGES**
- 23 TOTAL KNEE ARTHROPLASTY PROTOCOL (TKA)-SINGLE AND BILATERAL
- 24 BLOOD CLOTS IN LEGS (DVT)
- 24 Signs of Blood Clots in Legs
- 24 How to Prevent Blood Clots
- 24 BLOOD CLOTS IN LUNGS
- 24 Signs of Pulmonary Embolus (PE)
- 24 How to Prevent Pulmonary Embolus
- 24 DECREASE YOUR RISK OF FALLS
- **25 POST-OP GUIDE AND GOALS**

When you go home, there are a variety of things you need to know for your safety, recovery and comfort.

What You Can Do at Home

- Ankle pumps (See Appendix A).
- Deep breathing with an incentive spirometer you will take this home.
- You may shower per the instructions in the "Caring for Your Incision" section below.
- You should continue taking a stool softener (i.e. Senokot S, Colace) until you are no longer on prescription pain medication. It is important to maintain a good bowel program since constipation can occur.
- See **Appendix B** for information and examples on proper body positioning when sitting down, standing up and lying down.

Dressings

• Follow physician-specific instructions for dressing changes included in your discharge paperwork.

Caring for Your Incision

- Keep your incision dry.
- Keep your incision covered as instructed by your physician.
- Notify your surgeon if there is increased drainage, redness, pain, odor or heat around the incision.

Control Your Discomfort

- Take your medications as prescribed by your physician.
- Change your position every 45 minutes throughout the day.

Body Changes

- Your appetite may be poor. Drink plenty of fluids to keep from getting dehydrated. Your desire for solid food will return.
- You may have difficulty sleeping, which is normal. Do not sleep or nap too much during the day.

Total Knee Arthroplasty Protocol (TKA)-Single and Bilateral

- Full weight-bearing: You may go from a walker to a cane to nothing, as instructed by your physician and/or physical therapist.
- Ice should be used after activity, exercise or physical therapy. In addition, it may be used at any other time to assist in reducing pain and swelling.

- If you notice any drainage after the dressing has been removed, please call your surgeon's office.
- Do not get in a bathtub, swimming pool, lake or ocean until 4 weeks post-surgery, or once cleared by your surgeon.
- Use ice for pain control as directed.
- Your energy level will be lower than normal for at least the first month.
- Narcotic pain medication can cause constipation. Use stool softeners or laxatives if necessary.
- Remember, most of your success depends upon the effort you put into physical therapy after your discharge.
- Please refer to activity guide for goals.

Blood Clots in Legs (DVT)

Surgery may cause the blood to slow and thicken in the veins of your legs, creating a blood clot in a condition called deep vein thrombosis or DVT. This is why blood thinners are prescribed after surgery. If a clot occurs despite these measures, you need to contact your surgeon immediately. (See **Appendix D** for more information about blood thinners.)

SIGNS OF BLOOD CLOTS IN LEGS

• Swelling in thigh, calf or ankle that does not go down when raised above heart level

HOW TO PREVENT BLOOD CLOTS

- Ankle pumps (right and left sides)
- Walking

- Pain, heat and tenderness in calf, back of the knee or groin area (NOTE: blood clots can form in either leg)
- Compression stockings
- Blood thinners

Blood Clots in Lungs

An unrecognized blood clot could break away from the vein in the leg and travel to the lungs and is called a pulmonary embolus. This is an emergency and you should **CALL 911** if suspected.

SIGNS OF PULMONARY EMBOLUS (PE)

- Sudden chest pain
- Difficult and/or rapid breathing
- Shortness of breath

HOW TO PREVENT PULMONARY EMBOLUS

- Prevent blood clot in legs
- Recognize a blood clot in the leg and call physician promptly

Decrease Your Risk of Falls

Falls are a leading cause of injury for older adults. These falls usually happen on a level surface from a standing or sitting position. Often the fall results in a fracture.

Please closely review these fall prevention strategies:

- Have regular medical physical exams.
- Review your medications each time you visit your medical doctor. Some medications or combinations of medications can cause one to be lightheaded, dizzy and weak - all potential risks for falling.
- Have routine eye exams. You may be wearing incorrect glasses or develop cataracts without realizing it.
- See the section on preparing your home for additional tips.

