

The Joint Center at *GBMC*

PATIENT GUIDE

for knees





Joint & Spine Center
443-849-6261



Total Joint Replacement Overnight Preop Checklist

Surgeon: _____

Date of your surgery at GBMC: _____

(X) Place an **X** when task is completed

<input type="checkbox"/>	Activate your GBMC <i>MyChart</i>	Online link on Welcome E-mail					
<input type="checkbox"/>	Schedule your GBMC Pre-op Joint Replacement Class	Time: 9 am Date of Class:					
<input type="checkbox"/>	Did you receive your GBMC Pre-Op Guidebook?	YES NO					
<input type="checkbox"/>	Do you know how to use your Hibiclens CHG wash kit? (The Antimicrobial Skin Cleanser, Disposable cloths, Instructions)	Total of 4-CHG Showers at Home Begin to use 3-days BEFORE surgery					
<input type="checkbox"/>	Pre-op MSSA/MRSA test at GBMC's Diagnostic Center <i>Test must be completed within 10-30 days before surgery date</i>	Walk-in, no appointments needed. Monday-Friday 8am-4pm No Holidays					
<input type="checkbox"/>	Orthopaedic Surgery at GBMC - GBMC Health Partners Dr. Schmidt, Lanzo, Melegari's patients: 443-849-3854 Dr. Johnston's patient: 443-849-3824	Discussion with ECIP OrthoCare Coordinator Pre-Op PT home visit, discharge planning... Victoria Schmitz: 443-849-3828					
<input type="checkbox"/>	OrthoMD/CAO: Ronda Parker, Debra Maitland, Anna Green, and Courtney Winkler:	Dr. Jay, Buchalter, Heller patients 410-377-8900					
<input type="checkbox"/>	Pick up your prescribed medication(s) from your pharmacy before your surgery date!	Please call your surgeon's office if you need to update you pharmacy location					
<input type="checkbox"/>	Name of your Coach/Support Person(s):						
<input type="checkbox"/>	GBMC's Rehab Department will be calling you one week before your surgery to schedule your Family/Coach training session on Unit 58	GBMC Rehab Scheduler Tracie Brown: 443-849-2552					
<input type="checkbox"/>	Complete These Pre-op Questionnaires Before Class/Surgery Date:	<table border="0"> <tr> <td>YES</td> <td>NO</td> <td rowspan="2">AJRR/AAOS <i>will e-mail you a link please check your e-mail spam/junk folder</i></td> </tr> <tr> <td>YES</td> <td>NO</td> </tr> </table>	YES	NO	AJRR/AAOS <i>will e-mail you a link please check your e-mail spam/junk folder</i>	YES	NO
YES	NO	AJRR/AAOS <i>will e-mail you a link please check your e-mail spam/junk folder</i>					
YES	NO						
<input type="checkbox"/>	If you have a rolling walker (RW) or received a RW from your surgeon's office Preop (Ortho MD), please bring it into the hospital. If you do not have one, the team in the hospital will assist you in obtaining one. <i>Rolling walker – 5-inch front wheel with 2 back slide caps, skis, or tennis balls.</i> <i>(If you have Medicare and received a rolling walker within the past 5-years, Medicare will not cover another, therefore you may have an out-of-pocket cost)</i>						
<input type="checkbox"/>	<i>If you are missing any of these items, need assistance, or surgery is canceled:</i> <u>GBMC Joint & Spine Center</u> 6701 N. Charles Street, Unit 58: Suite 5835, Towson MD 21204	Please call 443-849-6261 Monday-Friday April, Casey, or John					

Current Medication List

Bring completed form to you primary care team and on the day of surgery

Refer to Medication Guideline for instructions regarding when to stop taking medication prior to surgery.

Name:

Date of Birth:

	Name of Medication	Dose	Frequency	Used for	Last Dose
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					

List all medication allergies, including Latex and IV contrast dye:

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

Date:	Stop 10-days before surgery date	Stop 10-days before surgery date	Stop 9-days before surgery date	Stop 8-days before surgery date	Stop 7-days before surgery date	Stop 6-days before surgery date	Stop 5-days before surgery date	Stop 4-days before surgery date	Stop 3-days before surgery date	Stop 2-days before surgery date	Stop 1-day before surgery date	Stop Morning of Surgery	Date and Time of the last dose taken:
Medications to stop on:													
Daily/Weekly Medications													
As Needed Medications													
<p>Important Reminders for Pre-op Clearance: *Please refer to the pre-op packet from your surgeon's office/surgical scheduler</p> <p>*30-days prior to surgery date: History and Physical, Cardiac Clearance, Pulmonary Clearance</p> <p>*30-60 days prior to surgery date: your primary care team may order the following items for you to complete: EKG, Echocardiogram, labwork (BMP, CMP, CBC w/platelets, A1C, PT/INR, PTT, Serum Heg, Urinalysis w/Micro (only if symptomatic for UTI))</p> <p>10-30 days before surgery date: MSSA/MRSA swab collected at GBMC's Diagnostic Center</p> <p>Complete this section ONLY if you have Outpatient PT therapy already scheduled:</p> <p>What is the name of the Outpatient Therapy Group/Company you are going to after discharge: _____ Phone number: _____</p> <p>When is your first appointment date after you leave the hospital? _____ (your first session should be within 72-hrs from your discharge date)</p> <p>Who is driving you to your first outpatient therapy session? _____</p>													
<p>Notes:</p> <p>1 week before your surgery date: Pick up your prescribed medications from your pharmacy. Call the surgeon's office if the prescriptions are not at your preferred pharmacy location.</p> <p>Begin antibacterial CHG skin prep 1st CHG shower: 3 nights before surgery</p> <p>2nd CHG Shower: 2 nights before surgery</p> <p>3rd CHG shower: 3 nights before surgery</p> <p>4th CHG shower: morning of surgery</p>													

GBMC Same-Day Discharge Joint Replacement:



GBMA Pre-op Checklist: Knee/Hip

My surgeon and surgery date and time at GBMC: **Dr. Schmidt/ Lanzo/Johnston/Melegari** __/__/__

Starting 6-weeks before your surgery you must:

- Designate coach/driver who will be with you:** at the **Pre-op Joint (Hip or Knee) Replacement Class**, at the **hospital during the Pre-op Phase** on the day of your surgery and **during Recovery Phase 2** to bring your walker to PACU II, participate in the **discharge teaching sessions**, will **drive you home** and to your PT sessions, and be home with you.
- Call GBMC's Joint & Spine Center: 443-849-6261:** To verify your phone number, e-mail, & mailing address to receive: **pre-op CHG, wash cloths, guidebook, & incentive spirometer.** And to discuss:
 - MSSA/MRSA nasal swab** collected at **GBMC's Diagnostic Testing Center, 10 days to 30 days** before your surgery date. **Monday-Friday, 8:00 am - 4:00 pm, no holidays**
 - Schedule and attend GBMC's Pre-op Joint Replacement Class:** Date/Time _____
- Complete online pre-op AJRR/AAOS surveys**, you will receive an e-mail link from the *American Academy of Orthopaedic Surgeons.*
- Call the Ortho Coordinator: Victoria Schmitz 443-849-3828**
 - Schedule your Outpatient Therapy Appointments: Pre-Op & Post-Op:**
 - Pre-op Appointment: Agency Name _____ Date/Time: _____
 - Post-op Appointment, Start of Care Date/Time: _____
 - If I haven't heard from the Physical Therapy Agency 3-days after discharge or have any issues with scheduling, call your surgeon's office as soon as possible
- Begin your pre-op exercises 6-weeks before surgery date (located in guidebook and Joint & Spine Center webpage)
- Prepare your home: clear clutter, remove rugs, clean home
- Receive your walker and/or cane before surgery date
- Prescription medication(s) filled before surgery date
- Prepare your home/meals for your return
- COMPLETE ALL Pre-op Requirements** (no later than 72-hours before surgery)
- 3-Night Before Surgery**, begin your **CHG 4% Preop Skin Prep**
 - Four (4) CHG showers (3-nights before surgery, 2-night before surgery, night before, and morning of surgery)



Do you have an Orange Fruit Allergy?

If, **YES**, please notify your surgeon or the surgeon's PA to discuss pre-op Mupirocin

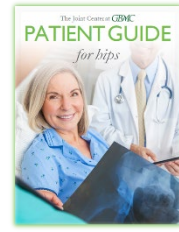
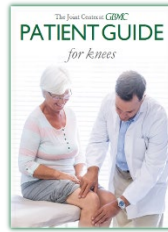
Same-Day Discharge Joint Replacement Surgery:

Day of Surgery Checklist: Knee/Hip

➤ Arrive with you **Coach/Support Person** to the hospital 2-hours before your scheduled surgery time.

Bring to the hospital:

- State issued ID card
- Insurance card(s)
- Walker with two 5" wheels
- Guidebook



Discharge from the Post Anesthesia Care Unit (PACU):

- Confirmed Post-operative physical therapy arrangements
- Coach/Family member MUST BE PRESENT** for education and PT training, brings the walker
- Nozin® Nasal Sanitizer®, 12-mL bottle and starter cotton swabs
- Gauze and tape
- Therapy ice packs & wrap (knee or hip)
- Gate belt

At Home After Surgery

- I will call my surgeon's office with any signs of infection such as fever, redness, swelling, tenderness, or drainage.
- I will call my surgeon's office with any new loss or decrease in sensation in the operative leg or foot.
- I will call my surgeon's office if there is persistent pain, cramping, or soreness in the calf.
- I will contact my surgeon's office with any questions or concerns.



Knee



Hip



Nozin® Nasal

Gauze & Tape

1 knee wrap, 4 ice packs

1 hip wrap, 2 large ice packs

Gate Belt

***IF your surgery at GBMC is cancelled, please call the Joint & Spine Center, 443-849-6261

GBMC Same-Day Discharge Joint Replacement:

OrthoMD/CAO Pre-op Checklist: Knee/Hip



My surgeon and surgery date and time at GBMC: Dr. Heller/Buchalter/Jay ___/___/___

Starting 6-weeks before your surgery you must:

- Designate coach/driver who will be with you:** at the Pre-op Joint (Hip or Knee) Replacement Class, at hospital during the Pre-op Phase on the day of your surgery and during Recovery Phase 2 to bring your walker to PACU II, participate in the discharge teaching sessions, will drive you home and to your appointments, and be home with you.
- Call GBMC's Joint & Spine Center: 443-849-6261:** To verify your phone number, e-mail, & mailing address to receive: pre-op CHG, wash cloths, guidebook, & incentive spirometer. And to discuss:
 - MSSA/MRSA nasal swab collected at GBMC's Diagnostic Testing Center, 10 days to 30 days** before your surgery date. Monday-Friday, 8:00 am - 4:00 pm, no holidays
 - Schedule GBMC's Pre-op Joint Replacement Class (Patient & Coach):** Date/Time _____
- Complete online pre-op AJRR/AAOS surveys,** you will receive an e-mail link from the *American Academy of Orthopaedic Surgeons*.
- Call your OrthoMaryland/CAO Surgical Scheduler: 410-377-8900**
 - Schedule your Pre-Surgical Review with your surgeon one week before surgery:**
 - You will receive your walker and prescriptions
 - Schedule your Outpatient Therapy Appointments.**
 - Your first post-op appointment (within 72-hours of discharge from hospital)
 - Agency Name _____ Start of Care Date/Time: _____
- Begin your pre-op exercises 6-weeks before surgery date (located in guidebook and Joint & Spine Center webpage)
- Prepared your home: clear clutter, remove rugs, clean home
- Received your walker and/or cane before surgery date
- Prescription medication(s) filled before surgery date
- Prepared your home/meals for your return
- COMPLETE ALL** Pre-op Requirements (no later than 72-hours before surgery)
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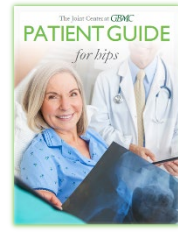
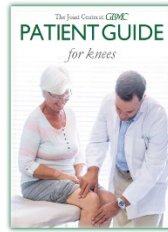
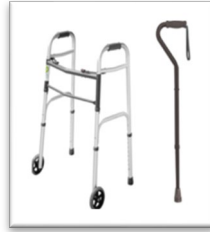
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Day of Surgery Checklist: Knee/Hip

➤ Arrive with you **Coach/Support Person** to the hospital 2-hours before your scheduled surgery time.

Bring to the hospital:

- State issued ID card
- Insurance card(s)
- Walker
- Guidebook



Discharge from the Post Anesthesia Care Unit (PACU):

- Coach/Family member **MUST BE PRESENT** for education and PT training, brings the walker
- Nozin® Nasal Sanitizer®, 12-mL bottle and starter cotton swabs
- Gauze and tape
- Therapy ice packs & wrap (knee or hip)
- Gate belt

At Home After Surgery

- I will call my surgeon's office with any signs of infection such as fever, redness, swelling, tenderness, or puss-like drainage.
- I will call my surgeon's office with any new loss or decrease in sensation in the operative leg or foot.
- I will call my surgeon's office if there is persistent pain, cramping, or soreness in the calf.
- I will contact my surgeon's office with any questions or concerns.



Knee



Hip



Nozin® Nasal

Gauze & Tape

1 knee wrap, 4 ice packs

1 hip wrap, 2 large ice packs

Gate Belt

***IF your surgery at GBMC is cancelled, please call the Joint & Spine Center, 443-849-6261

PATIENT GUIDE FOR KNEES

PATIENT NAME

SUPPORT PERSONS NAME

**SURGEON
NAME**

SURGERY DATE

**OVERNIGHT STAY IN HOSPITAL or
SAME-DAY DISCHARGE HOME?**

**PLEASE BRING THIS GUIDEBOOK THROUGHOUT EVERY STEP
OF YOUR SURGICAL JOURNEY INCLUDING:**

- ◆ All appointments with your surgeon, primary care team, and specialty provider(s)
- ◆ Your hospital Pre-Op class
- ◆ On the Day of Surgery bring to the hospital
- ◆ All physical therapy visits before and after surgery
- ◆ Any placement upon discharge for up to one year

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Welcome

Thank you for choosing The Joint & Spine Center at GBMC. The Center specializes in total joint replacement and spine surgery education and readiness. Every detail, from preoperative teaching and expectations to your postoperative teaching and expectations are considered and reviewed. The Joint & Spine Center collaborates with other members of the healthcare team to develop individual discharge plans which help to guide patients through the recovery process.

More than 753,000¹ people undergo total knee replacement surgery each year. Almost all of them have chronic joint pain which they no longer wish to tolerate. The surgery aims to relieve pain, restore independence, and return you to work and other daily activities.

The Joint & Spine Center has developed a comprehensive planned course of treatment. Our goal is to involve patients in their treatment through each step of the program. The first step begins the moment your surgery is planned. It continues with this guidebook, the pre-op class, optimizing your health by doing your pre-op exercises, and if necessary, participating in a smoking-cessation program, weight-loss program, and managing your diabetes. We believe the *patient* plays a key role in ensuring a successful recovery. This Patient Guidebook provides the information you need to make your surgery a success.

It is extremely important to know that **YOU** make the biggest difference in your success following your total joint replacement. Your motivation and participation in your physical therapy program immediately after surgery and throughout your rehab and recovery process has a direct bearing on regaining maximum functional mobility and achieving the highest quality of life you possibly can.

¹ Steiner, M.D., M.P.H. et al., 2019

GENERAL INFORMATION

The Role of The Joint & Spine Center

The Joint & Spine Program Manager oversees the Joint Replacement Program, aligning with your surgeon and care team. The Joint & Spine Center will be one of your greatest assets during every step of your surgical experience. Our goal is to help you throughout the entire process to answer all of your questions, or to direct you to someone who can.

GBMC Joint Replacement Program offers:

- ◆ A joint replacement program tailored to meet your individual needs.
- ◆ Nurses, nurse practitioners, physician assistants, physical therapists, and occupational therapists who specialize in the care of joint patients.
- ◆ Shared decision making with you, your surgeon, your anesthesiology team member, the Ortho Care Coordinator, and a care management team member to facilitate preoperative and discharge planning.
- ◆ Comprehensive Patient Guide to follow starting six weeks prior to surgery through the first year after surgery.
- ◆ Provide you with necessary supplies to use prior to surgery.
- ◆ Joint Replacement Education Class.
- ◆ Online Resources: <https://www.gbmc.org/services/joint-and-spine-center/>



GENERAL INFORMATION

You may call the Joint & Spine Center Monday to Friday from 8 a.m. – 4 p.m. (no holidays or weekends) to ask questions or raise concerns about your pending surgery. Please leave a detailed message if we are unable to answer your call. You may also send us an email at jointspinecenter@gbmc.org. **If you have medical concerns regarding your joint replacement before or after your surgery, call your surgeon's office.** In a medical emergency, call 911 or go to the nearest emergency room.

The Joint and Spine Center at GBMC and the Ortho Care Coordinators collaborate with Active Life Physical Therapy to offer more support during your surgical planning process. If available, a physical therapist (PT) will reach out to schedule a home assessment. A pre-op home assessment takes place in your residence prior to surgery to best prepare your home for after surgery. The PT will evaluate your physical health, environmental safety, and support systems. Please refer to the next page for more details and how to schedule.

Another option is an pre-operative physical therapy assessment and evaluation that takes place in an outpatient physical therapy office. This involves a one-on-one session with a physical therapist. During this visit, you will be able to develop strength and improve function of your joint as a component of your optimization for surgery. Your physical therapist will also make tentative recommendations for your postoperative rehab therapy, which may include exercise modification or specific equipment for your home. The Ortho Care Coordinator can help you facilitate this process, including identifying a convenient physical therapy office.

If you have further questions about your health concerns, please reach out to your Ortho Care Coordinator, the Joint & Spine Center, your surgeon or your primary care team.

The Joint & Spine Center
443-849-6261, M-F 8am-4pm (no holidays or weekends)
Email: jointspinecenter@gbmc.org
Fax: 443-849-6289

GENERAL INFORMATION

Role of the Ortho Care Coordinator

Patient's of Dr. Schmidt, Dr. Lanzo, Dr. Melegari, and Dr. Johnston the Ortho Care Coordinator will discuss your goals following your surgery. They will discuss with you the ways to best accomplish these goals through:

- ◆ Providing further resources for smoking cessation, diabetes management, and weight loss
- ◆ Assisting in connecting you with physical therapy prior to your surgery and discuss preoperative in-home assessments (if applicable)
- ◆ Reviewing what you will need in your home after your surgery, including identifying your support or “coach”
- ◆ Discussing options for physical therapy after your surgery, including outpatient physical therapy, in-home physical therapy.

Further questions regarding your home setup? Contact your Ortho Care Coordinator to discuss GBMC's affiliation with ActiveLife PT and their Pre-Op In-Home Assessments.

OrthoMaryland's Surgical Scheduler

Patient's of Dr. Buchalter, Dr. Jay, and Dr. Heller your surgical scheduler will discuss your goals following your surgery. They will discuss with you the ways to best accomplish these goals through:

- ◆ Reviewing what you will need to complete before your surgery date to prevent delays or cancellation of your your surgery.
- ◆ Reviewing what you will need in your home after your surgery, including identifying your support or “coach”
- ◆ Discussing options for physical therapy after your surgery, including outpatient physical therapy, in-home physical therapy,.
- ◆ Establishing a date for your **Pre-surgical Review**, typically 1-week before your surgery date. At this review you and your surgical scheduler:
 - Will review that you have meet all the requirements to have surgery at GBMC.
 - Providing you information to pick up your durable medical equipment (DME): Walker with two front wheels and slides on the back two legs, possibly a cane or crutch to bring to hospital.
 - Provide you the prescriptions for your post-op medications to pick-up before your surgery day.
 - An opportunity to purchase your TED hose stockings.

GENERAL INFORMATION

GBMC Orthopaedic Health Partners ONLY:

- ◆ Patient's of Dr. Schmidt, Dr. Lanzo, Dr. Melegari, and Dr. Johnston
 - Your Ortho Care Coordinator, 443-849-3828, can help you arrange this in-home pre-op physical therapy assessment.
 - This service is not available to OrthoMaryland patients



Benefits of Pre-Operative In-Home Physical Therapy Assessment:

Pre-Operative Measurements:

- ◆ Home Safety tips:
 - Establish baseline mobility, strength, and range of motion
 - Results communicated with inpatient therapists
- ◆ Assistive Device Training:
 - Experienced clinicians optimize your living environment
 - Recommend equipment and prepare you for discharge home
 - Prepare for using a walker or cane to navigate your home after surgery
- ◆ Exercise Review:
 - Will review your Joint Guidebook with you
- ◆ Discharge Plan Discussions:
 - Ask questions and finalize your potential post-operative plan

GENERAL INFORMATION

TOTAL KNEE REPLACEMENT SURGERY

We are glad you have chosen The Joint and Spine Center at GBMC to care for your knee. Patients often have many questions about total knee replacements. Here is a list of the most frequently asked questions along with their answers. If you have additional questions, please ask your surgeon or the Ortho Care Coordinator. We want you to be completely informed about this procedure.

What is arthritis and why does my knee hurt?

The knee joint has a layer of smooth cartilage on the lower end of the femur (thighbone), the upper end of the tibia (shinbone), and the under-surface of the patella (kneecap). This cartilage serves as a cushion and allows for smooth motion of the knee. Arthritis is a wearing away of the smooth cartilage. Eventually, the cartilage wears down to bone. Rubbing of bone against bone causes pain, swelling, and stiffness.



Before: Raw bone rubbing on raw bone.

What is a total knee replacement?

A total knee replacement is a cartilage replacement with an artificial surface. The knee itself is not replaced, as is commonly thought, but rather a substitute for the cartilage is inserted on the end of the bones. This is done with a metal alloy on the femur and plastic spacer on the tibia and patella. It creates a new, smooth cushion and a functioning joint that does not hurt.



After: A new surface creates a smooth functioning joint.

What are the results of total knee replacement?

Results will vary depending on the quality of the surrounding tissue, the severity of the arthritis at the time of surgery, the patient's activity level, and the patient's adherence to the doctor's orders.

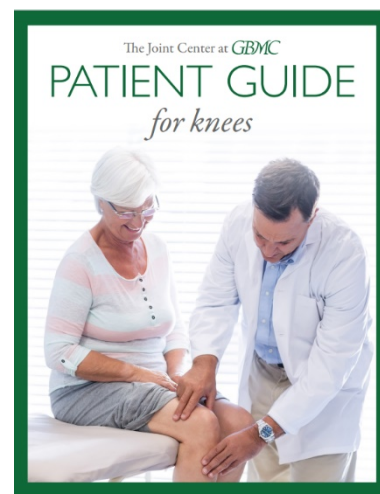
GENERAL INFORMATION

Using the Patient Guidebook

Preparation, education, continuity of care, and a pre-planned discharge plan are essential for optimum results in knee surgery. Communication is essential to this process. The Patient Guide is a communication and educational tool. It is designed to educate you so that you know:

- ◆ What to expect every step of the way
- ◆ What you need to do
- ◆ How to care for yourself after knee surgery

Remember, this is just a guide. Your provider may add to or change some of the recommendations. Always rely on their recommendations first and ask questions if you are unsure of any information. Keep this guide as a reference for at least one year after your surgery.



Important Instructions

- ◆ Read all sections of this Patient Guide.
- ◆ Please look for an e-mail from the American Academy of Orthopaedics/American Joint Replacement Registry (AAOS/AJRR), you **MUST** Complete these online surveys before surgery:
 - These surveys will tell your physician how you were feeling before your orthopaedic surgery. Your answers will help you and your physician better understand how you are doing. This information will also help improve care for patients undergoing similar orthopaedic procedures. Your answers to the survey questions are protected and secure. The AJRR system will only share your information with your physician's office. Complete your physician's surveys via the internet using the American Joint Replacement Registry (AJRR) secure patient portal (website).
- ◆ Show this patient guidebook to your physical therapist

PRE-OPERATIVE PREPARATIONS

Six Weeks Before Surgery

Pre-registration

After your surgery has been scheduled, the hospital admissions department will call you to gather your pre-registration information by phone and ask you about your health history. You will need to have the following information ready when you are contacted:

- ◆ Patient's full legal name and address, including county
- ◆ Home phone number, cellular phone number, and e-mail address
- ◆ Religion
- ◆ Marital status
- ◆ Social Security Number
- ◆ Insurance holder's full name, home address and phone number, and work address and phone number
- ◆ Name of insurance company, mailing address, policy number, and group number
- ◆ Patient's employer, address, phone number, and occupation
- ◆ Name, address, and phone number of someone to notify in case of emergency –this can be the same as the nearest relative
- ◆ Prescription card

Obtain Medical and Anesthesia Clearance

You will need to see your primary care provider for a preoperative medical evaluation in addition to your surgical appointments. When you were scheduled for surgery, you should have received a medical clearance letter from your surgeon telling when you should schedule this and any applicable specialist appointments.

Put your Healthcare Decisions in Writing

The law requires that every person admitted to a medical facility has the opportunity to complete an advance directive concerning medical care. More information is available in the appendix. If you already have an advance directive, please bring a copy with you to the hospital on the day of your surgery.

PRE-OPERATIVE PREPARATIONS

Six Weeks Before Surgery (continued)

Register for Pre-Operative Education Class

A class is held three times a month for patients planning for a joint surgery. Please schedule your class date no later than two weeks prior to your surgery. A designated family member or support person must attend this class with you. Register as soon as possible. You may call the Joint & Spine Center, or register from our website, or use the E-Portal to self-schedule your class appointment using the QR code below (<https://eportal.gbmc.org/mychart/openscheduling>). Once you are in the E-Portal-Find a Doctor, choose "Joint and Spine".

The outline of the class is as follows:

- ◆ Pre-op time sensitive tasks to complete before surgery
- ◆ GBMC Hospital specific updates
- ◆ Brief review of joint disease and prosthetic
- ◆ Enhanced Recovery After Surgery at GBMC
- ◆ Planning for surgery and what to expect
- ◆ Preventing infections and complications
- ◆ The importance of pre-op exercises
- ◆ Role of your "coach/support person(s)"
- ◆ General overview of your current medication and time lines to stop or continue before surgery
- ◆ Day of surgery
- ◆ After surgery in the hospital
- ◆ Learn about assistive devices and joint protection
- ◆ Discharge planning: Case Management, DVT prevention, physical therapy expectation, prescription medications
- ◆ The discharge process from the hospital
- ◆ Questions and answers



Become Smoke-Free

If you are a smoker, you must stop using tobacco products (including e-cigarettes and vaping) two weeks before surgery. The tar and nicotine in the tobacco products have serious adverse effects on your blood vessels and thus impair the healing of wounds and bone grafts. It is also thought that smokers experience more pain than non-smokers do. Your Ortho Care Coordinator can provide you with pamphlets about resources available to help you.

PRE-OPERATIVE PREPARATIONS

Six Weeks Before Surgery (continued)

Consult with Your Primary Care Team

Discuss with your physician or primary care team your current daily medications, pre-op diagnostic tests, and pre-op lab work in preparation for surgery. You **MUST** consult with your cardiologist, primary care team, or ordering provider for discontinuation date for anticoagulants such as Eliquis, Coumadin, Pradaxa, Plavix, Xarelto, Ticlid, Lovenox injections, or other blood thinners.

Coach Support Person(s)

Designate who will be your coach/support person(s). In addition, please take into consideration the vehicle that will be used on the day of discharge. Depending on the height of the patient, avoid high or very low vehicles to prevent injuries when the patient enters or exits the vehicle.

Participate in a Weight-Loss Program

If you have a BMI of greater than 35, you should talk to your doctor about ways to lose weight. This will help you in recovery. Your Ortho Care Coordinator can provide you with pamphlets about resources available to help you.

Manage Your Diabetes

If you are diabetic with an A1c >8, it is important to lower your levels. Managing your diabetes is a major factor in your surgeon's decision to operate. Your aim is to bring the A1c levels below 7. There are many new medications to manage your diabetes, please seek the advice of your endocrinologist or your primary care physician.

Perform Daily Oral Care

There is an increased risk for pneumonia and other associated infections if oral care is not adequate. Brushing your teeth 3-4 times a day—after you wake up in the morning, after a meal, and before bedtime—is highly encouraged before your surgery and during your post-op period.

Start Pre-Operative Exercises

Many patients with arthritis favor their joints, causing them to become weaker, which interferes with recovery. It is imperative that you participate in the pre-operative exercise program. Exercising before surgery can help you build your strength and endurance as well as prepare you for rehabilitation after surgery. Exercise videos can be viewed from the Joint & Spine Center website.

Start Using Incentive Spirometer (IS and or Deep Breathing Exercises)

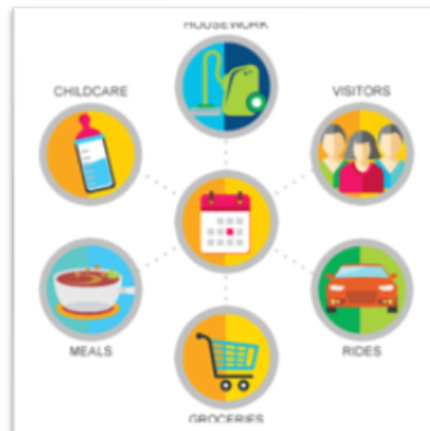
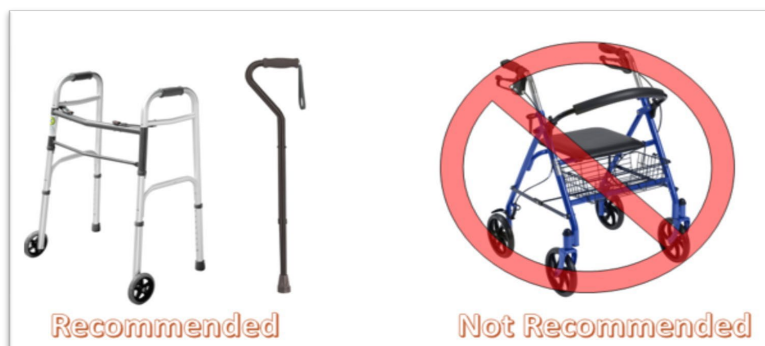
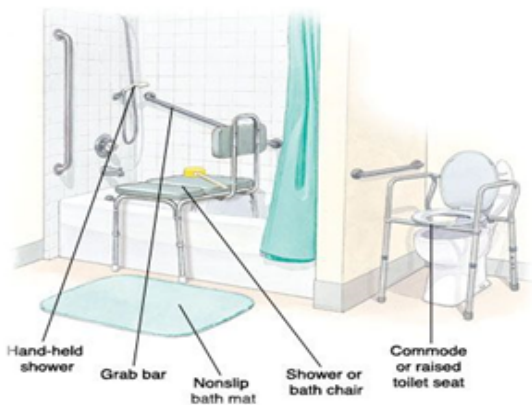
Start practicing your deep breathing by using your IS. The IS is a great tool used here at the hospital and at home to help prevent chances of pneumonia. Please see pages 33-34 for directions for usage.

PRE-OPERATIVE PREPARATIONS

Prepare Your Home for Your Return from the Hospital

Having your house ready for your return is essential for your safe recovery. Be sure to do the following:

- ◆ Clear your home of clutter and clear walkways inside your house.
- ◆ Clean, do the laundry, and put it away.
- ◆ Put clean linens on the bed.
- ◆ Prepare meals and freeze them in single-serving containers.
- ◆ Pick up throw rugs and tack down loose carpeting.
- ◆ Remove electrical cords and other obstructions from walk ways.
- ◆ Install nightlights in bathrooms, bedrooms, and hallways.
- ◆ Designate who your coach/support person(s) will be.
- ◆ Arrange to have someone collect your mail and take care of pets or loved ones, if necessary.
- ◆ Cut the grass, tend to the garden, clear walkways into house of debris or snow, salt snowy or icy sidewalks or pathways, and finish any other yard work.
- ◆ Make sure your assistive equipment is easily accessible, clean and in safe working order.



Pre-Operative Exercises, Goals and Activity Guidelines

Exercising Before Surgery

It is important to be as fit as possible before undergoing a total knee replacement. This will make your recovery much faster. Twelve exercises are shown here that you should start doing now and continue until your surgery. You should be able to do them in 15-20 minutes (excluding Exercise 11). It is recommended that you do all of them twice a day. Consider this a minimum amount of exercise prior to your surgery. Exercise videos can be viewed from the Joint & Spine Center website.

Remember that you need to strengthen your entire body, not just your leg. It is **very important** that you strengthen your arms by doing chair push-ups (Exercise 11), because you will be relying on your arms to help you get in and out of bed, in and out of a chair, walk, and to do your exercises postoperatively.

You will perform these same exercises after surgery to promote rehabilitation.



Knee Exercises

(QR code link to video library. See the following pages for descriptions)

1. Ankle pumps	20 reps.	2 times/day
2. Quad sets (knee push-downs)	20 reps.	2 times/day
3. Gluteal sets (bottom squeezes)	20 reps.	2 times/day
4. Heel slides (slide heel up and down)	20 reps.	2 times/day
5. Short arc quads	20 reps.	2 times/day
6. Abduction and adduction (slide heels out and in)	20 reps.	2 times/day
7. Straight leg raises	20 reps.	2 times/day
8. Long arc quads	20 reps.	2 times/day
9. Seated heel slides	20 reps.	2 times/day
10. Seated hamstring stretch	20 reps.	2 times/day
11. Armchair push-ups	20 reps.	2 times/day
12. Mini Squats	20 reps.	2 times/day



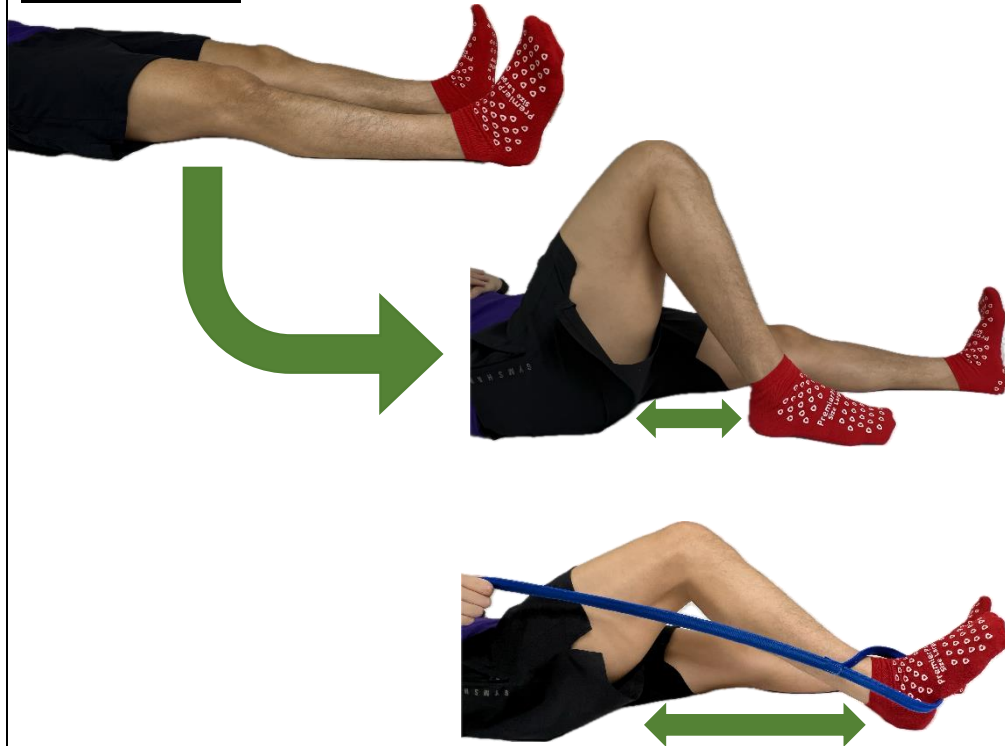
VIDEO LIBRARY

Range of Motion and Strengthening Exercises Total Knee Replacement

<p><u>Ankle Pumps</u></p>	<p><u>Ankle Pumps</u></p> <p>Move Ankles Up and Down.</p> <p>Repeat 20 times on each foot.</p> <p>You can move both feet at the same time or alternate left and right.</p>
<p><u>Quad Sets (knee push downs)</u></p>	<p><u>Quad Sets</u></p> <p>Press both knees into the chair or the bed while tightening the muscles on the front of the thigh.</p> <p>Hold for a count of five seconds and DO NOT hold your breath.</p> <p>Repeat 20 times.</p>
<p><u>Gluteal Sets (bottom squeezes)</u></p>	<p><u>Gluteal Sets</u></p> <p>Squeeze bottom together.</p> <p>Hold for a count of five seconds and DO NOT hold your breath.</p> <p>Repeat 20 times.</p>

PREOPERATIVE PHYSICAL THERAPY

Heel Slides



Heel Slides

Start lying down in a bed or reclining on a supportive chair with both legs out straight.

Slide the heel of one leg towards your bottom and then straighten out.

You may use a leg lifter, a strap or a sheet to assist with this movement only if needed. Check with your therapist for any limits of movement after your surgery.

Repeat 20 times.

Short Arc Quads



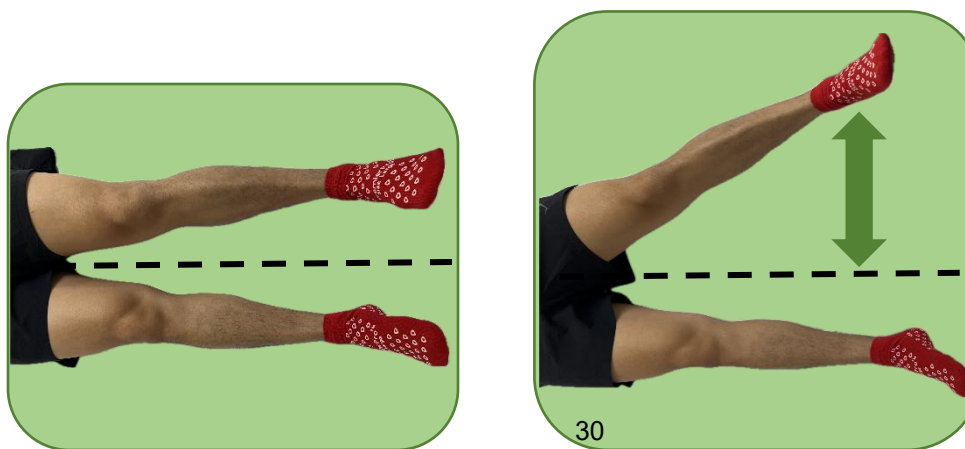
Short Arc Quads

Start lying down in a bed or reclining on a supportive chair with both legs out straight and with a blanket or foam roll under knees.

Lift your foot up by straightening your knee and keeping your thigh against the roll.

Repeat 20 times.

Hip Abduction and Adduction (slide leg in and out)



Hip Abduction and Adduction

Start lying down in a bed or reclining on a supportive chair with both legs out straight.

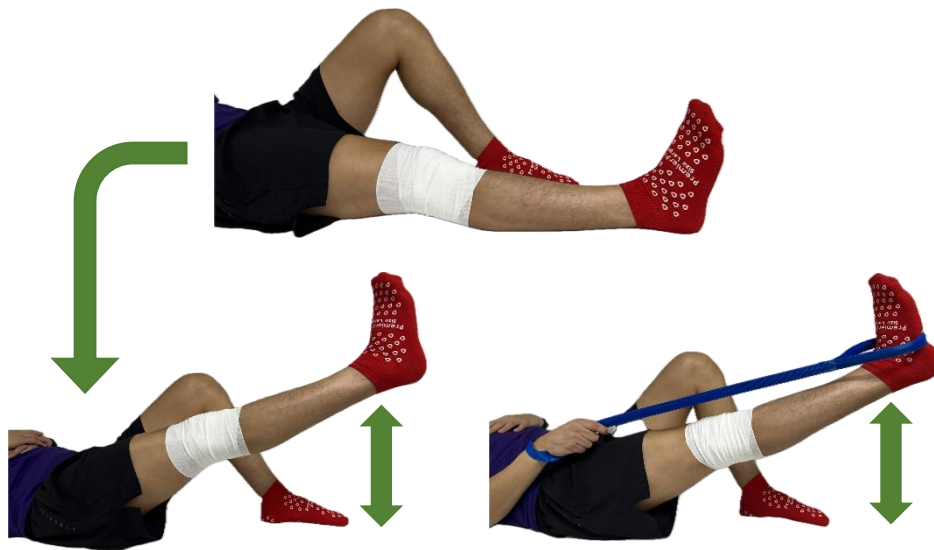
Keep your toes pointed up and your knees straight and slide your leg out to the side.

Return to starting position.

Repeat 20 times.

PREOPERATIVE PHYSICAL THERAPY

Straight Leg Raises



Straight Leg Raises

Start lying down in a bed or reclining on a supportive chair with one leg straight and the other one bent.

Keep your toes pointed up and your knee straight and lift your leg off the bed and return it to the starting position.

You may use a leg lifter, a strap or a sheet to assist with this movement only if needed.

Repeat 20 times.

Long Arc Quads



Long Arc Quads

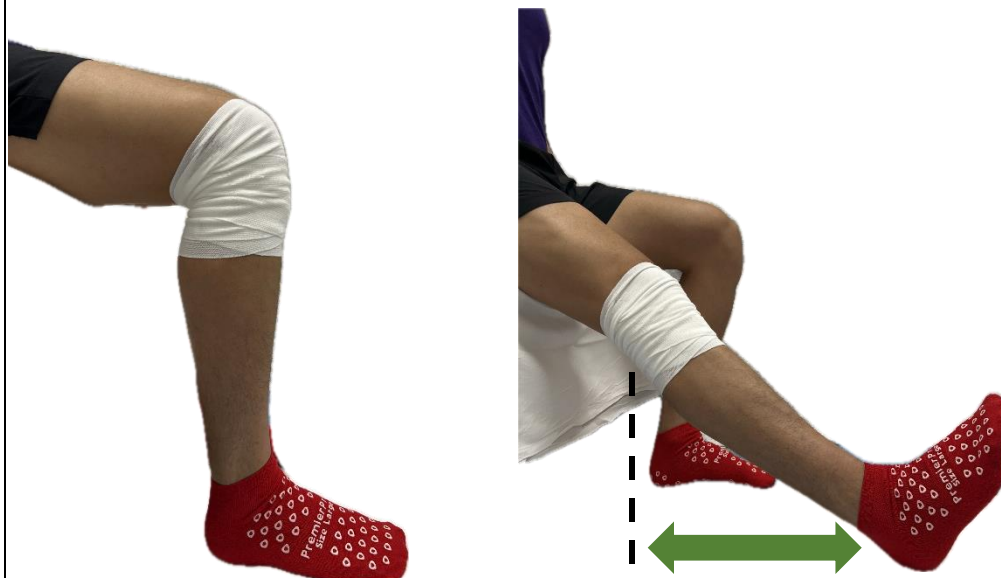
Sit up straight on a firm surface or chair.

Straighten your knee and hold for a count of five.

Return your foot to the floor.

Repeat 20 times.

Seated Heel Slides



Seated Heel Slides

Sit up straight on a firm surface or chair.