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- Sweating
- Confusion

Post-Op Guide and Goals*

Day of Surgery

• Walk 30 feet with assistance, using walker

Discharge home afternoon of surgery

• Walking 100 to 300 feet using walker with range of motion (ROM) 0 - 100 degrees

	Week 1	Week 2	Week 3 to 4	Week 5 to 6
Range of Motion (ROM)	0 – 100 degrees	0 – 120 degrees	0 – 120 degrees	0 – 130 degrees
Rest, Ice and Elevation	Periods of rest with leg raised (at heart level) and ice applied for 30 minutes, 6 to 8 times a day (to decrease swelling that is expected).	Periods of rest with leg raised (at heart level) and ice applied for 30 minutes, 4 to 5 times a day (to decrease swelling that is expected).		
Activity	Take short walks often, around the house, with a walker.	Take short walks often, inside and outside the house, with or without a walker.	Start swimming, stationary bike riding, golfing or dancing. NO high impact activities.	Walk long distances without tiring.
	Perform prescribed exercises at least twice daily.	Perform prescribed exercises at least twice daily.	Perform prescribed exercises at least twice daily.	Return to work — this will vary from patient to patient.
			Self-directed exercises, strengthening and stretching become normal exercises for the rest of your life.	
Doctor Appointments		2-week follow-up with orthopedic surgeon		6-week follow-up with orthopedic surgeon

6 Months

- Follow up with your orthopedic surgeon.
- Maintain good oral hygiene and check with your surgeon about a pre-dental-visit antibiotic.

*Not all patients progress the same. Limits due to medical conditions, elasticity of tendons and muscles, and extent of surgery will impact individual progress.

APPENDIX A — EXERCISES

- 27 ARM-CHAIR PUSH-UP
- **27 SEATED LONG ARC QUAD**
- 28 ACTIVE STRAIGHT LEG RAISE WITH QUAD SET
- **28 SUPINE ANKLE PUMPS**
- 29 MEDBRIDGE GO OVERVIEW
- 29 How It Works
- 29 Follow These Few Steps to Get Moving

Arm-Chair Push-Up

REPS: 10 SETS: 3 DAILY: 1 WEEKLY: 7



SETUP

Begin sitting upright with your feet resting flat on the floor and your hands on the armrest.

MOVEMENT

Straighten your arms, lifting your body off of the chair. Hold briefly, then lower back down and repeat.

TIP

Make sure to use a sturdy chair and use your legs to balance as needed. Do not shrug your shoulders during the exercise.

Seated Long Arc Quad







SETUP

Begin sitting upright.

MOVEMENT

Slowly straighten one knee so that your leg is straight out in front of you. Hold, then lower it back to the starting position and repeat.

TIP

Make sure to keep your back straight during the exercise.

Active Straight Leg Raise with Quad Set

 REPS: 8-10
 SETS: 3
 HOLD: 2-3 SEC
 DAILY: 1
 WEEKLY: 7





SETUP

Begin lying on your back with one knee bent and your other leg straight.

MOVEMENT

Squeeze the thigh muscles in your straight leg and flex your foot, then slowly lift your leg until it is parallel with your other thigh. Lower your leg back to the starting position and repeat.

TIP

Make sure to keep your back flat against the floor during the exercise.

Supine Ankle Pumps

REPS: 20





Do 20 repetitions every hour while you are awake.

SETUP

Begin lying on your back with your legs straight.

MOVEMENT

Slowly pump your ankles by bending and straightening them.

TIP

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

Source: MedBridge

MedBridge GO Overview

MedBridge GO is a free and comprehensive rehab recovery app that can be used across all your home devices (iPad, smart phone and laptop via app or email access). As part of your recovery from surgery, you will have access to the Home Exercise Program and Patient Education to better understand your specific condition. All classes will be assigned by your provider and are a formal component of your treatment plan.





Stay motiviated with daily reminders and achieve goals.



Track your daily progress towards a healthy recovery.

HOW IT WORKS

• You will be assigned exercises and education through the MedBridge app.

of your exercises.

- Easy-to-follow videos with interactive 3D models and audio cues will guide you through the exercises.
- You can track your progress as you get stronger every day and celebrate your activity streaks.
- You can set automatic reminders for accountability, so you get back to doing what you love, faster.
- Exercise plans can be completed at your convenience.
- Your physical therapist will also be able to manage your progress via the app – offering feedback on your pain and the difficulty of the exercises, allowing for program revisions when needed.
- In-app messaging provides the ability to communicate with your therapist.
- This program can be used with all AdventHealth Sports Med & Rehab services and is HIPAA compliant.

FOLLOW THESE FEW STEPS TO GET MOVING

- Prior to attending your pre-surgical education class, you can download the Medbridge GO app from the app store or get it on Google Play.
- During the class, the care navigator will provide the necessary access code to sync your app to your customized program.
- Tap "GO" to follow along with the exercise videos as they play on-screen.