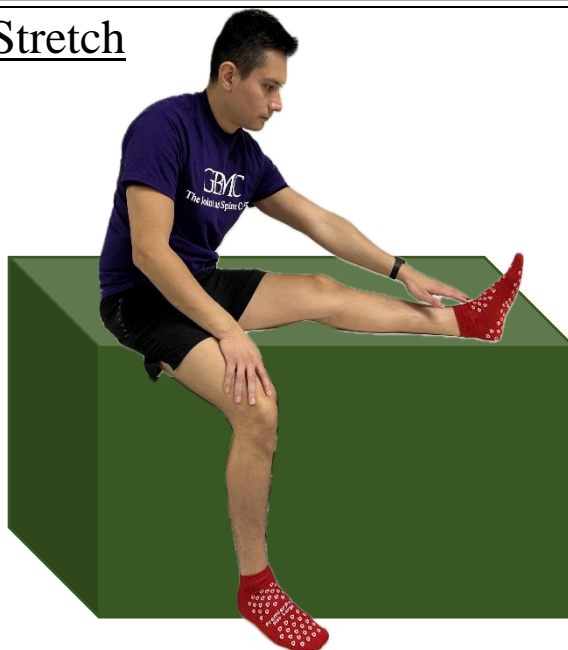
Slide your foot forwards on the floor while trying to straighten your knee as much as possible.

Slide your foot backwards on the floor while trying to bend your knee back as much as possible.

Repeat 20 times.

PREOPERATIVE PHYSICAL THERAPY

Seated Hamstrings Stretch



Seated Hamstrings Stretch

Sit on a bed or reclining supportive chair with one leg out straight.

Lean forwards at the hips while keeping your knee and back straight and with toes pointed upwards.

You should feel a stretch in the back of your thigh.

Hold for 20-30 seconds.

Repeat five times.

Armchair Push-Ups



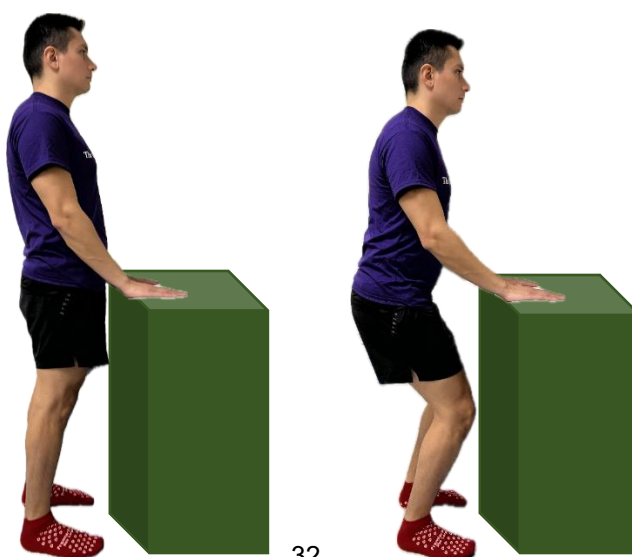
Armchair Push-Ups

Sit in a chair with your hands on the armrests and your feet flat on the floor.

Push up and straighten your arms while raising your bottom up off the chair. Lower slowly.

Repeat 20 times.

Mini Squats



Mini Squats

Hold on to a stable surface like a counter or railing with your feet flat on the floor.

Bend slightly at the knees and keep your back straight.

Return to standing position.

Repeat 20 times.

GBMC Main Hospital 6701 N. Charles St./ Suite 3100/ Towson, MD 21204

MSSA/MRSA preop testing: Monday-Friday 8:00 am-4:00 pm, no holidays

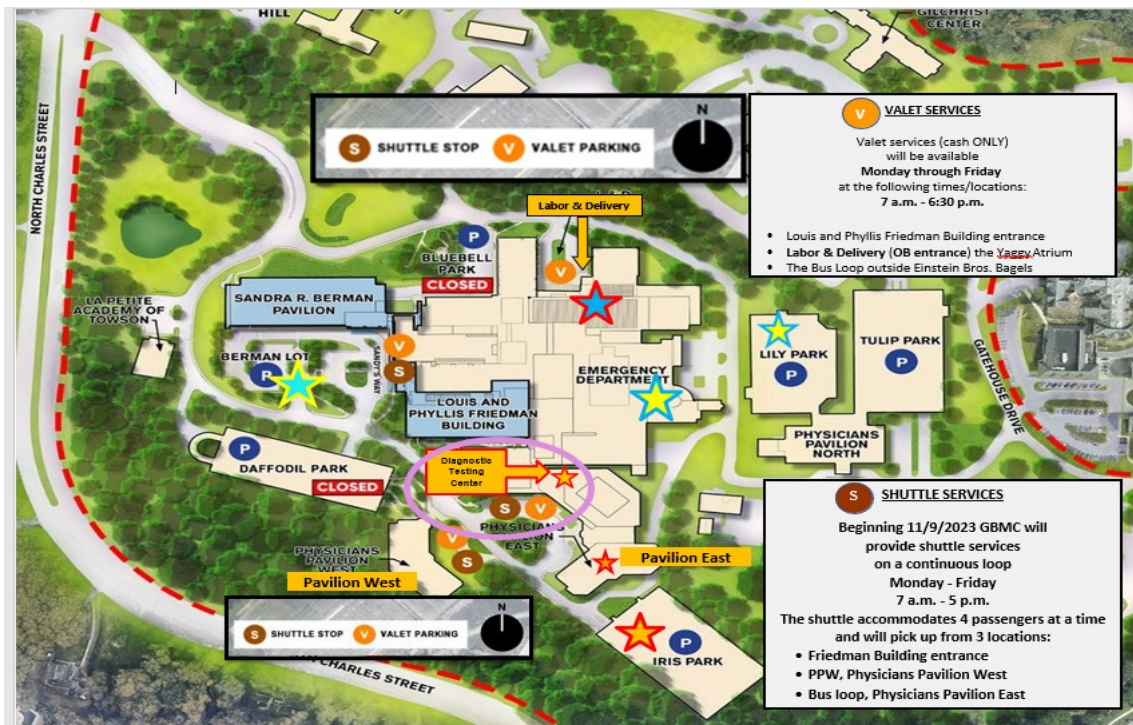
★ GBMC Diagnostic Center Suite #3100 (across from Einstein Bakery)

- ❖ Pre-op MSSA/MRSA nasal swab: To be completed **10 days to 30 days** prior to your surgery date; the test result is valid for 60-days.
- ❖ Walk-in, **no appointment needed for the MSSA/MRSA nasal swab.**
- ❖ **Monday-Friday 8am-4pm, no holidays.** Sign-in at the front desk.
- ❖ Park at **★ Iris Parking** (near the East Pavilion Entrance)



For those entering from Iris Park at Pavilion East entrance, proceed down the hallway and turn right once you reach Einstein Bagels. The Diagnostic Testing Center will be the next office on your left.

- ❖ Parking at **★ Berman Garage** (Main entrance) To access the main hospital, take the garage elevator to Floor 1 and follow the covered walkway/corridor. This will take you to the main lobby of the hospital where an information desk is located. Proceed forward, you will pass the gift shop, turn right. The Diagnostic Center will be the next office on your right before the Einstein Bagels.
- ❖ Parking at **★ Lily Park** (near ER/ED) Upon entering GBMC Lobby E walk straight down the hall until you reach the main concierge desk, turn left down the first hallway. You will pass the Gift Shop, proceeding to the Diagnostic Center prior to arriving at Einstein Bagels.



**NON-Kaiser Permanente
patients only**

Diagnostic Center and Laboratory Medicine at GBMC

GBMC Main Hospital 6701 N. Charles St./ Suite 3100/ Towson, MD 21204
MSSA/MRSA preop testing: Monday-Friday 8am-4pm ONLY, no holidays

Near EAST PAVILION-across the hallway
from the Einstein Bagel Coffee shop ↓





***Information for Patients with Positive Nasal Screens for
MSSA (Methicillin-sensitive Staphylococcus aureus) or
MRSA (Methicillin-resistant staphylococcus aureus)***

One important part of your preoperative evaluation is the identification of possible sources of infection. It is important to diagnose and treat any infections prior to surgery to reduce the risk of infection after surgery. This process involves specific testing done at GBMC's Diagnostic Center 10-30 days before your surgery date to comply with GBMC's Joint or Spine Program protocol.

The MSSA/MRSA nasal culture will check for the presence of staphylococcal bacteria. Staphylococcal bacteria can be present on the skin and in the nose of healthy individuals without symptoms (known as colonization). **A positive nasal screen does not mean you are infected, nor will your surgery be canceled.**

If your culture shows the presence of *Methicillin-sensitive Staphylococcus aureus* (MSSA) *standard precautions are needed. But if your result indicates Methicillin-resistant Staphylococcus aureus* (MRSA), a form of the bacteria that is **resistant** to commonly used antibiotics, your care team will be notified, and the appropriate IV antibiotic(s) will be ordered and given to you in the pre-op/OR areas the day of surgery.

- 1. Pre-op CHG wash:** You will be given a Pre-op CHG Wash Kit from the Joint & Spine Center. Your CHG preop wash starts three nights before surgery with the fourth wash the morning before you come to the hospital for your surgery. Your surgeon may need you to continue to use the CHG wash when you are discharged home. Follow the instructions you are given for the CHG antiseptic. The morning of your surgery, your pre-op nurses will have you wash your skin with a chlorhexidine gluconate (CHG) wipes. Using CHG on your skin will reduce your risk of getting an infection.
- 2. Pre-op IV Antibiotic(s):** On the day of surgery, once you are admitted into the pre-op area, IV antibiotics will be infused. Ancef, Vancomycin, or both if you are positive for **MRSA+**.
- 3. MRSA+ patients** will be placed on **contact isolation** requiring the staff to wear a protective gown and gloves to prevent the transmission of the bacteria to other patients in the hospital.
- 4. Pre-op Normal/MSSA+/MRSA+ decolonizing nasal cleanser:** Nozin® Nasal Sanitizer® is advanced antiseptic for nasal decolonization of germs that can transfer into the surgical incision site. The morning of your surgery your nurse in the pre-op area will clean the inside of your nose with Nozin®.
- 5. Post-op Normal/MSSA+/MRSA+ decolonizing nasal cleanser:** After surgery, you will continue to use the post-op Nozin® Nasal Sanitizer® every 12 hours until your post-op wound check with your surgeon or until the 12-mL bottle is empty (30 days/twice a day).

Instructions for Post-op Nozin® Nasal Sanitizer®:

All Joint & Spine patient cohorts regardless of their MSSA/MRSA results will be participating in this decolonizing regimen. The picture below shows how to clean the inside of your nose. This nasal sanitizer removes MSSA/MRSA and harmful germs that are harboring inside your nose, reducing your risk of getting an infection.

- Once you are admitted to the nursing unit after your surgery, your nurse will provide you with a Post-op Nozin® Nasal Sanitizer® 12 mL kit that includes a starter supply of cotton applicators. **Do not misplace or throw away the box.** You can use any over the counter cotton swab.
- The nurse will scan the box barcode into your electronic medication administration record (eMAR)
- Your first dose after surgery will be on arrival to the unit.
- Your second dose will be at 9 pm that same day of your surgery.
- You will continue to clean the inside of your nose every 12 hours as instructed, 9 am and 9 pm, every day until your post-op wound check or until the bottle is empty (30 days, twice a day).

How to Apply Nozin®: (see Figure 1 image on next page)

1. Shake the 12-mL bottle well. Remove Cap.
2. Saturate the cotton applicator: Apply four (4) drops of solution onto cotton swab tip.
3. Apply: Insert swab tip into the RIGHT nostril. Swab eight (8) times clockwise and eight (8) times counterclockwise.
4. Swab: Ensure swab rotation covers all surfaces, including the inside tip of the nostril.
5. Re-saturate Again: Re-saturate the swab tip by applying two (2) drops of solution.
6. Apply to Left Nostril: Repeat application **steps 3-4** in the LEFT nostril.

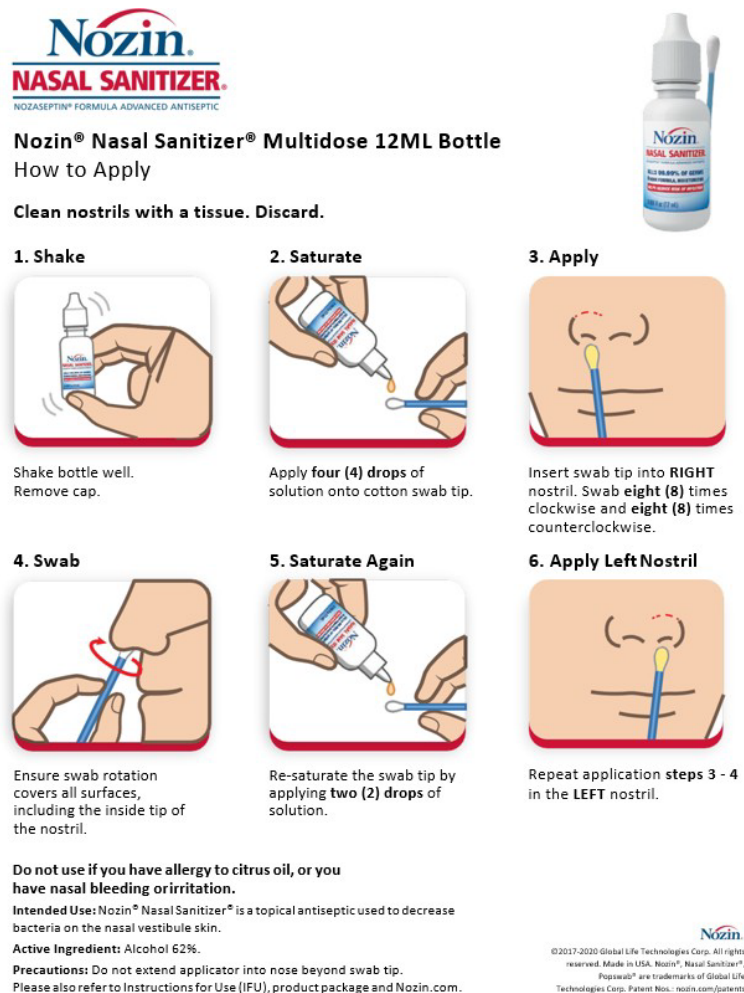


Figure 1

How can you prevent infections after surgery? The most important thing you can do is **wash your hands** regularly. You should wash your hands frequently with soap and water or use an alcohol-based hand sanitizer.

- Don't shave near where you will have surgery. Shaving with a razor can irritate your skin and make it easier to develop an infection.
- Wash with the Preop CHG solution as directed, starting 3 nights before surgery, last CHG shower is the morning of surgery; a total of 4 CHG showers.
- Keep any wounds clean and change your bandages the way your healthcare provider taught you. Clean your hands before and after changing your bandages.

Bactroban (mupirocin) 2% intranasal pre-op instructions

for patients **allergic to orange fruit** and/or **cannot use the Nozin® Nasal Sanitizer®**

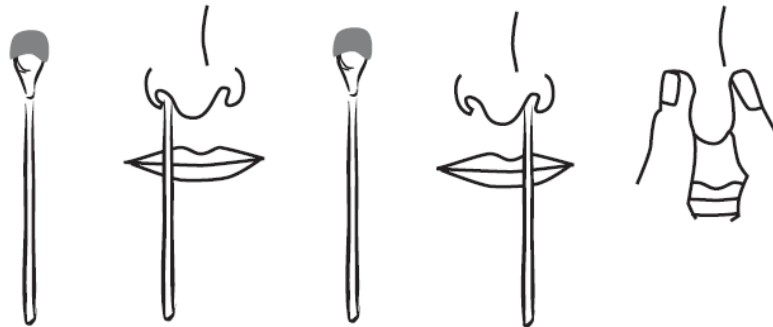
Mupirocin is an antibiotic ointment that provides treatment to help prevent a surgical site infection from *Staphylococcus aureus* organisms.

If your surgeon has ordered a prescription of mupirocin (Bactroban) to use before your surgery, you will need to begin this treatment **Five (5) Days before your surgery date**: You will apply the mupirocin (aka Bactroban) inside each nostril, twice a day for five (5) days, 10 applications, with a cotton Q-tip.

Application instructions:

The picture below shows how to administer the intranasal mupirocin ointment to your nose. This ointment may be supplied in one large tube or several individual application tubes. Both are effective.

- If you receive a single tube of mupirocin (Bactroban) from the pharmacy, place a small amount of ointment on the tip of your finger or on a Q-tip and put on the inside front part of each nostril.
- If you receive 10 individual small tubes of ointment, put half of the ointment from the tube into one nostril and the other half into the other nostril.
- Gently press your nostrils together and release several times (for about a minute) to spread the ointment through your nostrils. Do this twice a day for five days before your surgery.



How can you prevent infections after surgery? The most important thing you can do is **wash your hands** regularly. You should wash your hands frequently with soap and water or use an alcohol-based hand sanitizer.

- **Don't shave.** Shaving with a razor can irritate your skin and make it easier to develop an infection.
- Keep any wounds clean and change your bandages the way your healthcare provider taught you. Clean your hands before and after changing your bandages.
- Cleanse your skin with a pre-op surgical scrub prior to your surgery. It is suggested you start your pre-op skin cleanser 3-nights before surgery, every night, with the 4th and last application the morning of surgery before you come to the hospital. **Do not use deodorant, lotion, cream, oil, hair removal lotion, or skin medication prior to surgery.**



GBMC

JOINT AND SPINE CENTER

PRE-SURGERY INSTRUCTIONS

The HIBICLENS soap you have been given is a solution of 96% Gentle Foaming Soap, and 4% Chlorhexidine Gluconate Antiseptic for pre-surgical bathing, which is prescribed to mitigate the opportunity for infection:

1) It is VERY important that you follow these instructions no less than **FOUR (4)** days in a row.

2) Visit this link to watch a 2-minute 36-second video illustrating how to correctly shower using the foaming HIBICLENS: <https://youtu.be/eF3tae-c6d8>

[Scan this QR Code for video:](#)



3) **Shower #1** begin three (3) nights before your surgery.

Wash your hair, face, and genitals with your regular shampoo and soap. Rinse thoroughly.

4) Run clear water on the rest of your body to wet the rest of your body.

5) Shut off the shower or step out of the water stream.

6) Pump the Hibiclens foam onto each of the 6 or 7 disposable cloths provided to you.

7) Lather up and wash your body from your neck down (each cloth for each body zone, see back of this page).

IMPORTANT!!: Do not allow solution to come in contact with your face, eyes, nose, mouth, ears, or inside your genitals.

8) Allow the HIBICLENS foam to sit on your skin for at least **two (2) to five (5) minutes.**

9) After you've waited at least 2 minutes, turn the water back on, or step back into the water stream to rinse.

10) Pat dry with a fresh clean towel.

11) You will repeat this process every night before surgery.

Hibiclens Shower #2 is two (2) nights before surgery.

Hibiclens Shower #3 is the night before surgery.

Hibiclens Shower #4 is the morning of surgery before coming to the hospital.

Do NOT shave or use removal lotions, deodorant, perfume, lotion, creams, or oils on your body.

FOUR (4) SHOWERS ARE PRESCRIBED.

DO THIS EVERY DAY FOR FOUR (4) DAYS IN A ROW PRIOR TO SURGERY!!

Each one of the disposable cloths (#1 through #6 or #7) is used on a different part of the body. By using a fresh clean cloth with the Hibiclens for each body zone, you help cut down on cross contaminating different body areas. Pump the Hibiclens foam onto each of the 6 or 7 disposable cloths provided to you.

Cloths #1-6: Pump Hibiclens onto cloths, lather skin as instructed below.

#1: Surgical Site. (If multiple surgical sites, use a new cloth)

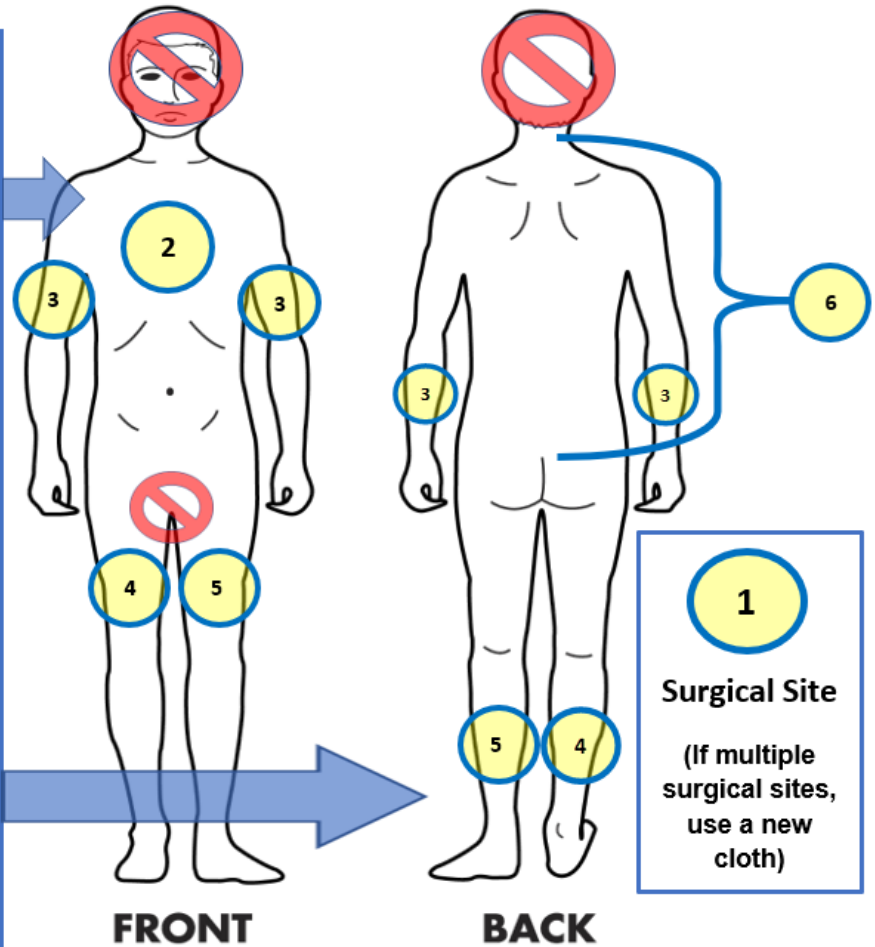
#2: Neck, chest, and stomach.

#3: Both arms front and back, arm pits, hands, and fingers.

#4: Starting at right hip, front and back of leg, feet, toes.

#5: Starting at left hip, front and back of leg, feet, and toes.

#6: Shoulders, back of neck, upper and lower back, and buttocks.



Do NOT shave or use hair removal lotions, deodorant, perfume, lotion, creams, or oils on your body.



Three Nights Before Surgery

●

Two Nights Before Surgery

●

One Night Before Surgery

●

Morning of Surgery

●

How to Use Your Incentive Spirometer *Before Surgery*

To better prepare you for surgery, we are supplying you with an incentive spirometer (IS) to begin using before your procedure. Your goal is to use this at least 30 times a day before your surgery. This information will teach you how to use the incentive spirometer.

About your Incentive Spirometer

An incentive spirometer (IS) is a device that will expand your lungs by helping you to breathe more deeply and fully. The parts of your incentive spirometer are labeled Figure 1.

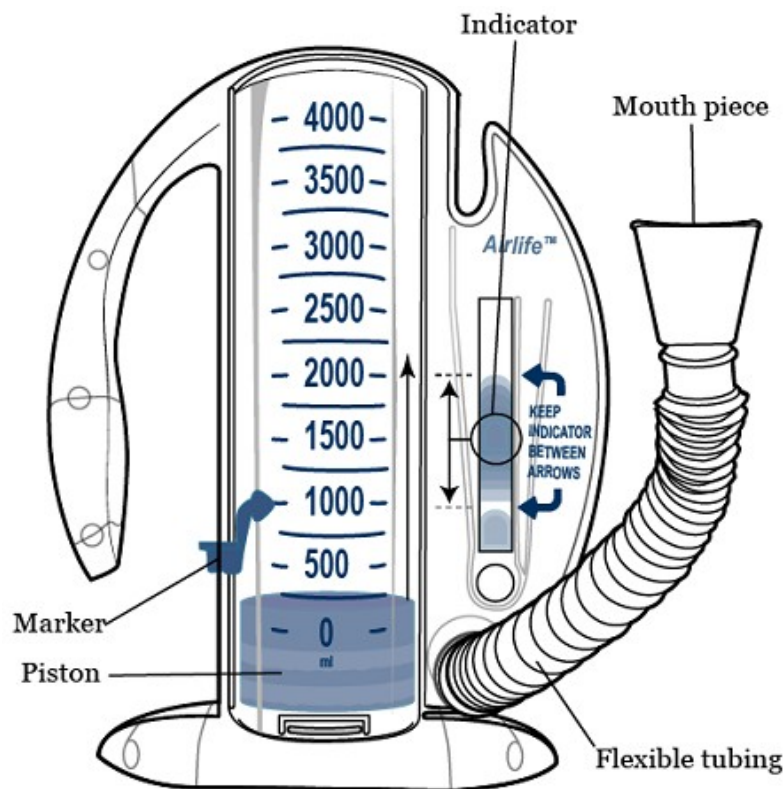


Figure 1. Incentive Spirometer



Use the Incentive Spirometer (IS) before your surgery and do your deep breathing and coughing exercises. This will keep your lungs active throughout your recovery and prevent complications such as pneumonia.

Setting up your incentive spirometer

The first time you use your incentive spirometer (IS), you will need to take the flexible tubing with the mouthpiece out of the bag. Stretch out the tubing and connect it to the outlet on the right side of the base (see Figure 1). The mouthpiece will be attached to the other end of the tubing.

Using your incentive spirometer

When you are using your incentive spirometer (IS), make sure to breathe through your mouth. If you breathe through your nose the incentive spirometer will not work properly. You can plug your nose if you have trouble.

The goal is to use this incentive spirometer at least 30 times throughout the day. Breathing-in several times consecutively may leave you feeling dizzy. Stop and rest if this occurs and try again later.

To use your incentive spirometer (IS), follow the steps below. Sit upright in a chair or in bed. Hold the incentive spirometer at eye level.

1. Slowly breathe out (exhale) completely.
2. Put the mouthpiece in your mouth and close your lips tightly around it. Breathe in (inhale) slowly through your mouth as deeply as you can. As you take the breath, you will see the piston rise inside the large column. While the piston rises, the indicator on the right should move upwards. It should stay in between the 2 arrows (see Figure 1).
3. Try to get the piston as high as you can, while keeping the indicator between the arrows.
 - o If the indicator does not stay between the arrows, you are breathing either too fast or too slow.
4. When you get it as high as you can, hold your breath for 5-10 seconds, or as long as possible. While you're holding your breath, the piston will slowly fall to the base of the spirometer.
5. Once the piston reaches the bottom of the spirometer, breathe out slowly through your mouth. Rest for a few seconds.
6. Repeat twice. Try to get the piston to the same level with each breath.
7. After each set of breaths, try to cough. Coughing will help loosen or clear any mucus in your lungs.
8. Put the marker at the level the piston reached on your incentive spirometer (IS). This will be your goal next time.

Use your incentive spirometer every few hours, the goal is at least 30 times spread-out through the day. No more than 8-10 times an hour.

Deep Breathing Exercises and/or Incentive Spirometry

1. Sit upright.
2. Take a few slow breaths, then take a slow, deep breath in through your nose.
3. Hold your breath for 2-5 seconds.
4. Gently and Slowly breathe out through your mouth making an "O" shape.
5. Repeat 10-15 times

If you have any questions or concerns, contact us at The Joint and Spine Center 443-849-6261



Do not take the following medications the day of your scheduled surgery



(Please see additional instructions for “Other Diabetic Meds” below)

Angiotensin Converting Enzyme (ACE) Inhibitors
Benazepril / amlodipine (Lotrel)
Benazepril (Lotensin)
Benazepril / HCTZ (Lotensin HCT)
Captopril (Capoten®)
Captopril / HCTZ (Capozide)
Enalapril (Vasotec®)
Enalapril / HCTZ (Vaseretic)
Fosinopril (Monopril)
Fosinopril / HCTZ (Monopril HCT)
Lisinopril (Prinivil®, Zestril®)
Lisinopril / HCTZ (Prinzide or Zestoretic)
Moexipril (Univasc)
Moexipril / HCTZ (Uniretic)
Perindopril (Aceon)
Quinapril (Accupril)

Particulate Antacids
Gaviscon
Maalox
Mylanta
Milk of Magnesia
Gaviscon

CBD/THC Products
No Flower, Edibles
Concentrates,
Topicals, or Tinctures

Angiotensin Receptor Blockers (ARB)
Azilsartan (Edarbi)
Candesartan (Atacand)
Candesartan/HCTZ (Atacand HCT)
Eprosartan (Teveten)
Eprosartan/HCTZ (Teveten HCT)
Irbesartan (Avapro)
Irbesartan / HCTZ (Avalide)
Losartan (Cozaar)
Losartan / HCTZ (Hyzaar)
Olmesartan (Benicar)
Olmesartan / HCTZ (Benicar HCT)
Telmisartan (Micardis)
Telmisartan/HCTZ (Micardis HCT)
Valsartan (Diovan)
Valsartan / HCTZ (Diovan HCT)
Azilsartan (Edarbi)

Diuretics
EXCEPTION: Do take for congestive heart failure or ascites, as directed by your doctor.
Acetazolamide (Diamox)
Amiloride
Amiloride/Hydrochlorothiazide (Moduretic)
Bendroflumethiazide
Bumetanide (Bumex)
Chlorothiazide (Diuril)
Chlorthalidone (Thalitone)
Eplerenone (Inspra®)
Ethacrynic acid (Edecrin)
Furosemide (Lasix®)
Hydrochlorothiazide (Microzide, Esidrix®)
Indapamide (Lozol)
Metolazone (Zaroxolyn)
Methazolamide
Spironolactone (Aldactone)
Metolazone (Zaroxolyn)
Spironolactone/Hydrochlorothiazide (Aldactazide)
Torsemide (Demadex)
Triamterene (Dyrenium)
Triamterene / HCTZ (Dyazide, Maxzide)

Metformin:
Do not take on the morning of surgery

OTHER TIME SENSITIVE MEDICATIONS!! See Below
--

Metformin ER (extended release)
Discontinue 24 hours before Surgery
Glucophage XR
Glumetza
Fortamet

Appetite Suppressant (Diet Drug)
Discontinue for 6 days before surgery
Phentermine (Adipex®, Suprenza®)
Phentermine / Topiramate (Qsymia®)

SGLT-2 Inhibitors **
Discontinue 4 days before surgery
Steglatro (ertugliflozin)

SGLT-2 Inhibitors **
Discontinue 3 days before surgery
Jardiance (empagliflozin)
Invokana (canagliflozin)
Farxiga (dapagliflozin)

Other Diabetic Meds (Off-label use for weight management)
<ul style="list-style-type: none"> **GLP-1 Agonist: semaglutide (Ozempic, Rybelsus), dulaglutide (Trulicity), exenatide (Bydureon bcise, Byetta), liraglutide (Victoza, Saxenda), lixisenatide (Adlyxin), etc. If taken daily: Hold GLP-1 agonists on the day of the procedure/surgery. If taken weekly: Hold GLP-1 agonists a week prior to the procedure/surgery. Recommend a clear liquid only diet starting 12 hours before the usual NPO time (noon the day before surgery if NPO time starts at midnight.



Please ask your primary care team prior to taking the following medications before your surgery date



Anticoagulants:**

You MUST consult with your cardiologist or primary care team.

Continue for carotid surgery, recent heart stent, recent MI or stroke. Again, please consult with your doctor.

Coumadin:

Generally, discontinue for 5 days pre-surgery. Again, must consult with your doctor and see if bridging therapy is needed.

Dabigatran (Pradaxa®)

Fondaparinux (Arixtra)

Apixaban (Eliquis®)

Rivaroxaban (Xarelto)

Clopidogrel (Plavix)

Prasugrel (Effient)

Ticagrelor (Brilinta)

Ticlopidine (Ticlid)

Non-steroidal anti-inflammatory:

Joint Replacement & Neurosurgical Patients Discontinue 7 Days prior to surgery

Diclofenac (Cataflam®, Voltaren®)

Etodolac (Lodine®)

Fenoprofen (Nalfon®)

Flurbiprofen (Ansaid®)

Ibuprofen (Advil®, Motrin®)

Ibuprofen/Hydrocodone (Vicoprofen®)

Ibuprofen/Oxycodone (Combunox®)

Indomethacin (Indocin®)

Ketoprofen (Orudis KT®, Oruvail®)

Ketorolac (Toradol®)

Meclofenamate (Meclomen®)

Mefenamic Acid (Ponstel®)

Tolmetin (Tolectin®)

Diflunisal (Dolobid®)

Etodolac (Lodine XL®)

Meloxicam (Mobic®)

Nabumetone (Relafen®)

Naproxen (Aleve®, Anaprox®, Naprosyn®)

Oxaprozin (Daypro®)

Piroxicam (Feldene®)

Sulindac (Clinoril®)

Aspirin or Salicylates:

Discontinue for 10 days prior to your joint replacement or neurosurgery. May cause excessive bleeding during surgery and recovery period. Again, please consult with your primary care team.

Herbal Medications and Non-Vitamin Supplements

Discontinue for 10 days prior to your joint replacement or neurosurgery.

**May cause excessive bleeding during surgery and recovery period

** Vitamin E

** Fish Oil/Omega

** Glucosamine

CoQ10

Gingko Biloba

Ginseng

Turmeric

Garlic

Dong quai

Kava

Ma-huang

Cox-2 Inhibitor:

Consult with your surgeon.

Discontinue 7 Days prior to surgery

Celecoxib (Celebrex) – Joint Replacement patients can continue to take this medication.

MAO inhibitors:

Obtain psychiatry consult before elective surgery

Discontinue 48 hours prior to surgery.

Isocarboxazid (Marplan®)

Phenelzine (Nardil®)

Tranylcypromine (Parnate®)

Rasagiline (Azilect®)

Selegiline patch (Emsam®)

Isocarboxazid (Marplan®)

Phenelzine (Nardil®)

Tranylcypromine (Parnate®)

Rasagiline (Azilect®)

Selegiline patch (Emsam®)



You may take the following medications the day of your surgery.



Beta Blockers
Acebutolol (Sectral)
Atenolol (Tenormin)
Betaxolol (Kerlone)
Bisoprolol (Zebeta)
Carvedilol (Coreg)
Metoprolol (Lopressor, Toprol XL)
Nadolol (Corgard)
Nebivolol (Bystolic)
Penbutolol (Levator)
Pindolol (Visken)
Propranolol (Inderal)
Sotalol (Betapace)

Bronchodilators, Inhaled Steroids, Anticholinergics, or combination of these
Albuterol (ProAir, Proventil, Ventolin)
Albuterol/Ipratropium (Duoneb, Combivent)
Formoterol/Budesonide (Symbicort)
Formoterol/Mometasone (Dulera)
Ipratropium (Atrovent)
Levalbuterol (Xopenex)
Salmeterol (Serevent)
Salmeterol/Fluticasone (Advair)
Beclomethasone (QVAR)
Flunisolide (AeroBid)
Fluticasone (Flovent)
Mometasone (Asmanex)
Triamcinolone (Asmacort)
Fluticasone/vilanterol (Breo)
Tiotropium/olodaterol (Stiolto)

Steroids (Glucocorticoids)
Prednisone
Methylprednisolone (Medrol) or (Solumedrol)

Opioid Agonist/Antagonist: Consider transitioning to alternative medication 1-2 weeks prior to elective surgery by the prescribing physician.
Buprenorphine/Naloxone (Suboxone)
Buprenorphine patch (Butrans)
Naltrexone (Vivitrol, ReVia, Depade)

Thyroid hormone
Levothyroxine (Synthroid, Levoxyol)
Dessicated thyroid (Armour Thyroid)

Calcium Channel Blocker
Amlodipine (Norvasc)
Clevidipine (Cleviprex®)
Diltiazem (Cardizem®)
Felodipine (Plendil®)
Isradipine (Dynacirc®)
Nicardipine (Cardene®)
Nifedipine (Procardia®, Adalat®)
Nimodipine (Nimotop®)
Verapamil (Calan®, Covera-HS®, Verelan®)

Statins
Atorvastatin (Lipitor)
Fluvastatin (Lescol)
Lovastatin (Mevacor)
Pitavastatin (Livalo)
Pravastatin (Pravachol)
Rosuvastatin (Crestor)
Simvastatin (Zocor)

Opioid/Narcotics
Fentanyl Patch (Duragesic)
Hydromorphone SR (Exalgo)
Methadone (Dolophine)
Morphine SR (MS Contin, Kadian, Avinza)
Morphine SR/Naltrexone (Embeda)
Oxycodone SR (Oxycontin)
Oxymorphone (Opana ER)
Hydrocodone
Hydrocodone/Acetaminophen (Hycet, Lorcet, Lortab, Norco, Vicodin, Zydone)
Hydrocodone/Ibuprofen (Vicoprofen)
Hydromorphone (Dilaudid)
Hydromorphone ER (Exalgo)
Morphine
Oxycodone (Roxicodone)
Oxycodone/Acetaminophen (Percocet, Endocet, Roxicet)
Oxycodone/Aspirin (Percodan, Endodan)
Propoxyphene/Acetaminophen (Darvocet)
Propoxyphene/Aspirin (Darvon)
Tapentadol (Nucynta)

Celecoxib (Celebrex) - NSAID
Celebrex: Joint Replacement patients ONLY



You may take the following medications the day of your surgery.



GERD/antacids

Esomeprazole (Nexium)
Lansoprazole (Prevacid)
Omeprazole (Prilosec)
Pantoprazole (Protonix)
Rabeprazole (Aciphex)

Alzheimer's (acetyl cholinesterase inhibitors)

Donazepil (Aricept)
Galantamine (Razadyne)
Rivastigmine (Exelon)
Tacrine (Cognex)

Antidepressants (and anti-anxiety)

Citalopram (Celexa®)
Duloxetine (Cymbalta)
Escitalopram (Lexapro®)
Fluoxetine (Prozac®)
Fluvoxamine (Luvox®)
Paroxetine (Paxil®)
Sertraline (Zoloft®)
Strattera (Atomoxetine®)
Desvenlafaxine (Pristiq, Khedezla)
Amitriptyline (Elavil®)
Bupropion (Wellbutrin)
Desipramine (Norpramin)
Doxepin (Sinequan)
Imipramine (Tofranil)
Mirtazapine (Remeron)
Nefazodone (Serzone)
Nortriptyline (Pamelor)
Trazodone (Desyrel)
Buspirone (Buspar)

Lithium

You may take morning of surgery. Please consult with your psychiatrist for instructions.

Skeletal Muscle Relaxants

Carisoprodol (Soma)
Metaxalone (Skelaxin)

Histamine H2 blockers

Cimetidine (Tagamet)
Famotidine (Pepcid)
Nizatidine (Axid)
Ranitidine (Zantac)

Psychiatric (including anxiety and depression) and Neurological Medications

Alprazolam (Xanax®)
Chlordiazepoxide (Librium®)
Diazepam (Valium®)
Clonazepam (Klonopin)

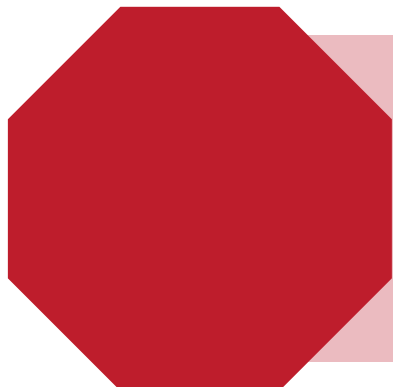
Anticonvulsants

Carbamazepine (Tegretol)
Felbamate (Felbatol)
Gabapentin (Neurontin)
Levetiracetam (Keppra)
Lamotrigine (Lamictal)
Oxcarbazepine (Trileptal)
Phenytoin (Dilantin)
Pregabalin (Lyrica)
Primidone (Mysoline)
Tiagabine (Gabitril)
Topiramate (Topamax)
Valproic Acid (Depakote)
Zonisamide (Zonegran)

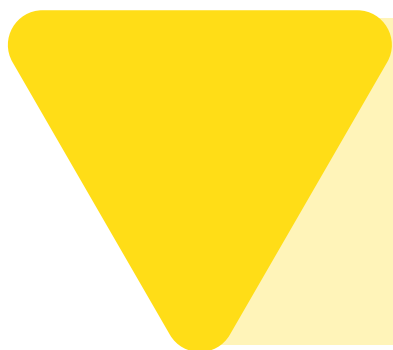
ADHD (stimulant and non-stimulant)

Dextroamphetamine (Adderall)
Lisdexamfetamine (Vyvanse)
Dexmethylphenidate (Focalin)
Methylphenidate (Ritalin, Metadate, Concerta, Daytrana patch)
Guanfacine (Intuniv)
Atomoxetine (Strattera)

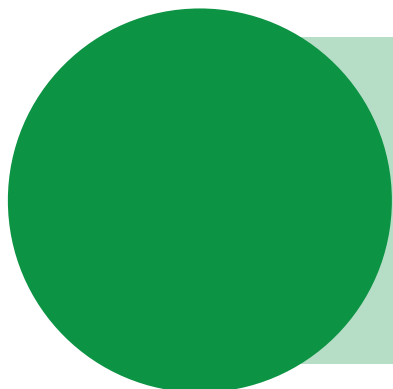
When is it Appropriate for Patients with a Total Joint Replacement or Neurosurgery to use Antibiotics prior to Dental Procedures?



Antibiotics are NOT recommended
if the patient is allergic to penicillin



Amoxicillin may be utilized
(but is not required) in most other instances



Antibiotics ARE recommended
if the patient has a history of uncontrolled Diabetes (1), a medical treatment or condition that causes suppression of the immune system (2), or a history of prior total joint infection

1. Uncontrolled Diabetes – Hemoglobin A1c > 8
2. Immune Suppression – Examples include: stage 3 AIDS, immunosuppressive chemotherapy, immunosuppressants after solid organ transplant, inherited conditions, bone marrow transplant

PRE-OPERATIVE MEDICATION GUIDELINES

10 Days Before Surgery

- ◆ Your **Pre-op MSSA/MRSA Nasal Swab** should already be completed by today
- ◆ **Current Medications for Pain Management**

You can continue your pain medications up to and on the day of surgery. You may take **Tylenol** (acetaminophen), **Oxycodone**, **Dilaudid**, **Neurontin/Gabapentin**, **Flexeril**, and **Skelaxin**. **Celebrex is the only NSAID** (non-steroidal anti-inflammatory drugs) that is okay to take during this period.