If you attended the class, but didn't receive an access code, please contact your care navigator for assistance.

APPENDIX B – HOW TO MOVE AFTER SURGERY

- **31 LYING IN BED**
- **31 STANDING UP FROM A CHAIR**
- 32 TRANSFER-BED
- **33 TRANSFER-TUB**
- **34 TRANSFER-TOILET**
- **34 TRANSFER-AUTOMOBILE**
- **35 STAIR CLIMBING**
- **35 WALKER AMBULATION**

Lying in Bed

- When lying in bed, keep your knee straight. Do not put a pillow underneath your knee.
- The knee should be kept as straight as possible.
- You can place a small pillow or rolled blanket under your ankle to assist in straightening.



Standing Up From a Chair

- When standing up from a chair, do NOT pull up on the walker to stand!
- Sit in a chair with armrests when possible.
- Scoot to the front edge of the chair.
- Push up with both hands on the armrests. If sitting in a chair without an armrest, place one hand on the walker while pushing off the side of the chair with the other.
- Balance yourself before grabbing for the walker.



WRONG



CORRECT

Transfer-Bed

Getting into bed:

- Back up to the bed until you feel it on the back of your legs (you need to be midway between the foot and the head of the bed). Slide your operated leg out in front of you when sitting down.
- Reaching back with both hands, sit down on the edge of the bed and then scoot back toward the center of the mattress. (Silk pajama bottoms, satin sheets, or sitting on a plastic bag may make it easier.)
- Move your walker out of the way but keep it within reach.
- Scoot your hips around so that you are facing the foot of the bed.
- Lift your leg into the bed while scooting around (use assistive device if instructed to do so).
- Keep scooting and lift your other leg into the bed.
- Scoot your hips towards the center of the bed.

NOTE: Do NOT cross your legs to help the operated leg into bed.



Getting out of bed:

- Scoot your hips to the edge of the bed.
- Sit up while lowering your non-surgical leg to the floor.
- If necessary, use an assistive device to lower your surgical leg to the floor.
- Scoot to the edge of the bed.
- Use both hands to push off the bed. If the bed is too low, place one hand in the center of the walker while pushing up off the bed with the other.
- Balance yourself before grabbing for the walker.



Transfer-Tub

Getting into the tub using a bath seat:

- Place the bath seat in the tub so it faces the faucet.
- Back up to the tub until you can feel it on the back of your knees. Be sure you are in front of the tub bench.
- Reach back with one hand for the bath seat. Keep the other hand in the center of the walker.
- Slowly lower yourself onto the bath seat, keeping the surgical leg out straight.
- Move the walker out of the way, but keep it in reach.
- Lift your legs over the edge of the tub, using a leg lifter for the surgical leg, if necessary.



Getting out of the tub using a bath seat:

- Lift your legs over the outside of the tub.
- Scoot to the edge of the bath seat.
- Push up with one hand on the back of the bath seat while holding on to the center of the walker with the other hand.
- Balance yourself before grabbing the walker.

Transfer—Toilet

When sitting down on the toilet:

- Take small steps and turn until your back is to the toilet.
- Back up to the toilet until you feel it touch the back of your legs.
- If using a commode with armrests, reach back for both armrests and lower yourself onto the toilet. If using a raised toilet seat without armrests, keep one hand on the walker while reaching back for the toilet seat with the other.

When getting up from the toilet:

- If using a commode with armrests, use the armrests to push up. If using a raised toilet seat without armrests, place one hand on the walker and push off the toilet seat with the other.
- Slide operated leg out in front of you when standing up.
- Balance yourself before grabbing the walker.







Transfer-Automobile

- Push the car seat all the way back; recline it, if possible, but return it to the upright position for traveling.
- Place a plastic trash bag on the seat of the car to help you slide and turn frontward.
- Back up to the car until you feel it touch the back of your legs.
- Reach back for the car seat and lower yourself down. Keep your operated leg straight out in front of you and duck your head so that you don't hit it on the doorframe.
- Turn frontward, leaning back as you lift the surgical leg into the car.







Stair Climbing

• Ascend with non-operative leg first ("up with the good"). Descend with operative leg first ("down with the bad").





Walker Ambulation

- Move the walker forward.
- With all four walker legs firmly on the ground, step forward with the operative leg.
- Place the foot in the middle of the walker area. Do NOT move it past the front feet of the walker.
- Step forward with the operated leg.
- NOTE: Take small steps. Do not take a step until all four walker legs are flat on the floor.