- ◆ **Stop** taking aspirin or aspirin-containing products, including Excedrin®. Aspirin may cause increased bleeding during and after surgery.
- ◆ **Stop** taking vitamin E, fish oil, glucosamine; they may increase bleeding.
- ◆ **Stop** taking all herbal products/alternative medications.
- ◆ **If you are on blood thinning medications****, you will need special instructions for stopping this medication. Patients taking medications prescribed by a rheumatologist need to speak with that physician. He or she will determine if you need to stop taking these medications prior to surgery.
- ◆ Any patient who has **cardiac stents and/or takes aspirin, Plavix, or any anti-platelet drugs**** must speak with their cardiologist or primary care team before stopping these medications.

7 Days Before Surgery

- ◆ **Stop** taking **ALL NSAIDS**** (nonsteroidal anti-inflammatory drugs):
 - Advil/Motrin (Ibuprofen)
 - Aleve (Naproxen)
 - Toradol (Ketorolac)
 - Nabumetone
 - Mobic (Meloxicam)
 - Robaxin
 - Diclofenac
- ◆ **Stop** taking all diet and weight-loss medications**.
- ◆ Your surgeon's office will be electronically submitting your post-op pain prescription medications at your preferred pharmacy. Pick up these medications 5-7 days before your surgery.

**please refer to the Anesthesia Guidelines for Home Medications

4 Days Before Surgery

- ◆ **Stop** diabetic medications SGLT-2 Inhibitors^{**}: Steglatro (ertugliflozin).

3 Nights Before Surgery

- ◆ **Stop** diabetic medications SGLT-2 Inhibitors ^{**}: Jardiance (empagliflozin), Invokana (canagliflozin), Farxiga (dapagliflozin).
- ◆ **Stop** Viagra, Levitra, and Cialis.
- ◆ **Stop** topical medications.
- ◆ **Begin your pre-op CHG showers**, continue this every night.
- ◆ **Begin using your incentive spirometer.**

48 Hours Before Surgery

- ◆ **Stop** Monamine Oxidase Inhibitors (MAIOs): Nardil (Phenelzine), Emsam (Selegline), Marplan (Isocarboxazid), Parnate (Tranylcypromine)

24 Hours before Surgery

- ◆ You will be instructed by your physician or primary care team on which of your daily medications to take or omit the morning of surgery.
- ◆ If you have been instructed to take any of your medications pre-operatively, **please take with a small sip of water.** Speak with your primary care provider if you have any questions about your medications.
- ◆ Asthma inhalers should be used the morning of surgery and brought with you to the hospital.
- ◆ **You MUST consult with your cardiologist or primary care team** regarding all your heart medications for pre-op guidance.
 - **Stop the day of surgery your ACE inhibitors** such as Lisinopril, Enalapril, and Benazepril.
 - **Stop the day of surgery your angiotensin receptor blockers** such as Irbesartan, Losartan, Olmesarten, Candesartan, and Valsartan.
 - **DO NOT stop taking your beta-blockers** or **calcium-blocker medications** that treat your abnormal heart rhythms such as **metoprolol, propranolol, carvedilol**

^{**}please refer to the Anesthesia Guidelines for Home Medications

24 Hours before Surgery...continued

◆ Diabetic patients:

- Consult with your endocrinologist or primary care team regarding your insulin and oral medications.
- **Stop Metformin** medications 24 hours, including:** Glucophage, Metformin, Riomet, Glumetza, Glucophage XR, Fortamet, Avandamet, Actos-plus, and Glucovance.
 - If any of these medications are taken within 24 hours of your surgery, your surgery will be canceled.
- If you take a **GLP-1 Agonist****(eg. **Ozempic, Trulicity, etc.**) or **Soliqua**, you must follow the **Anesthesia Guidelines for Home Medications**** and talk to your provider.
 - If taken **daily**: Hold GLP-1** agonists on the day of the procedure/surgery.
 - If taken **weekly**: Hold GLP-1**agonists a week prior to the procedure/surgery.
 - **ONLY Clear Liquids beginning 24 hrs before surgery**
 - Coffee and tea without milk or non-dairy creamer (sweetener is ok)
 - Clear, nonfat broths
 - Fruit & vegetable juices that are strained & pulp free
 - Jell-O
 - **Nothing to eat/drink after midnight (NPO)**

The Day Before Surgery

General Instructions

- ◆ If you become ill prior to your surgery date, contact your surgeon to decide if your surgery should be canceled or postponed.
- ◆ If you have a toothache or notice an open area on the skin, contact your surgeon.
- ◆ **Do not shave your legs the day before surgery.**

Eating and Drinking Before Surgery

- ◆ **No heavy meals past 8 p.m.** the night before surgery. You can snack until midnight.
- ◆ **No food after midnight.**
- ◆ **STOP drinking six hours before surgery if you have:**
 - Diabetes
 - Gastroesophageal reflux disease (GERD)
 - BMI >39
 - Gastroparesis (slow moving gut)
- ◆ Mints, hard candy, and gum are **not allowed after midnight.**

The Day of Surgery before you leave your house

- ◆ **DO NOT take** any antacids like **Tums, Maalox, or Carafate****.
- ◆ **DO NOT take your ACE inhibitors or angiotensin receptor blockers****.
- ◆ **No CBD/THC*** products.
- ◆ **Take your Beta Blocker and/or Calcium Channel Blocker**** with a tiny sip of water.
- ◆ Take your **acid blockers** with a tiny sip of water: **Zantac, Pepcid, Prilosec, Pantoprazole**, etc.
- ◆ **Take your 4th CHG shower at home** before coming to the hospital.
- ◆ Place fresh clean linens on your bed.

What to Bring to the Hospital:

- ◆ Patient Guide.
- ◆ A copy of your advance directive and living will.
- ◆ Insurance card and co-pay (if applicable).
- ◆ Personal hygiene items (deodorant, feminine products, incontinent pads, etc).
- ◆ Loose-fitting shorts, tops, well-fitted tennis shoes or flat shoes that have a rubber sole and supportive sides (including the back of heel), and items such as your CPAP machine or electric razor. **NO Crocks, clogs, or flip-flops.**
- ◆ For safety reasons, do not bring electrical items, except items mentioned above (cellphone and charger are permitted).
- ◆ List of all current medications.
- ◆ Prescription card (original or a copy).
- ◆ Glasses and hearing aids.
- ◆ Walker and cane.
- ◆ Be at the hospital 2 hours before your surgery time.

◆ *Please bring your small overnight bag with you the day of surgery.*

◆ *Please be sure to label all personal belongings with your name before bringing them to the hospital.*

Day of Surgery – What to Expect

In the pre-op area, you and your support person will meet your pre-op registered nurse and nurse support tech (NST). You will be prepared for surgery. This includes gathering your medical and surgical history, a list of your home medications, performing a physical assessment, collecting blood work to be sent to the lab, an EKG if ordered, taking your vital signs, a pre-operative skin cleanser, decolonizing the inside of your nose, and starting an IV. Your surgeon will come see you to discuss your surgery. Your operating room (OR) nurse, as well as a member from the anesthesia team will come to meet you and your support person, discuss your options for anesthesia based on your medical or surgical history, they will collect your support person's phone number to provide updates as you progress in the operating room to the recovery area. During this time in the pre-op area your anesthesia team will review and evaluate the results of your pre-op lab work, diagnostic tests, and the pre-op clearance documentation from your providers. Once it is determined you are safe to undergo surgery, your OR team will escort you to the operating room. Your support person can wait for you in the GOR waiting area. In the operating room your IV antibiotics and surgical anesthesia block(s) will be administered before the first incision made. Following surgery, you will be taken to a recovery area where you will remain for about two hours. No visitors are allowed in the Phase-I recovery area. If you are a same-day discharge home, you will continue to the Phase-II area to be evaluated by a physical therapist, your coach person must bring your walker to this area and must be present for the physical therapy session and discharge teaching. You will be discharged via a wheelchair with your support person from this Phase-II area to the support persons vehicle.

Patients staying overnight will be transferred to Unit 58 where the team will care for you. Family and friends will be able to see you at this time in your hospital room.

Once you arrive to Unit 58, you will be greeted by your nurse and nurse support tech or certified nursing assistant (CNA) who will get you settled and familiarized to your room and unit. You will be given ice packs for your knee(s), the staff will update your communication board, a GBMC iPad can be assigned to you upon request, and you can ask for something to drink or eat. Generally, there is good pain control after surgery. Please ask your nurse if you need pain relievers. You can also utilize your MyChart Bedside app from your personal electronic device or the GBMC iPad. You can use this app to view your schedules for therapy or medications, send a message to your care team requesting for something to eat, drink, or pain relievers.

Patients are expected to walk the day of surgery. Your coach/support person(s) are scheduled to be available during these PT and/or OT sessions. Your therapist will teach you how to use your walker appropriately and safely, how to use the stairs, remind you of your knee precaution per surgeons orders, and review post-op exercises in this guidebook. Exercise videos links are included in this guidebook and can also be found on the Joint & Spine Center Website. If there is not a PT or OT to get you out of bed, your RN, NST, or CNA will help you ambulate to and from the bathroom. It is important to do ankle pumps and exercises while in bed or sitting the chair. This will help prevent blood clots from forming in your lower legs. You should be using your incentive spirometer and doing deep breathing exercises. 51

How to Use Your Incentive Spirometer *After Surgery*

To better prepare you for surgery, we are supplying you with an incentive spirometer (IS) to begin using after your procedure. Your goal is to use this 10 times an hour when you are awake after surgery. This information will teach you how to use the incentive spirometer.

About your Incentive Spirometer

An incentive spirometer (IS) is a device that will expand your lungs by helping you to breathe more deeply and fully. The parts of your incentive spirometer are labeled Figure 1.

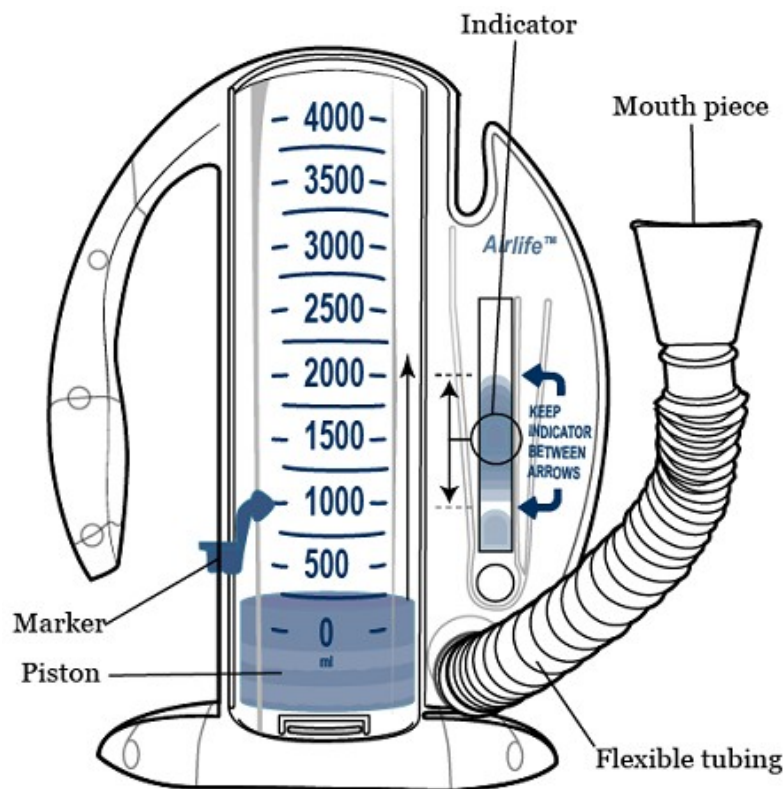


Figure 1. Incentive Spirometer



Use the Incentive Spirometer (IS) after your surgery and do your deep breathing and coughing exercises. This will keep your lungs active throughout your recovery and prevent complications such as pneumonia.

Setting up your incentive spirometer

The first time you use your incentive spirometer (IS), you will need to take the flexible tubing with the mouthpiece out of the bag. Stretch out the tubing and connect it to the outlet on the right side of the base (see Figure 1). The mouthpiece will be attached to the other end of the tubing.

Using your incentive spirometer

When you are using your incentive spirometer (IS), make sure to breathe through your mouth. If you breathe through your nose the incentive spirometer will not work properly. You can plug your nose if you have trouble.

The goal is to use this incentive spirometer at least 30 times throughout the day. Breathing-in several times consecutively may leave you feeling dizzy. Stop and rest if this occurs and try again later.

To use your incentive spirometer (IS), follow the steps below. Sit upright in a chair or in bed. Hold the incentive spirometer at eye level.

1. Slowly breathe out (exhale) completely.
2. Put the mouthpiece in your mouth and close your lips tightly around it. Breathe in (inhale) slowly through your mouth as deeply as you can. As you take the breath, you will see the piston rise inside the large column. While the piston rises, the indicator on the right should move upwards. It should stay in between the 2 arrows (see Figure 1).
3. Try to get the piston as high as you can, while keeping the indicator between the arrows.
 - o If the indicator does not stay between the arrows, you are breathing either too fast or too slow.
4. When you get it as high as you can, hold your breath for 5-10 seconds, or as long as possible. While you're holding your breath, the piston will slowly fall to the base of the spirometer.
5. Once the piston reaches the bottom of the spirometer, breathe out slowly through your mouth. Rest for a few seconds.
6. Repeat twice. Try to get the piston to the same level with each breath.
7. After each set of breaths, try to cough. Coughing will help loosen or clear any mucus in your lungs.
8. Put the marker at the level the piston reached on your incentive spirometer (IS). This will be your goal next time.

Use your incentive spirometer every hour when you are awake, the goal is 10 times spread-out through the hour. No more than 5 times at once.

Deep Breathing Exercises and/or Incentive Spirometry

1. Sit upright.
2. Take a few slow breaths, then take a slow, deep breath in through your nose.
3. Hold your breath for 2-5 seconds.
4. Gently and Slowly breathe out through your mouth making an "O" shape.
5. Repeat 10-15 times

If you have any questions or concerns, contact us at The Joint and Spine Center 443-849-6261


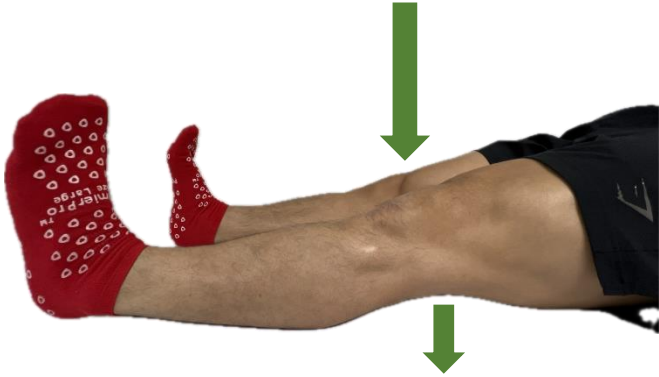

POSTOPERATIVE PHYSICAL THERAPY

Greater Baltimore Center for Rehabilitation Medicine
Acute Care Physical & Occupational Therapy



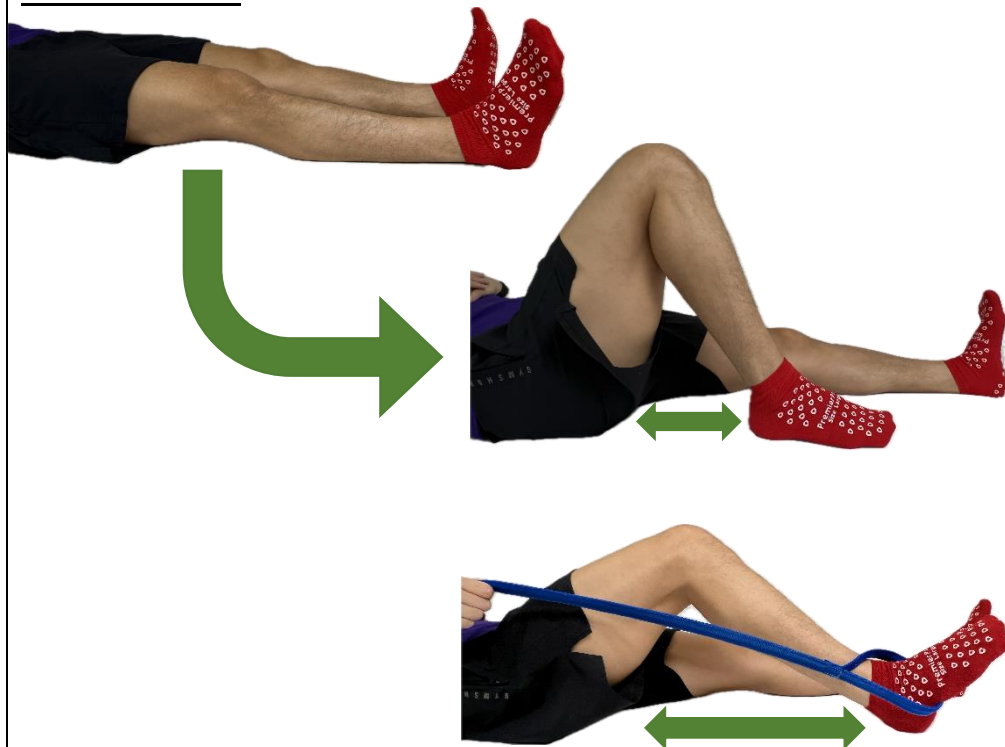
VIDEO

Range of Motion and Strengthening Exercises Total Knee Replacement

<p><u>Ankle Pumps</u></p> 	<p><u>Ankle Pumps</u></p> <p>Move Ankles Up and Down.</p> <p>Repeat 20 times on each foot.</p> <p>You can move both feet at the same time or alternate left and right.</p>
<p><u>Quad Sets (knee push downs)</u></p> 	<p><u>Quad Sets</u></p> <p>Press both knees into the chair or the bed while tightening the muscles on the front of the thigh.</p> <p>Hold for a count of five seconds and DO NOT hold your breath.</p> <p>Repeat 20 times.</p>
<p><u>Gluteal Sets (bottom squeezes)</u></p> 	<p><u>Gluteal Sets</u></p> <p>Squeeze bottom together.</p> <p>Hold for a count of five seconds and DO NOT hold your breath.</p> <p>Repeat 20 times.</p>

POSTPERATIVE PHYSICAL THERAPY

Heel Slides



Heel Slides

Start lying down in a bed or reclining on a supportive chair with both legs out straight.

Slide the heel of one leg towards your bottom and then straighten out.

You may use a leg lifter, a strap or a sheet to assist with this movement only if needed. Check with your therapist for any limits of movement after your surgery.

Repeat 20 times.

Short Arc Quads



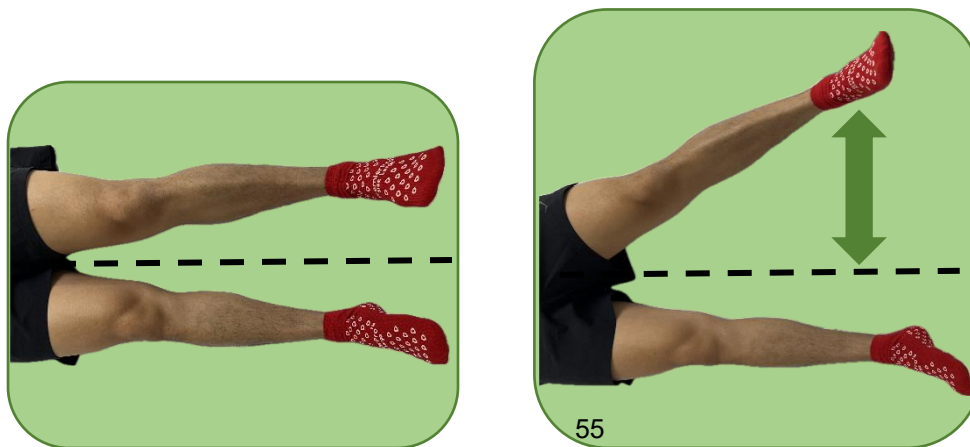
Short Arc Quads

Start lying down in a bed or reclining on a supportive chair with both legs out straight and with a blanket or foam roll under knees.

Lift your foot up by straightening your knee and keeping your thigh against the roll.

Repeat 20 times.

Hip Abduction and Adduction (slide leg in and out)



Hip Abduction and Adduction

Start lying down in a bed or reclining on a supportive chair with both legs out straight.

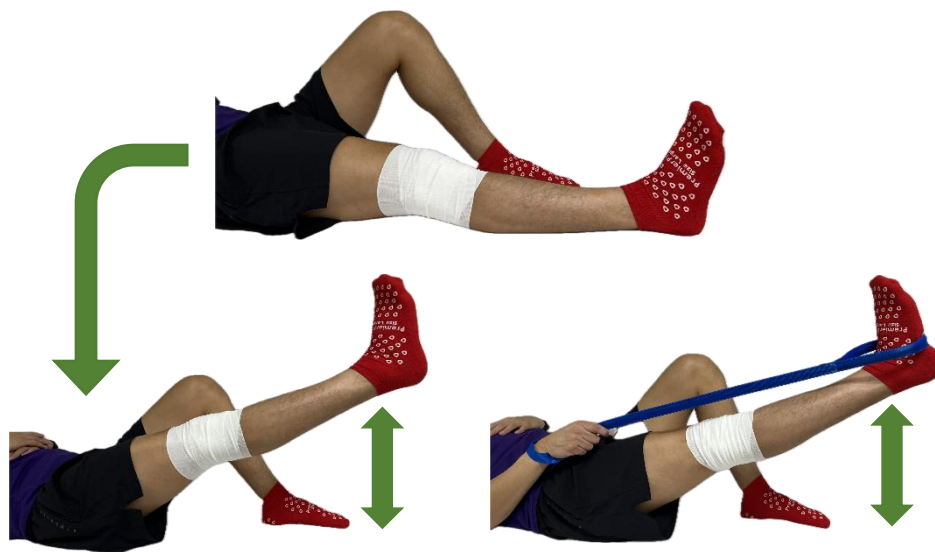
Keep your toes pointed up and your knees straight and slide your leg out to the side.

Return to starting position.

Repeat 20 times.

POSTPERATIVE PHYSICAL THERAPY

Straight Leg Raises



Straight Leg Raises

Start lying down in a bed or reclining on a supportive chair with one leg straight and the other one bent.

Keep your toes pointed up and your knee straight and lift your leg off the bed and return it to the starting position.

You may use a leg lifter, a strap or a sheet to assist with this movement only if needed.

Repeat 20 times.

Long Arc Quads



Long Arc Quads

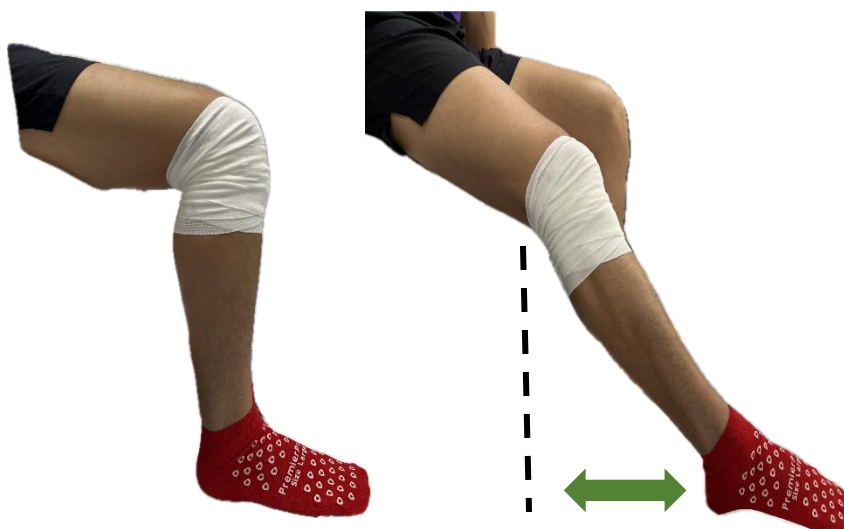
Sit up straight on a firm surface or chair.

Straighten your knee and hold for a count of five.

Return your foot to the floor.

Repeat 20 times.

Seated Heel Slides



Seated Heel Slides

Sit up straight on a firm surface or chair.

Slide your foot forwards on the floor while trying to straighten your knee as much as possible.

Slide your foot backwards on the floor while trying to bend your knee back as much as possible.

Repeat 20 times.

POSTOPERATIVE PHYSICAL THERAPY

Seated Hamstrings Stretch



Seated Hamstrings Stretch

Sit on a bed or reclining supportive chair with one leg out straight.

Lean forwards at the hips while keeping your knee and back straight and with toes pointed upwards.

You should feel a stretch in the back of your thigh.

Hold for 20-30 seconds.

Repeat five times.

Armchair Push-Ups



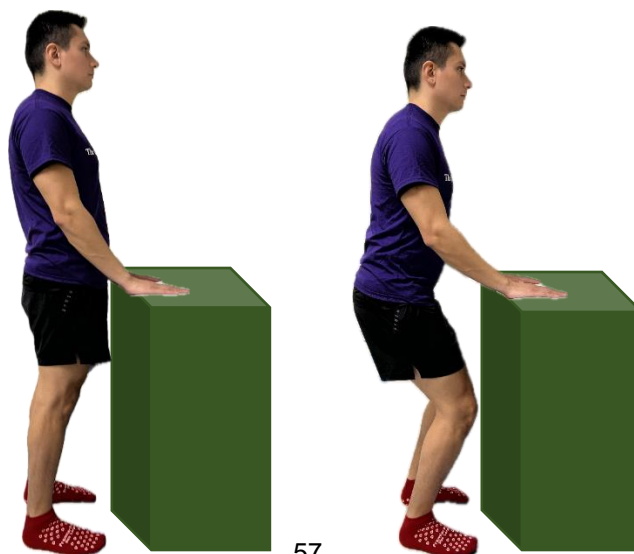
Armchair Push-Ups

Sit in a chair with your hands on the armrests and your feet flat on the floor.

Push up and straighten your arms while raising your bottom up off the chair. Lower slowly.

Repeat 20 times.

Mini Squats



Mini Squats

Hold on to a stable surface like a counter or railing with your feet flat on the floor.

Bend slightly at the knees and keep your back straight.

Return to standing position.

Repeat 20 times.

Day 1 After Surgery— Preparing for discharge

On Day 1 after surgery, you will be given a wash basin to freshen up, you'll be helped out of bed, and seated in a recliner in your room. Your surgeon/advanced practitioner will visit you in the morning. PT and/or OT will continue to assess your progress and provide you exercises to reach your rehabilitation knee goals, and techniques to help you safely transfer in and out of the bed, chair, shower area, car, and stairs using your rolling walker (or crutches if appropriate). Your coach/support person(s) are scheduled to be available during Coach/Family PT Training Session to learn important safety guidelines. Your therapy goals will be tailored especially for you. Your therapy times will be posted on your communication board in your room or you can view your schedule in your MyChart Bedside app on your smartphone, your personal iPad, or you can borrow one of GBMC's iPad.

The occupational therapist are typically scheduled for 7:45 AM the morning after surgery, day one, the day of discharge to teach you how to perform self-care activities and educate you and your coach/support person(s) on any needed equipment to getting dressed easier, getting in and out of the shower and car safely and with less discomfort, reaching into cabinets, etc. Once you have:

- Met the therapy goals for discharge, including the Coach/Family PT Training Session
- Your approved walker and/or cane in your room;
- Your PT agency for the first two weeks (outpatient or home health PT) arranged with a start of care within 72-hours of being discharged from the hospital;
- Your prescriptions
- Discharge instructions from your surgeon/advance practitioner
- Your ride at GBMC...

Your nursing team will review with you and your support person the printed AVS (after visit summary) discharge instructions and provide you with supplies for home. Please use the Discharge Checklist to help ensure you have all your belongings, ice packs, etc. GBMC is not responsible for lost or forgotten items.

Discharge from your overnight stay at the hospital is typically between 1:00 PM - 5:00 PM.

Going Directly Home

Most patients are discharged home the next day after surgery. You will receive written discharge instructions concerning medications, equipment, therapy needs, activity, etc. Have this Patient Guidebook with you. It is imperative that you continue your exercises every day, three times a day, on your own. During your admission you will be evaluated by your PT and OT; if the recommendation is post-op home therapy, it will likely be arranged by your care manager on post-op day 1. Home PT is limited to insurance approval, service area, an available home therapy group, and availability of a physical therapist. Of note, some patients can go directly to outpatient physical therapy. OT is not typically needed after discharge. It is expected for you to begin working with a PT within 72-hours of your discharge day and every attempt will be made to try to meet this expectation.

If You Are Going to a Skilled Nursing Facility (SNF)

The decision to go home or to a SNF, also known as "rehab", will be made based on your PT, OT, and medical recommendations. The SNF location will be determined collectively by availability of a bed, your care manager, your insurance company, and your surgeon. Every attempt will be made to have this decision finalized in advance, but it may be delayed until the day of discharge.

Upon acceptance to a SNF, your transfer papers will be completed by the nursing staff. Transportation to the facility will be arranged by the care management team. Your primary care provider (PCP) or a clinician from the SNF will be caring for you in consultation with your surgeon. The average stay is 7-10 days, dependent upon your progress. Upon discharge home, the SNF staff will give you further instructions. TAKE THIS PATIENT GUIDEBOOK WITH YOU.

Please remember that additional rehab stays must be approved by your insurance company. A patient's stay in a SNF must be done in accordance with the guidelines established by Medicare. Although you may desire to go to a SNF when you are discharged, your progress will be monitored by your insurance company while you are in the hospital. Upon evaluation of your progress, you will either meet the criteria for a SNF stay or your insurance company will recommend that you return home with other care arrangements. Therefore, it is important for you to make alternative plans pre-operatively for care at home. In the event an additional rehab stay is not approved by your insurance company, you may go to rehab and pay privately.

Please keep in mind that most patients do not meet the criteria for admission to a SNF. Remember that insurance companies do not become involved in "social issues", such as lack of caregiver, animals, etc. These issues need to be addressed prior to admission for surgery. For any issues concerning this, please reach out to your Ortho Care Coordinator pre-operatively.

Discharge Checklist-Joint

- _____ I have reviewed my discharge instructions with the nurse
- _____ I know who is my support person/help at home
- Post-op Physical Therapy/Occupational Therapy Agency: _____
 - Phone # _____ Start of Care Date: _____
 - If I haven't heard from the Home Physical Therapy Agency 3-days after discharge or have any issues with scheduling, I will call my surgeon's office as soon as possible
- _____ Do I need a referral/prescription for Outpatient Physical Therapy?
- _____ Do I have my prescription(s)?
 - Medication(s) **MUST** be picked up the day of discharge or prior to admission
- Do I know the reason for and side effects of my prescriptions?
- I have my...
 - _____ Walker and/or cane (if you do not have one, insurance approval is needed)
 - _____ Ice packs (2 for hips and 4 for knees) and the wrap
 - _____ Dressing material (gauze and tape)
 - _____ Nozin® Nasal Sanitizer® 12-mL bottle and starter cotton swabs
 - _____ Gait Belt
 - _____ Belongings that I brought into the hospital
- If I choose, I can purchase a portable SCD device to take home to prevent development of post-op blood clots
- I will call my surgeon's office with any signs of infection such as fever, redness,



Nozin® Nasal Sanitizer® 12mL Bottle



Home SCD:
(optional)

Caring for Yourself at Home

There is a variety of important information you need to know as you head home:

Controlling Discomfort:

- ◆ Take your pain medicine at least 30 minutes before PT.
- ◆ Change your position every 45 minutes throughout the day.
- ◆ Use ice for pain control. Applying ice to your affected joint will decrease discomfort, but **do not use it for more than 20 minutes at a time** each hour.
- ◆ It is recommended that you ice before and after your exercise program.

Weaning Off Pain Medication:

- ◆ Avoid taking acetaminophen (Tylenol®) that is combined with a prescription pain medication (eg. Percocet®), you may unknowingly exceed the recommended daily dose of acetaminophen.
- ◆ Gradually wean yourself from prescription medication to Tylenol®. You may take two extra- strength Tylenol® in place of your prescription medication up to four times per day.

Body Changes:

- ◆ Appetite:
 - Your appetite may be poor.
 - Drink plenty of fluids to keep from getting dehydrated.
- ◆ Sleeping
 - You may have difficulty sleeping (this is normal).
 - Try not to sleep too much or nap during the day.
- ◆ Energy
 - Do not be surprised if your energy levels drop. This is normal for the first month after surgery.
- ◆ Constipation:
 - Pain medication can promote constipation.
 - Drink water and use a stool softener or laxative if necessary. Some over the counter examples are:
 - Colace
 - MiraLAX
 - Senokot
 - Magnesium Citrate

Constipation (continued)

- ◆ Avoid using fiber laxatives which will make the constipation worse. Examples of those are as follows:
 - Metamucil
 - Benefiber
- ◆ If an over the counter stool softener/laxative does not work. call your primary care team.

Caring for Your Incision

- ◆ **You must follow your surgeon's recommendation and discharge instruction regarding your specific surgical dressing, some patients are instructed to not shower until a certain date.**
 - IF you have a **Mepilex Border Ag** dressing, your surgeon may want you to remove it on post-op day seven.
 - IF you have an **Aquacel Ag** dressing, follow your surgeons orders; your surgeon may want you to keep it in place until your post-op visit.
- ◆ Keep your incision dry.
- ◆ Keep your incision covered with a light dry dressing until your staples are removed (usually seven days). You will likely have Mepilex dressing which protects your incision.
- ◆ Notify your surgeon if there is increased drainage, redness, pain, odor, or heat around the incision.
- ◆ Take your temperature if you feel warm or sick. Call your surgeon if it exceeds 100.5°F.

***THE NEXT PAGE ARE INSTRUCTIONS FOR THE
MEPILEX or AQUACEL SURGICAL DRESSING***



Ordered by your healthcare provider to promote wound healing.

- ✓ Gentle on skin
- ✓ Will not stick to wound
- ✓ Shower-Proof
- ✓ Flexible during rehabilitation

Your Dressing Should Be Removed:

The waterproof dressing remains in place for seven total days with planned removal as directed by your surgeon. Thereafter, no further dressings are required, although a dry sterile gauze can be placed over the surgical site for comfort if needed.

Note: Unless you see wound drainage is present at the edges of the wound pad. See "time to Change" image to right.

***If the border of the dressing has lifted before the 7-days, and/or you suspect water has entered the inside of your dressing, notify your surgeon, you may need to remove the Mepilex.

Notify your surgeon if the surgical incision and/or the surrounding skin looks red, swollen, warm/hot to touch, there is yellowish/tan discharge from the incision, increased incisional pain, or you have a fever.

Step 1: Preparing to remove your Mepilex Border Post-op Ag Dressing:

- Wash hands

Step 2: Removing your soiled Mepilex Border Post-op AG dressing:

- Remove the Mepilex Border Pos-op Ag dressing by gently lifting a corner and peeling away from your wound
- Wash hands

Step 3: No further dressings are required, although a dry sterile gauze can be placed over the surgical site for comfort if needed.



Time to change. The dressing is saturated when the strikethrough has reached three of the edges



The dressing is saturated when the visible drainage has reached three of the edges. **Call your provider if this occurs.**



If only small amount of visible drainage is showing - it's **OK** to leave dressing in place.



WHEN TO CALL THE HEALTHCARE PROVIDER (doctor, nurse, therapist)

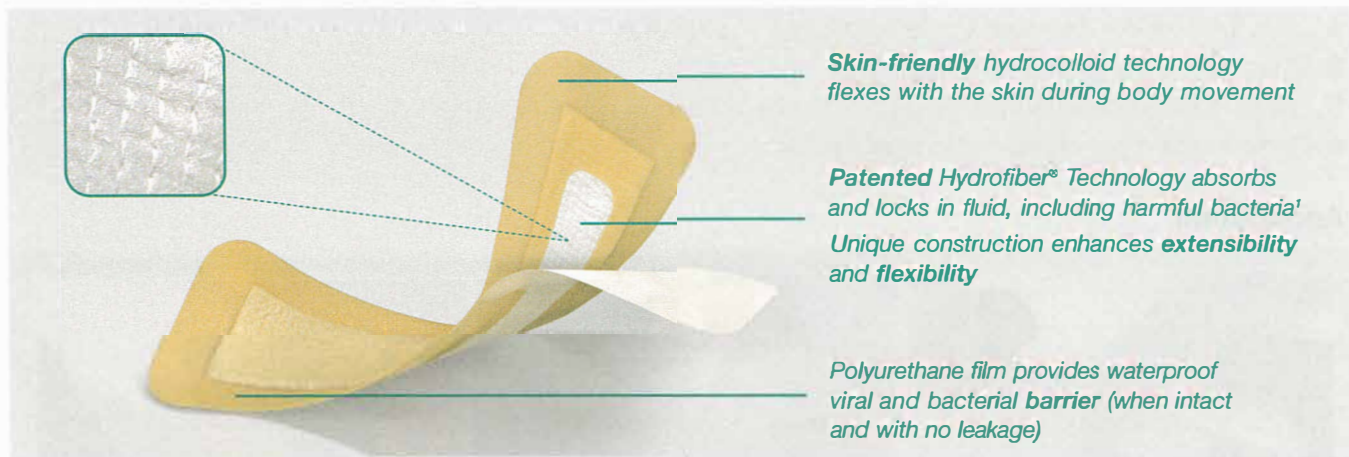
- Any change in the wound that is a concern to you
- If the drainage from the wound increases
- If you have a sudden increase in pain, or new pain in your wound
- If the area around the wound gets red, swollen or painful to touch
- If the wound color changes from pink or red to a tan, brown or black color
- If you get a fever, or if the wound odor gets worse
- If you have questions

NOTE: The recommendation and information in this material should not be considered a substitute for medical advice or diagnosis. See package insert for full instructions and precautions. Please contact your healthcare provider with any questions regarding the care or condition of your wound



A patient's guide to AQUACEL® Ag SURGICAL dressing

An innovative design to handle post-operative challenges



- Dressing is waterproof, can be worn in the shower
- Your dressing can be left in place for up to seven days
- Dressing may need to be changed sooner depending on the amount of drainage it absorbs



Acceptable amount of fluid



Dressing needs to be changed when fluid reaches border

Removal

If your surgeon placed an Aquacel dressing over your incision, please refer to your discharge instructions regarding removal. Your surgeon may want you to keep it on until your post-op wound appointment.

Call your Clinician if:

- the dressing will not stay in place or has attached to your skin
- there is a large amount of fluid coming from the incision
- you experience unusual pain or odor

Refer to package insert for full instructions for use.

References

1. Walker M, Hobot JA, Newman GR, Bowler PG. Scanning electron microscopic examination of bacterial immobilisation in a carboxymethylcellulose (Aquacel) and alginate dressings. *Biomaterials*. 2003; 24:883-890.8.

Signs of Infection

- ◆ Increased swelling, warmth, and redness at incision site
- ◆ Change in color or amount of drainage, odor
- ◆ Increased pain in knee
- ◆ Fever greater than 100.5° F

Prevention of Infection

- ◆ Take proper care of your dressing and incision as explained by your surgeon, nurse, and in your discharge paperwork (AVS.)
- ◆ **Do not soak in a bathtub, pool, river, ocean, etc.** Keep incision area clean and dry. You will need to be cleared by your surgeon before you can soak in tub or pool.
- ◆ Take prophylactic antibiotics when having dental work or other potentially contaminating procedures. *This needs to be done for at least two years to the rest of your life after your surgery depending on your doctor's recommendation.*
- ◆ Notify your physician and dentist that you have a total joint replacement.
- ◆ Keep pets and animals away from your incision until you are cleared by your surgeon.

Prevention of Blood Clots (Deep Vein Thrombosis-DVT)

What are blood clots?

Surgery may cause the flow of blood to your legs to slow and coagulate in the veins of your legs, creating a blood clot. If a clot occurs, you may need to be admitted to the hospital to receive intravenous blood thinners. Prompt treatment usually prevents the more serious complication of pulmonary embolus. Moving around, especially walking, will reduce the chance of a blood clot.

Stockings

Your surgeon may decide to order special white stockings if you have preexisting swelling in your legs or vascular issues. These stockings are used to help compress the veins in your legs, which keeps swelling down and reduces the chance for blood clots.

- ◆ If swelling in the operative leg is bothersome, elevate the leg for short periods throughout the day. It is best to lie down and raise the leg above heart level.
- ◆ Wear the stockings continuously, removing for one hour a day.
- ◆ Notify your physician if you notice increased pain or swelling in either leg.
- ◆ Ask your surgeon when you can discontinue wearing the stockings. Usually, this will be done three weeks after surgery.



Signs and Symptoms of Blood Clots (DVT) in Legs

- ◆ Pain, tenderness in calf
- ◆ Swelling in thigh, calf, or ankle that does not decrease with elevation
- ◆ These signs do not definitely point to a blood clot, but they are early warnings. Don't be alarmed if they are present but notify your surgeon. The surgeon will arrange for you to visit a radiologist, who will use ultrasound to identify a possible blood clot.

Prevention of Blood Clots (DVT)

- ◆ Foot and ankle pumps
- ◆ Walking, using leg muscles
- ◆ Staying well-hydrated

Pulmonary Embolus (PE)

An unrecognized blood clot can dislodge from the vein and travel to the lungs. This is an emergency. Go to your nearest Emergency Room or **CALL 911 immediately** if suspected.

Signs of a PE

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

DISCHARGE INSTRUCTIONS

Weeks 1-2

Most joint patients go directly home, but you may go to a rehabilitation center for 7-10 days if approved by your insurance as a medical necessity. During weeks one and two of your recovery, your two-week goals are to:

- ◆ Continue with walker or two crutches unless otherwise instructed.
- ◆ Walk at least 300 feet with support.
- ◆ Climb and descend a flight of stairs (12-14 steps) with a rail once a day.
- ◆ Actively bend your knee at least 60°.
- ◆ Straighten your knee completely.
- ◆ Independently dressing yourself, sink bathe or shower (please follow your surgeon's discharge instruction). No soaking or submersion of your surgical site in water until cleared by your surgeon.
- ◆ Gradually resume homemaking tasks.
- ◆ Do 20 minutes of home exercises twice a day, with or without your physical therapist, from the program given to you.
- ◆ See your surgeon at your scheduled post-op wound check.



Weeks 3-4

During this time, you will continue recovering more independence. Even if you are receiving outpatient therapy, **you will need to be very faithful to your home exercise program to be able to achieve the best outcome.** Your goals for this period are to:

- ◆ Wean from full support to a cane or single crutch as instructed.
- ◆ Walk at least 1/4 mile.
- ◆ Climb and descend a flight of stairs (12-14 steps) more than once daily.
- ◆ Bend your knee to 90° **unless otherwise instructed.**
- ◆ Independently shower and dress.
- ◆ Resume homemaking tasks.
- ◆ Do 20 minutes of home exercises twice a day with or without the therapist.
- ◆ Begin driving if your left knee had surgery with permission from your surgeon.

DISCHARGE INSTRUCTIONS

Weeks 4-6

You will see much more recovery as you head toward full independence. Your home exercise program will be even more important as you receive less supervised therapy. Your goals for this time period are to:

- ◆ Walk with a cane or single crutch.
- ◆ Walk 1/4 to 1/2 mile.
- ◆ Begin progressing on stairs from one step at a time to regular stair-climbing (foot-over-foot).
- ◆ Actively bend knee.
- ◆ Drive a car (regardless of knee operated on).
- ◆ Continue with home exercise program twice a day.