APPENDIX C – ADVANCE DIRECTIVES

36 Total Knee Replacement Surgery Guidebook

Exercise Your Right to Put Your Health Care Decisions in Writing

It is our policy to place patients' wishes and individual considerations at the forefront of their care and to respect and uphold those wishes.

What Are Advance Medical Directives?

Advance directives are a means of communicating to all caregivers the patient's wishes regarding health care. If a patient has a living will or has appointed a Health Care Agent and is no longer able to express his or her wishes to the physician, family or hospital staff, the medical center is committed to honoring the wishes of the patient as they are documented at the time the patient was able to make that determination.*

Types of Advance Directives

There are different types of Advance Directives, and you may wish to consult your attorney concerning the legal implications of each.

LIVING WILLS

Living wills are written instructions that explain your wishes for health care if you have a terminal condition or irreversible coma and are unable to communicate.

APPOINTMENT OF A HEALTH CARE AGENT

Appointment of a Health Care Agent (sometimes called a Medical Power of Attorney) is a document that lets you name a person (your agent) to make medical decisions for you, if you become unable to do so.

HEALTH CARE INSTRUCTIONS

Health care instructions are your specific choices regarding use of life-sustaining equipment, hydration and nutrition, and use of pain medications.

*On admission to the hospital you will be asked if you have an advance directive. If you do, please bring copies of the documents to the hospital with you so they can become a part of your medical record. Advance directives are not a requirement for hospital admission.

APPENDIX D – MEDICATIONS

38 Total Knee Replacement Surgery Guidebook

Anesthesia

WHAT TYPES OF ANESTHESIA ARE AVAILABLE?

Decisions regarding your anesthesia are tailored to your personal needs. The types available to you are listed below.

- General anesthesia provides loss of consciousness.
- Regional anesthesia involves the injection of a local anesthetic to provide numbness, loss of pain, or loss of sensation to a large region of the body. Regional anesthetic techniques include spinal blocks, epidural blocks, and saphenous nerve blocks.

WILL I HAVE ANY SIDE EFFECTS?

Your anesthesiologist will discuss the risks and benefits associated with the different anesthetic options as well as any complications or side effects that can occur with each type of anesthetic. Nausea or vomiting may be related to anesthesia or the type of surgical procedure. Medications to treat nausea and vomiting will be given if needed. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your pain discomfort should be minimal, but do not expect to be totally pain-free. The staff will teach you the pain scale (0–10) to assess your pain level.

WHAT WILL HAPPEN BEFORE MY SURGERY?

You will meet your anesthesiologist immediately before your surgery. Your anesthesiologist will review all information needed to evaluate your general health. This will include your medical history, laboratory test results, allergies and current medications. With this information, the anesthesiologist will determine the type of anesthesia best suited for you. If a regional anesthetic is to be used, it will be administered in the pre-operative area. Your anesthesiologist will also answer any further questions you may have.

WHAT HAPPENS DURING SURGERY/ANESTHESIA?

Your anesthesia will be provided by an anesthesia care team. An anesthesiologist with a Certified Registered Nurse Anesthetist (CRNA) will provide your care while in the operating room. They will monitor your vital signs (blood pressure, heart rate and oxygen level) during surgery and administer any medications necessary to provide you a safe surgical procedure.

WHAT CAN I EXPECT AFTER THE OPERATION?

After surgery, you will be taken to the Post Anesthesia Care Unit (PACU) where specially trained nurses will watch you closely.

Blood Thinners

The surgeon will place you on an anticoagulant, also called a blood thinner, in order to help prevent blood clots. Most patients will go home on a blood thinner. The specific medication will be decided on by your surgeon based on your medical history.

BLOOD THINNER MEDICATION EXAMPLES: GENERIC (BRAND)

Injectable

- Enoxparin (Lovenox®)
- Fondaparinux (Arixtra®)
- Heparin

- **Oral blood thinners**
- Aspirin
- Rivaroxaban (Xarelto®)
- Warfarin (Coumadin®)
- Apixaban (Eliquis®)

MOST COMMON SIDE EFFECTS OF BLOOD THINNERS

- Risk of bleeding
- Upset stomach
- Bruising
- Burning at injection site

- Decrease in platelets
- Tell your nurse or doctor if you notice any bleeding or black colored stools.

APPENDIX E - NUTRITION

40 Total Knee Replacement Surgery Guidebook

Your body needs to be well-nourished to heal bones, muscles and skin that are affected by surgery. The nutrients from food provide us with the strength, energy and ability to heal. People who are well-nourished overall are less likely to develop an infection and may heal faster. Work on incorporating the following important nutrients into your diet before and after surgery.