Strengthening Exercises

1. Name of exercise _____ reps _____ times/day
2. Name of exercise _____ reps _____ times/day
3. Name of exercise _____ reps _____ times/day
4. Name of exercise _____ reps _____ times/day
5. Name of exercise _____ reps _____ times/day
6. Name of exercise _____ reps _____ times/day

Stretching Exercises

1. _____ (stretch/) _____ times/day _____
2. _____ (stretch/) _____ times/day _____
3. _____ (stretch/) _____ times/day _____

Additional Comments:

PT _____

DISCHARGE INSTRUCTIONS

Weeks 6-12

By this time, you should begin resuming all of your normal activities. Your goals are to:

- ◆ Walk with no cane or crutch and without a limp.
- ◆ Climb and descend stairs in normal fashion (foot-over-foot).
- ◆ Walk 1/2 to 1 mile.
- ◆ Improve strength to 80%.
- ◆ Resume all activities including dancing, bowling, and golf.

Strengthening Exercises

1. Name of exercise _____ reps _____ times/day
2. Name of exercise _____ reps _____ times/day
3. Name of exercise _____ reps _____ times/day
4. Name of exercise _____ reps _____ times/day
5. Name of exercise _____ reps _____ times/day
6. Name of exercise _____ reps _____ times/day

Stretching Exercises

1. _____ (stretch/) _____ times/day _____
2. _____ (stretch/) _____ times/day _____
3. _____ (stretch/) _____ times/day _____

Additional Comments:

PT _____

DISCHARGE INSTRUCTIONS

Daily Living with Joint Precautions

Getting into bed:

1. 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 operated leg out in front of you when sitting down.
2. 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).
3. Move your walker out of the way but keep it within reach.
4. Scoot your hips around so that you are facing the foot of the bed.
5. Lift your leg into the bed while scooting around (if this is your operated leg, you may use a cane, a rolled bed sheet, a belt, or your TheraBand to assist with lifting that leg into bed).
6. Keep scooting and lift your other leg into the bed.
7. Scoot your hips toward the center of the bed.

NOTE: CROSS YOUR LEGS to help the operated leg into bed.

Getting out of bed:

1. Scoot your hips to the edge of the bed.
2. Sit up while lowering your non-operated leg to the floor.
3. If necessary, use a leg-lifter to lower your operated leg to the floor.
4. Scoot to the edge of the bed.
5. Use both hands to push off 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.
6. Balance yourself before grabbing for the walker.

Transfer - into bed



Transfer - out of bed



DISCHARGE INSTRUCTIONS

PROPER method

IMPROPER method

Standing up from chair:

Do NOT pull up on the walker to stand!

Sit in a chair with armrests when possible.

1. Scoot to the front edge of the chair.
2. Push up with both hands on the armrests. If sitting in a chair without armrest, place one hand on the walker while pushing off the side of the chair with the other.
3. Balance yourself before grabbing for the walker.



Walker ambulation

1. Your goal is to walk as normally as possible.
2. If your doctor has ordered full weight bearing (FWB) or weight bearing as tolerated (WBAT), you should use a rolling walker. You do not need to stop between steps. You may feel more comfortable taking smaller steps initially but work toward increasing your step length and speed as you recover. You should step one foot past the other to regain a normal walking pattern. Step forward with the operated leg.
3. If your doctor has ordered partial weight bearing (PWB), you need to push down into the walker whenever you take a step with your operative leg.
4. Your goal is to step forward, touch your heel first, then transfer your weight to the toe for push off. This is called heel-toe gait and is the natural way to walk.



DISCHARGE INSTRUCTIONS

Getting into the tub using a bath seat:

1. Place the bath seat in the tub facing the faucets.
2. Back up to the tub until you can feel it on the back of your knees. Be sure the seat is behind you.
3. Reach back with one hand for the bath seat. Keep the other hand in the center of the walker.
4. Slowly lower yourself onto the bath seat.
5. Move the walker out of the way but keep it within reach.
6. Lift your legs over the edge of the tub, using a leg-lifter for the operated leg, if necessary.

NOTE: While using a bath seat, grab bars, long-handled bath brushes and hand-held showers make bathing easier and safety, they are typically not covered by insurance.

NOTE: ALWAYS use a rubber mat or nonskid adhesive on the bottom of the tub or shower.

NOTE: To keep soap within easy reach, make a soap-on-a-rope by placing a bar of soap in the toe of an old pair of pantyhose and attach it to the bath seat.

NOTE: Place a towel, washcloth, or garbage bag on the seat to make turning hips easier when getting in and out of the tub.

Getting out of the tub using a bath seat:

1. Lift your legs over the outside of the tub.
2. Scoot to the edge of the bath seat.
3. 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.
4. Balance yourself before grabbing the walker.

DISCHARGE INSTRUCTIONS

Sitting down on the toilet:

You may need a raised toilet seat or a three-in-one bedside commode over your toilet after surgery.

1. Take small steps and turn until your back is to the toilet.
2. Back up to the toilet until you feel it touch the back of your legs.
3. 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.
4. Slide your operated leg out in front of you when sitting down, if needed.

Raised toilet seat



Getting into a car

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

DISCHARGE INSTRUCTIONS

How to use a tub transfer bench



Back up to the tub bench until you can feel it against your legs.



Reach back for the tub bench and lower yourself onto the seat. Scoot back as far as you can.



Turn your body toward the tub lifting your legs over the tub wall. Scoot further onto the seat as you go.



Reverse the steps to get back out of the tub.

DISCHARGE INSTRUCTIONS

Stair-Climbing

Ascend with non-operated leg first. **Descend** with operated leg first.

Sequence for going up stairs

1. Step up with non-operated leg first.
2. Step up with operated leg next.
3. Bring cane or crutch up last.

Sequence for going down stairs

1. Bring cane or crutch down to next step first.
2. Bring operated leg down next.
3. Bring non-operated leg down last.

Using a “Reacher” or “Dressing Stick”

A reacher or dressing stick can help you remove your pants from your foot and off the floor.

Putting on pants and underwear

1. Sit down.
2. Put your operated leg in first and then your non-operated leg.
3. Use a reacher or dressing stick to guide the waistband over your foot.
4. Pull your pants up over your knees, within easy reach.
5. Stand with the walker in front of you to pull your pants up the rest of the way.



Taking off pants and underwear

1. Back up to the chair or bed where you will be undressing.
2. Unfasten your pants and let them drop to the floor. Push your underwear down to your knees.
3. Lower yourself down, keeping your operated leg out straight, if needed.
4. Take your non-operated leg out first and then the operated leg.

DISCHARGE INSTRUCTIONS

Car transfer



Back up to until your legs touch the car.



Reach for the back of the seat and the dashboard, tucking your head as you lower yourself to the seat.



Move back onto the seat as far as possible. Lift your legs into the car one at a time. Maintain any precautions you have been instructed to follow.



Reverse the steps to exit the car.

DISCHARGE INSTRUCTIONS

Using a Sock Aid

1. Slide the sock onto the sock aid.
2. Hold the cord and drop the sock aid in front of your foot. It is easier to do this if your knee is bent.
3. Slip your foot into the sock aid.
4. Straighten your knee, point your toe, and pull the sock on. Keep pulling until the sock aid pulls out.

Using a Long-Handled Shoehorn

1. Use your reacher, dressing stick, or long-handled shoehorn to slide your shoe in front of your foot.
2. Place the shoehorn inside the shoe against the back of the heel. Have the curve of the shoehorn match the curve of your shoe.
3. Lift your leg and place your toes in your shoe.
4. Step down into your shoe, sliding your heel down the shoehorn.

NOTE: Wear sturdy slip-on shoes, or shoes with Velcro closures or elastic shoelaces.

DO NOT wear high-heeled shoes or shoes without backs.

DISCHARGE INSTRUCTIONS

Around the House

Kitchen

- ◆ **DO NOT** get down on your knees to scrub floors. Use a mop and long-handled brushes.
- ◆ Plan ahead! Gather all your cooking supplies at one time. Then, sit to prepare your meal.
- ◆ Place frequently used cooking supplies and utensils where they can be reached without too much bending or stretching.
- ◆ To provide a better working height, use a high stool or put cushions on your chair when preparing meals.

Bathroom

- ◆ **Do NOT** get down on your knees to scrub bathtub.
- ◆ Use a mop or other long-handled brushes.

Safety and Avoiding Falls

- ◆ Pick up throw rugs and tack down loose carpeting. Cover slippery surfaces with carpets that are firmly anchored to the floor or that have non-skid backs.
- ◆ Be aware of all floor hazards such as pets, small objects, or uneven surfaces.
- ◆ Provide good lighting throughout your home. Install night lights in the bathrooms, bedrooms, and hallways.
- ◆ Keep extension cords and telephone cords out of pathways. **DO NOT** run wires under rugs; this is a fire hazard.
- ◆ **DO NOT** wear open-toe slippers or shoes without backs. They do not provide adequate support and can lead to slips and falls.
- ◆ Sit in chairs with arms. It makes it easier to get up.
- ◆ Rise slowly from either a sitting or lying position to avoid becoming light-headed.
- ◆ **DO NOT** lift heavy objects for the first three months and then only with your surgeon's permission.
- ◆ Stop and think. Use common sense when deciding what activities are appropriate.

DISCHARGE INSTRUCTIONS

Do's and Don'ts for the Rest of Your Life

All joint patients need to have a regular exercise program to maintain their fitness and the health of the muscles around their joints. With both your orthopedic and primary care physicians' permission, you should be on a regular exercise program three to four times per week lasting 20 to 30 minutes.

Impact activities such as running and singles tennis may put too much load on the joint and are not recommended. High-risk activities such as downhill skiing is likewise discouraged because of the risk of fractures around the prosthesis and damage to the prosthesis itself. Infections are always a potential problem, and you may need antibiotics for prevention.

What to Do in General

- ◆ Check with your surgeon or dentist regarding the use of antibiotics before you have dental work or other invasive procedures for at least two years after surgery, depending on your doctor's recommendation.
- ◆ Although the risk is very low for postoperative infections, it is important to realize that it remains. A prosthetic joint may attract the bacteria from an infection in another part of your body. If you should develop a fever of more than 100.5° or sustain an injury such as a deep cut or puncture wound you should clean it as best you can, put on a sterile dressing or Band-Aid®, and notify your doctor. The closer the injury is to your prosthesis, the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your doctor if the area is painful or reddened.
- ◆ When traveling, stop and change positions hourly to prevent your joint from tightening.
- ◆ Get a card from the Total Joint Care Coordinator that states you had a joint replacement. Carry the card with you, as you may set off security alarms at airports, malls, etc.
- ◆ See your surgeon every 2-3 years unless otherwise recommended. (See appendix for follow-up visits).

DISCHARGE INSTRUCTIONS

Exercise To **Do's**

Choose low-impact activities such as:

- ◆ Recommended exercise classes
- ◆ Exercises outlined in Patient Guide
- ◆ Regular 1-3-mile walks
- ◆ Treadmill (for walking)
- ◆ Stationary bike
- ◆ Low-impact sports such as golf, bowling, walking, gardening, dancing, etc.



Exercise **Don'ts**

- ◆ Do not run or engage in high-impact activities.
- ◆ Do not participate in high-risk activities such as downhill skiing, etc.

Preventing Surgical Site Infection

One risk of having surgery is an infection at the surgical site (any cut the surgeon makes in the skin to perform the operation). Surgical site infections can range from minor to severe or even fatal. This sheet tells you more about surgical site infections, what hospitals are doing to prevent them, and how they are treated if they do occur. It also tells you what you can do to prevent these infections.

What Causes Surgical Site Infections?

Germs are everywhere. They're on your skin, in the air, and on things you touch. Many germs are good, but some are harmful. Surgical site infections occur when harmful germs enter your body through the incision in your skin. Some infections are caused by germs that are in the air or on objects, but most are caused by germs found on and in your own body.

What Are the Risk Factors for Surgical Site Infections?

Anyone can have a surgical site infection. Your risk is greater if you:

- ◆ Are an older adult
- ◆ Have a weakened immune system or other serious health problem such as diabetes are malnourished (not eating enough healthy foods), or very overweight
- ◆ Smoke
- ◆ Have a wound that is left open instead of closed with sutures

What Are the Symptoms of a Surgical Site Infection?

The infection usually begins with increased redness, pain, and swelling around the incision. Later, you may notice a greenish-yellow discharge from the incision. You are also likely to have a fever and may feel very ill. Symptoms can appear any time from hours to weeks after surgery. Implants such as an artificial knee or hip can become infected a year or more after the operation.

How Are Surgical Site Infections Treated?

- ◆ Most infections are treated with antibiotics. The type of medication you receive will depend on the germ causing the infection.
- ◆ An infected skin wound may be reopened and cleaned.
- ◆ If an infection occurs where an implant is placed, the implant may be removed.
- ◆ If you have an infection deeper in your body, you may need another operation to treat it.

Preventing Surgical Site Infections: What Hospitals Are Doing

Many hospitals, including GBMC, take these steps to help prevent surgical site infections:

Handwashing: Before the operation, your surgeon and all operating room staff scrub their hands and arms with an antiseptic soap.

Pre-op CHG wash: The morning of your surgery, your pre-op nurses will have you wash your

skin with a chlorhexidine gluconate (CHG) solution. Using CHG will reduce your risk of getting an infection.

Pre-op MSSA/MRSA decolonizing nasal cleanser: Nozin® Nasal Sanitizer® is an advanced antiseptic for nasal decolonization of germs that can transfer into the surgical incision site. The morning of your surgery, your nurse will clean the inside of your nose with Nozin®.

Clean skin: The site where your incision is made is carefully cleaned with an antiseptic solution.

Sterile clothing and drapes: Members of your surgical team wear medical uniforms (scrub suits), long-sleeved surgical gowns, masks, caps, shoe covers, and sterile gloves. Your body is fully covered with a sterile drape (a large sterile sheet) except for the area of the incision.

Clean air: Operating rooms have special air filters and positive pressure airflow to prevent unfiltered air from entering the room.

Careful use of antibiotics: Antibiotics are given no more than 60 minutes before the incision is made and are stopped shortly after surgery. This helps kill germs but avoids problems that can occur when antibiotics are taken for longer periods of time.

Controlled blood sugar levels: After surgery, blood sugar levels are watched closely to make sure they are within the normal range. High blood sugar delays wound healing.

Controlled body temperature: A lower body temperature during or after surgery prevents oxygen from reaching the wound and makes it harder for your body to fight infection. Hospitals may warm IV fluids, increase the temperature in the operating room, and provide warm-air blankets to prevent this.

Proper hair removal: Any hair that must be removed is clipped, not shaved with a razor. This prevents tiny nicks and cuts through which germs can enter.

Wound care: After surgery, the closed wound is covered with a sterile, water-resistant dressing.

Preventing Surgical Site Infections: What Patients Can Do

- ◆ Ask questions to learn what your hospital is doing to prevent infection.
- ◆ An MSSA/MRSA nasal swab test will be done at GBMC's Diagnostic Center (Monday-Friday, 8am-11am).
- ◆ You will receive a CHG Pre-op Skin Cleanser Kit with instructions for use. This pre-op CHG skin prep begins three nights before surgery with the fourth wash the morning of surgery before you come to the hospital. Your surgeon may need you to continue to use the CHG wash when you are discharged home. Follow the instructions you are given for the CHG antiseptic.
- ◆ If you smoke, stop or cut down. Ask your doctor about ways to quit.
- ◆ Take antibiotics only when told to by a healthcare provider. Using antibiotics when they're not needed can create germs that are harder to kill. Finish any prescribed antibiotics, even if you feel better before they are done.
- ◆ Be sure healthcare workers clean their hands with soap and water or with an alcohol-based hand cleaner before and after caring for you. Don't be afraid to remind them.

- ◆ After surgery, you will continue to use the Post-op Nozin® Nasal Sanitizer® every 12 hours until your post-op wound check with your surgeon or until the 12-mL bottle is empty (30 days/twice a day).
- ◆ When you return home, care for your incision as directed by your doctor or nurse.
- ◆ Eat a healthy diet.

Call Your Doctor If You Have Any of the Following:

- ◆ Increased soreness, pain, or tenderness at the surgical site
- ◆ A red streak, increased redness, or puffiness near the incision
- ◆ Yellowish or bad-smelling discharge from the incision
- ◆ Stitches that dissolve before the wound heals
- ◆ Fever of 101° or higher
- ◆ A tired feeling doesn't go away
- ◆ Stitches that dissolve before the wound heals

Nozin®

LEADER IN NASAL DECOLONIZATION.

How It Works

Increased Protection Against Risk of Infections

The nose is a reservoir for bacteria that escape typical hygiene protocols such as hand washing. Nozin® Nasal Sanitizer® antiseptic equips health professionals, patients and individuals with a safe and effective nasal shield that helps decrease bacteria on nasal vestibule skin. Importantly, Nozin Nasal Sanitizer antiseptic is clinically shown to reduce nasal bacteria carriage without antibiotics.



Nozin® Nasal Sanitizer® is specially formulated to effectively address nasal carriage of bacteria:

- **Effective** – kills 99.99% of germs and is clinically proven to decrease nasal bacteria carriage
- **Safe, Fast-Acting** – the active ingredient is ethyl alcohol, a well-established, trusted, broad spectrum antiseptic
- **12-Hour Duration** – soothing solution is well tolerated, safe for regular use and Nasal Sanitizer® effect lasts 12 hours
- **No Antibiotics** – alcohol-based antiseptic
- **Pleasant** – experience a soothing, moisturizing feeling and a soft smell of citrus
- **Easy To Use** – with the multiple use bottle, application of Nozin is simple and convenient

Think hand sanitizer for your nose.



Nozin[®] Nasal Sanitizer[®] Multidose 12ML Bottle

How to Apply

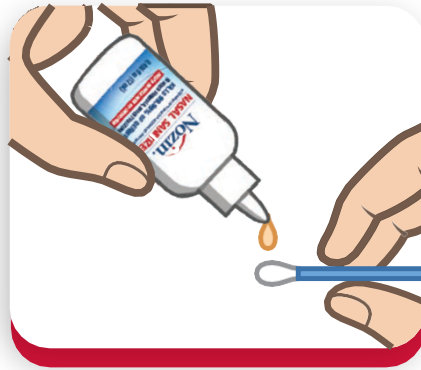
Clean nostrils with a tissue. Discard.

1. Shake



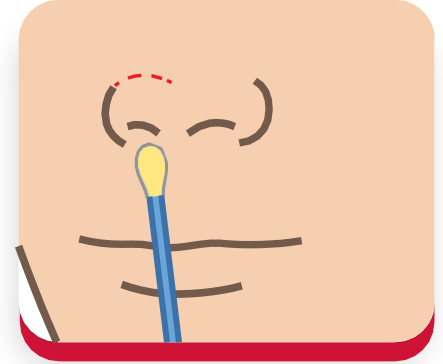
Shake bottle well.
Remove cap.

2. Saturate



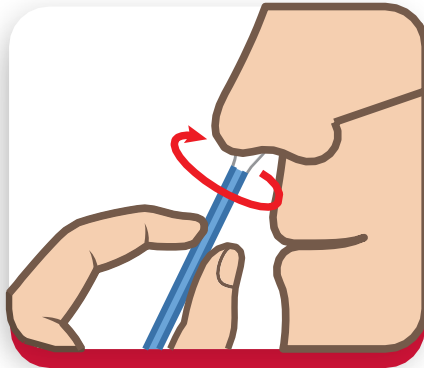
Apply four (4) drops of solution
onto cotton swab tip.

3. Apply RIGHT nostril



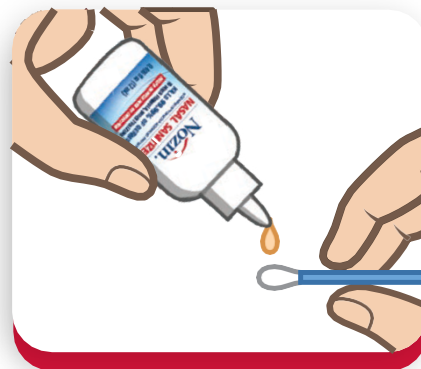
Insert swab tip into **RIGHT** nostril.
Swab eight (8) times clockwise and
eight (8) times counterclockwise.

4. Swab



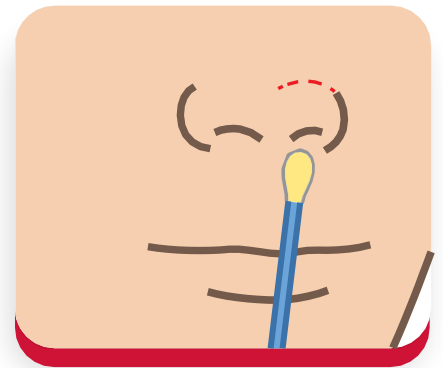
Ensure swab rotation covers all
surfaces, including the inside
tip of the nostril.

5. Resaturate



Re-saturate the swab tip by
applying **two (2) drops** of
solution.

6. Apply LEFT nostril



Repeat application **steps 3 - 4**
in the **LEFT** nostril.

Do not use if you have allergy to citrus oil, or you have nasal bleeding or irritation.

Intended Use: Nozin[®] Nasal Sanitizer[®] is a topical antiseptic used to decrease bacteria on the nasal vestibule skin.

Active Ingredient: Alcohol 62%.

Precautions: **Do not** extend applicator into nose beyond swab tip.
Please also refer to Instructions for Use (IFU), product package and Nozin.com.