Protein	
Protein contains all the essential amino acids to aid in wound healing and keeps your immune system strong. Protein is not just for muscle building. It is a key nutrient in bone building.	Protein-rich food: Eggs, red and white meat, turkey, chicken, fish, cheese, low/nonfat milk, beans, nuts/seeds, soy protein
Iron	
Iron is an important mineral for your body to make hemoglobin. Hemoglobin is a part of the blood that carries oxygen. It is important to increase your iron intake before and after surgery. Eating foods high in Vitamin C with iron-rich food can help your body absorb iron.	Iron-rich food: Red meat, egg yolks, dark green leafy vegetables, iron-rich cereals, beans, lentils, dried fruit, liver, watermelon, baked potato, dark meat turkey
Calcium and Vitamin D	
Calcium and Vitamin D are nutrients associated with healthy bones. All milk is fortified with Vitamin D to help absorb calcium. Yogurt is also a good source of calcium, but is not always fortified with Vitamin D, so check the nutrition label.	Calcium- & Vitamin D-rich food: Low-fat dairy, like milk and yogurt
Fiber	
Make sure to consume fiber-rich foods prior to and after surgery to avoid constipation (unless directed differently by your physician). It is important to increase your fiber intake slowly to avoid gas and bloating. Adequate fluid intake is also very important if you are increasing your fiber intake to avoid adverse effects. Prunes or prune juice (along with drinking plenty of water) have a natural laxative effect that can alleviate constipation while on pain medications.	Fiber-rich food: Whole grains, bran, fruits, vegetables, beans, lentils
Water	
Drink at least 8 glasses of water or other calorie-free beverages per day to help with the prevention of constipation. Adequate hydration will also help to promote healing.	
Vitamin C	
Vitamin C is needed to make a protein called collagen and is needed for repairing tendons, ligaments and healing surgical wounds.	Vitamin C-rich food: Citrus fruits, strawberries, kiwi, baked potatoes, broccoli, bell peppers
Zinc	
Zinc is also important for wound healing. Zinc is a mineral found mostly in animal foods. It is better to get zinc from foods than supplements.	Zinc-rich food: Meat, fish, poultry, dairy, whole-grain foods, breads, cereals, nuts

AIM FOR 2 TO 3 SERVINGS FROM EACH OF THESE FOOD GROUPS DAILY.

Meat and Alternatives

1 serving equals:

- 2 to 3 oz meat, poultry or fish
- 1/2 cup beans
- ¹/₂ cup tofu
- 2 tablespoons peanut butter

Milk and Alternatives

1 serving equals:

- 1 cup milk or soy beverage
- 1 cup yogurt

Our Health Equity Promise

Patient Protection and Affordable Care Act: Section 1557

AdventHealth complies with applicable federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability or sex. This facility does not exclude people or treat them differently because of race, color, national origin, age, disability or sex.

AdventHealth provides free aid and services to people with disabilities to communicate effectively with us, such as:

- Qualified sign language interpreters
- Written information in other formats (large print, audio, accessible electronic formats, other formats)

AdventHealth provides free language services to people whose primary language is not English, such as:

- Qualified interpreters
- Information written in other languages

If you need these services, please call 407-303-5600 x1106707.

If you believe that this facility has failed to provide these services or discriminated in another way on the basis of race, color, national origin, age, disability or sex, you can file a grievance or request that someone assist you with filing a grievance at 407-200-1324 or fh.risk.management@adventhealth.com.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically, through the Office for Civil Rights Complaint Portal, available at ocrportal.hhs.gov/ocr/portal/lobby.jsf, or by mail or phone at:

U.S. Department of Health and Human Services 200 Independence Avenue, SW Room 509F, HHH Building Washington, D.C. 20201 1-800-368-1019, 800-537-7697 (TDD)

Complaint forms are available at hhs.gov/ocr/office/file/index.html.

The statements below direct people whose primary language is not English to translation assistance.

ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al número siguiente.

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સુચનાઃ જો તમે ગુજરાતી બોલતા હો, તો નિઃશુલ્ક ભાષા સહાય સેવાઓ તમારા માટે ઉપલબ્ધ છે. નીચેના નંબર પર ફોન કરો.

ATENÇÃO: Se você fala português, disponibilizamos serviços lingüísticos gratuitos. Ligue para o número abaixo.

ध्यान दें: यदि आप हिंदी बोलते हैं तो आपके लिए मुफ्त में भाषा सहायता सेवाएं उपलब्ध हैं। नीचे लिखे नम्बर पर सम्पर्क करें ।

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407-303-5600 🕋 407-303-3025





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