Exercise Your Rights – Put Your Healthcare Decisions in Writing

It is the policy of GBMC 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 an appointed a healthcare agent and is no longer able to express his or her wishes, the medical center is committed to honoring the wishes of the patient as they were documented at the time the patient was able to make that determination.

There are different types of Advance Directives:

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

Appointment of a Healthcare 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 are unable to do so.

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

Once admitted 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 part of your medical record. Advance directives are not required for hospital admission.

Blood Transfusions

There will be some blood loss with knee replacement surgery. Most patients will not require a blood transfusion, but, if a transfusion is needed, the GBMC Blood Bank has blood available.

Anesthesia

What is Anesthesia?

It is a painless state brought about by the administration of a variety of medications.

Who will give me anesthesia?

At GBMC, the Operating Room and Post Anesthesia Care Unit (PACU) are staffed by the Anesthesia Care Team. The team is made up of board-certified or board-eligible anesthesiologists and certified nurse anesthetists (CRNA). An anesthesiologist or a CRNA will administer your anesthetic and will be closely monitoring you throughout your procedure and in the recover area (PACU).

What type of anesthesia will I have?

On the morning of surgery, you and your anesthetist will discuss and decide the type of anesthesia selected for your surgery based on your H&P and other factors, one or more may be selected:

General anesthesia which involves administering medications and gases to produce a loss of consciousness. Initially, medication is administered intravenously to help control pain, then, once you are unconscious, often a breathing tube (endotracheal tube) is inserted into your windpipe so anesthetic gases can be administered safely.

Spinal block is a form of regional anesthesia involving the injection of a local anesthetic into the fluid surrounding the spinal cord in the lower back – this will numb the legs and block all sensation in the lower half of the body for several hours. You will be sedated and not awake.

Nerve block can help to block the sensation of pain up to 24-72 hours post-operatively. Other means of pain relief may then be necessary.

Will I have side effects?

Your anesthesiologist will discuss the risks and benefits associated with general anesthesia and/or spinal anesthesia, including the side effects. Typical side effects include nausea, thirst, shivering, sore throat, and urinary retention.

Do I need to do anything before I can have anesthesia?

To assure your well-being during anesthesia, you may be required to have lab tests, X-rays, or an electrocardiogram (EKG). Before surgery you will receive directions regarding eating, drinking, and smoking. Follow these directions exactly.

May I choose an anesthesiologist?

All patients are assigned an anesthesiologist. If you have questions about your insurance coverage or medical plan participation by the anesthesiologist, please contact your insurance carrier for guidance.

What will happen before my surgery?

Your anesthesiologist will conduct a preoperative interview to ask questions about:

- ◆ Your recent health history (colds, flu, etc.)
- ◆ Current health history (GERD, acid reflux, morbid obesity with a BMI of greater than 40, sleep apnea)
- ◆ Chronic medical conditions (heart disease, high blood pressure, diabetes)
- ◆ Prescriptions and over-the-counter medications
- ◆ Allergies
- ◆ Previous surgeries
- ◆ Your past experiences with anesthesia and anesthetic experiences of your biological/blood relatives
- ◆ Use of alcohol, tobacco, and illegal substances

Be sure to discuss your concerns and questions with your anesthesiologist. It is helpful to make a list of your medications, allergies, and questions. In the preoperative area, you will have an intravenous (IV) line inserted and preoperative medications may be given. Once in the operating room, monitoring devices such as a blood pressure cuff and EKG electrodes will be attached. At this point you will be ready for anesthesia.

What does my anesthesiologist do during surgery?

Your anesthesiologist is responsible for monitoring and maintaining your vital signs including heart rate and rhythm, blood pressure, breathing, temperature, and fluid and electrolyte balance. The anesthesiologist is also responsible for your comfort and well-being during and immediately after surgery.

Enhanced Recovery After Surgery (ERAS[®])

The Joint & Spine Center at GBMC is proud to adopt the Enhanced Recovery After Surgery (ERAS[®]) program. ERAS[®] refers to patient-centered, evidence-based, multidisciplinary team developed pathways for our total joint replacement surgeries to reduce your surgical stress response, optimize your physiologic function, and facilitate your recovery. These care pathways form an integrated continuum as you move from preadmission to recovery at home.

Why ERAS[®]?

Numerous research reports have shown that employing ERAS[®] as opposed to traditional care has marked effects on recovery. In many surgeries, recovery time can be shortened by 30% or more.

In addition, complication rates after surgery are lessened, and modalities for pain management intra-operatively have decreased the use of opioid after surgery as patients report minimal to no pain. This promotes walking the day of surgery, eating and drinking, and sleep hygiene.

You may be given one of the following medications after surgery to reduce the risk of blood clots. Additional information about each medication can be found in the appendix.

Aspirin

This antiplatelet medication is optimal for patients who are active and are at low risk for developing a blood clot, or for patients who are unable to take other anticoagulant (blood-thinning) medications.

Apixaban (Eliquis)

Eliquis® prescribed for four to six weeks following surgery. It is a pill that must be taken once a day.

Warfarin (Coumadin)

Coumadin® is prescribed for up to six weeks following surgery. It comes in pill form and must be taken once each night at the same time. The amount you take may change depending on how much your blood thins. Therefore, it will be necessary to do blood tests once or twice weekly while on the medication.

Enoxaparin (Lovenox) or Fondaparinux (Arixtra)

Your physician will determine the number of doses needed each day of Lovenox® or Arixtra®, as well as the duration of therapy. The prescription comes in pre-filled syringes that will be injected into the fatty tissue around your stomach. You will be provided with injection instructions prior to discharge from the hospital.

Portable Intermittent Compressions Device (ICD/SCD)

If you are taking aspirin, your surgeon may suggest a portable SCD device to use when you leave the hospital. This device uses cuffs around the legs that fill with air and squeeze your legs. Using your SCD at home in combination with the aspirin reduces the risk of developing a blood clot after surgery by promoting circulation. Some commercial insurances will cover the cost of this device; however, some companies and noncommercial providers have an out-of-pocket cost component. Check with your insurance provider to see what is covered under your plan. This portable SCD/ICD device can be given to you at the time of discharge from the hospital.

Warfarin (Coumadin®)

Coumadin® is an anticoagulant. The purpose of this medication is to prevent harmful clots from forming. The medication works by decreasing the amount of active clotting factors in the bloodstream.

Instructions

Coumadin® remains in the body for a prolonged time. Therefore, it needs to be taken only ONCE daily. You should learn and understand the following instructions about taking Coumadin®:

- ◆ Take Coumadin® at the same time every day.
- ◆ Take Coumadin® exactly as the physician or pharmacist prescribes.
- ◆ NEVER take more or less of Coumadin® unless specifically told to by your physician or the GBMC pharmacist.
- ◆ If you forget to take your dose, **DO NOT** double your dose the next day – take your regularly prescribed dose. Missing only one dose will not cause a clot to form, while taking more than the prescribed dose may cause bleeding.

Determining Dosage

While you are taking Coumadin®, a blood test will be done each day that you are in the hospital to monitor the effectiveness of the medication. This blood test is called the prothrombin time, PT, or INR. When you are discharged from the hospital, the blood test monitoring is decreased to two times a week. Coumadin® therapy will normally continue for three to six weeks based on your individual situation as determined by your physician.

Monitoring Dosage After Discharge

HOME – If you are discharged to home with home health services, the home health nurse will come out twice a week to draw the prothrombin time. These results are called in to the pharmacist who will call you to adjust your dose if necessary.

OUTPATIENT – If you DO NOT utilize home health nursing, then you will have to go to an outpatient medical lab or the GBMC Anticoagulation Clinic to and have the prothrombin time drawn there. You may contact the GBMC Anticoagulation Clinic by calling (443) 849-2769. After testing, the pharmacist/physician will call you to adjust your Coumadin® dose if needed.

REHAB – If you are transferred to rehab, the monitoring is usually done two times a week. The physician or pharmacist caring for you at the rehab will adjust the Coumadin® dose as necessary. When you are discharged from rehab, the rehab staff, if necessary, will arrange home health or outpatient blood monitoring.

Signs of Adverse Effects

Because one of the signs of too much Coumadin® is bleeding, you should be aware of the signs and symptoms of bleeding. Call your doctor right away if any of these signs and symptoms are present. Also, call your doctor if you sustain any falls or injuries while taking Coumadin®.

- ◆ Excessive bleeding from your gums while brushing your teeth
- ◆ Frequent and severe bruising
- ◆ Unexplained nosebleed
- ◆ Dark or bloody urine
- ◆ Black or tarry stools or blood in your stools
- ◆ Unusual bleeding

Drugs to Avoid While Taking Coumadin®

Aspirin, aspirin-containing, non-steroidal medications (ibuprofen, naproxen, ketoprofen, etc.), and herbal products can all INCREASE the effect of Coumadin® and should be avoided unless prescribed by a physician and the dose of Coumadin® adjusted. Inform all of your doctors that you are on Coumadin® and consult your pharmacist before taking any over-the-counter medications.

How Diet Affects Coumadin®

Changes in diet may also affect the way Coumadin® works. It is important to maintain a steady, well-balanced diet. Too many dark green leafy vegetables on consecutive days may alter the prothrombin time. Therefore, maintain the same weekly balance of vegetables.

Alcohol

Alcohol consumption should be avoided while on Coumadin® because it can also increase the prothrombin time.

Eliquis®

Eliquis® is an anticoagulant that is indicated for the prevention of deep vein thrombosis (DVT), which may lead to pulmonary embolism. Eliquis® works by blocking factor Xa, which is critical to the blood-clotting process.

Instructions

Your doctor may prescribe Eliquis®, which is typically prescribed in 2.5-mg tablets taken twice a day (morning and night). The physician or pharmacist will dose the medication based on your individual need. If a dose of Eliquis® is not taken at the scheduled time, the dose should be taken as soon as possible on the same day and twice-daily administration should be resumed. The dose should not be doubled to make up for a missed dose. **Do not** change your dose or stop taking Eliquis® unless your doctor tells you to.

Signs of Adverse Effects

Because apixaban (Eliquis®) decreases your body's ability to form clots, you will be at an increased risk for bleeding. It is important to notify your physician or pharmacist if you notice any of the following:

- ◆ Bleeding or oozing from your surgical wound
- ◆ An allergic reaction to Eliquis® can cause hives, rash, itching, and possibly trouble breathing. If you experience this reaction, it will usually happen soon after you take a dose of Eliquis®.
- ◆ Contact your doctor if you fall or injure yourself, especially if you hit your head
- ◆ Call your doctor or get medical help right away if you have any of the following symptoms:
 - Unexpected or severe bleeding or bleeding that lasts a long time such as unusual bleeding from the gums, frequent nose bleeds, or menstrual or vaginal bleeding that is heavier than normal
 - Red, pink, or brown urine; tar-like red or black stool
 - Coughing up or vomiting blood or vomit that looks like coffee grounds
 - Unexpected pain, swelling, or joint pain
 - Headaches, or feeling dizzy or weak
 - Chest pain or tightness
 - Trouble breathing or wheezing
 - Swelling of your face or tongue

Do Not Take Eliquis® If:

- ◆ You have artificial heart valves
- ◆ Currently have certain types of abnormal bleeding
- ◆ Have had a serious allergic reaction to Eliquis®

Drugs to Avoid While Taking Eliquis®

Aspirin, aspirin-containing, nonsteroidal medications (ibuprofen, naproxen, ketoprofen etc.), warfarin sodium (Coumadin®, Jantoven®), and any medication that contains heparin, select serotonin reuptake inhibitors (SSRIs) or serotonin norepinephrine reuptake inhibitors (SNRIs).

Inform all of your doctors that you are on Eliquis® and consult your pharmacist before taking any over-the-counter medications or herbal products.

Enoxaparin (Lovenox®) and Fondaparinux (Arixtra®)

How Lovenox® and Arixtra® work

Lovenox® and Arixtra® are anticoagulants. The purpose of these medications is to prevent harmful clots from forming or growing. Each of these medications works by inhibiting active clotting factors in the bloodstream.

Instructions

Your doctor may prescribe either Lovenox® or Arixtra®. Both medications come in prefilled syringes that are ready to use. Lovenox® is usually given twice daily and Arixtra® is given once daily. Prior to discharge from the hospital, you will be given instructions for injecting your medication. Follow these instructions to self-inject the medication into the fatty tissue around your stomach.

- ◆ NEVER inject the medication into your muscle.
- ◆ Take your medication at the same time every day and exactly as the physician or pharmacist prescribes.
- ◆ NEVER take more or less of your medication unless specifically told to by your physician or pharmacist.
- ◆ If you forget to take your dose, **DO NOT** double up on your dose, but take your regularly prescribed dose. Missing only one dose will not cause a clot to form, while taking more than the prescribed dose may cause bleeding.
- ◆ Contact your physician or pharmacist if you suspect you have used too much of your medication. Dispose of your syringes into a sharps container and keep out of the reach of children.

Determining Dosage

The physician or pharmacist will dose the medication based on your individual need. Therapy will normally continue for 7 to 42 days, depending on your ability to ambulate and your physician's discretion.

Signs of Adverse Effects

Because Lovenox® and Arixtra® decrease your body's ability to form clots, you will be at an increased risk for bleeding. It is important to notify your physician or pharmacist if you notice any of the following:

- ◆ Bleeding or oozing from your surgical wound
- ◆ Any other bleeding – bleeding at the site of injection, nosebleeds, dark or bloody urine, black or tarry stools, or if you cough or vomit blood
- ◆ Spontaneous bruising (a bruise not caused by a blow or an apparent reason)
- ◆ Pain or swelling in any part of your leg, foot, or hip
- ◆ Dizziness, numbness, or tingling
- ◆ Rapid or unusual heartbeat
- ◆ Chest pain or shortness of breath
- ◆ Vomiting, nausea, or fever
- ◆ Confusion

Remember to look at your previous injection sites for: redness, pain, warmth, puffiness, discoloration of the skin, or oozing, which could be signs of infection or a skin reaction. If you notice any of these signs, or anything unusual, contact your physician or pharmacist immediately.

Drugs to Avoid While Taking Lovenox® or Arixtra®

Aspirin, aspirin-containing, nonsteroidal medications (ibuprofen, naproxen, ketoprofen etc.) and herbal products can all INCREASE the effect of Lovenox® and Arixtra®. Therefore, they should be avoided unless prescribed by a physician who is aware of the Lovenox® or Arixtra® therapy.

Inform all of your doctors that you are on Lovenox® or Arixtra® and consult your pharmacist before taking any over-the-counter medications or herbal products.

Alcohol

Alcohol consumption should be avoided while on Lovenox® or Arixtra® because it can increase the risk of bleeding.

Knee Replacement Pre-op & Post-op Precaution

Total Knee Replacement



Knee Precaution:

Do **NOT** place a pillow under your knee

- Negative Outcomes
 - Knee flexor contractures
 - Prevents full knee extension
 - Gait disturbances

Physical Therapy Daily Schedule

Please note: *all times are approximate.* Your nurse can post your PT and OT times on the communication board in your room, or you can view your schedule in the MyChart Bedside app.

- Day of Surgery:** Patients are expected to walk the day of surgery. Coaches are encouraged to be available. Depending on when you arrive to Unit 58, a PT will visit you in your room. If there is not a PT to get you out of bed, then your RN, NST, or CNA will help you.
- Post-Op Day 1:** Patients will be seen individually in their room the morning of post-op Day 1. This will occur between 7:45 a.m. and 11:00 a.m. Coaches are encouraged to be available at 7:45 a.m. If you were not seen on the day of surgery, you may receive a second PT visit during the afternoon. Most patients are discharged on this day.
- Post-Op Days 2-3:** If you are still here, you will have individual therapy every day you are in the hospital. You may be discharged after your therapy is completed.

Occupational Therapy (OT) Daily Schedule

Individuals scheduled for total knee replacements will see an OT for one session per day.

Day of Surgery:

In some cases, patients can be evaluated by OTs on the day of surgery.

Post-Op Day1:

OT evaluation and treatment occurs between 7:45 a.m. and 11:30 am. Coaches are encouraged to be available. Most patients are discharged on this day

Days 2-3:

All patients have OT treatment; coaches are encouraged to be available at the scheduled time.

Discharge:

If coaches have not already been present for an OT session, they are encouraged to do so today to ensure they are comfortable supervising the patient for safety at home.

Recommended Exercise Classes

Arthritis Foundation Aquatic Program

Program participants are led by certified aquatic fitness professionals through a series of specially designed exercises that, with the aid of the water's buoyancy and resistance, can help improve joint flexibility and muscular strength. The warm water (86°-93°) and gentle movements can also help to relieve pain and stiffness. The Arthritis Foundation has developed the program and your physician's permission is required.

PACE® (People with Arthritis Can Exercise)

PACE® was developed by the Arthritis Foundation, but the benefits are not limited to individuals with arthritis. PACE® uses gentle activities to promote increased joint flexibility and range of motion as well as help you maintain muscle strength. The advanced version helps increase overall stamina through a brief, light low-impact aerobics component.

Participants must be ambulatory and should move about at their own pace. All programs provided through Major Changes Incorporated are designed to help participants lead a more fulfilling, active, and healthy life. We recommend that all participants consult with their physician before starting any fitness or exercise program. The programs run continuously; you may start at any time. Students are encouraged to mix and match programs in order to promote a balanced fitness regimen.

For more information, visit the Arthritis Foundation website at www.arthritis.org or call 1-800-283-7800

The Importance of Lifetime Follow-Up Visits

Over the past several years, orthopaedic surgeons have discovered that many people are not following up with their surgeons on a regular basis.

You should follow up with your surgeon:

- ◆ Every 2-3 years, unless instructed differently by your physician
- ◆ Anytime you have mild pain for more than a week
- ◆ Anytime you have moderate or severe pain

Reasons for routine follow-up visits with your orthopedic surgeon:

1. If you have a cemented knee, we need to evaluate the integrity of the cement. With time and stress, cement may crack. This usually happens slowly over time and patients are often unaware of it. Seeing a crack in cement does not necessarily mean you need another surgery, but it does mean we need to follow things more closely. Your knee could become loose, and this might lead to pain. Alternatively, the cracked cement could cause a reaction in the bone called “osteolysis,” which may cause the bone to thin out and cause loosening. In both cases you might not realize this for years. Orthopaedists are constantly learning more about how to deal with both problems. The sooner we know about potential issues, the better chance we have of avoiding more serious complications.
2. The second reason for follow-up is that the plastic liner in your knee may wear. Little wear particles combine with white blood cells and may get in the bone and cause osteolysis, similar to what can happen with cement. Replacing a worn liner early and grafting the bone can keep this from worsening.

X-rays taken at your follow-up visits can detect these problems. Your new X-rays can be compared with previous films to make these determinations. This should be done in your doctor’s office. If you are unsure how long it has been or when your next visit should be scheduled, call your doctor.

SPORTS ACTIVITY PARTICIPATION

Always consult your surgeon before beginning or resuming a new activity.

Activities that pose a low level of risk:

- Golfing
- Swimming laps
- Cycling
- Sailing
- Bowling
- Scuba diving
- Cross-country skiing
- Low-impact aerobics
- Gardening
- Dancing

Activities that pose a moderate level of risk:

- Singles or doubles tennis
- Hiking
- Backpacking
- Speed walking
- Ice skating
- Ballet
- Alpine skiing
- Softball
- Volleyball
- Horseback riding

Activities that are NOT recommended that pose a high level of risk:

- Soccer
- Baseball
- Running/jogging
- Basketball
- Football
- Handball
- Racquetball
- Hockey
- Waterskiing
- Karate
- Wrestling



The American Joint Replacement Registry Notice

GBMC Hospital is a **Total Knee Replacement & Total Hip Replacement TJC Certified Facility**. Participation in **The American Joint Replacement Registry (AJRR)** is a requirement of this certification and demonstrates GBMC’s dedication to improving orthopaedic care through collecting, analyzing, and benchmarking data on total hip and knee replacements from across the entire United States. **AJRR** provides a wide range of actionable information and reporting that helps improve patient care, identify potential problems, and support quality improvement initiatives.



This notice is to advise you of GBMC’s participation and that such participation requires the disclosure of patient protected



health information (PHI). The **American Academy of Orthopaedic**

Surgeons (AAOS), which operates the AJRR, is obligated to safeguard your PHI and is not permitted to further disclose such PHI without authorization. The type of PHI submitted to AJRR includes the following patient-related data: full name, date of birth, gender, last 4 digits of the social security number, continuing care information, such as: discharge summary, history and physical, consultation, operative report, diagnostic and medical tests, pathology report, laboratory results and radiology reports.

While the data that AJRR provides is important to furthering GBMC’s mission, we also respect our patients’ right to request restrictions on how their medical information is used. If you would **Opt-Out** of the AJRR, please request an Opt-Out form from The Joint and Spine Center.

PHYSICAL THERAPY LOCATIONS

★ **GBMC Center for Rehabilitation & Active Life Physical Therapy**

GBMC 6701 N Charles St #4377, Towson, MD 21204
443-849-6210

Available Services: Comprehensive Physical Therapy, Occupational Therapy, Speech Therapy, Hand Therapy, GBMC Lymphedema Center, Neurologic Therapy, Oncology Rehabilitation Services, Pelvic Floor Therapy, Vestibular and Balance Therapy, and Dry Needling

★ **Active Life Physical Therapy - Jacksonville**

3411 Sweet Air Rd #A, Jacksonville, MD 21131
410-529-3303

Available Services: Comprehensive Physical Therapy, Neurologic Therapy, Pre/Post Operative Therapy, and Vestibular & Balance Physical Therapy

★ **Active Life Physical Therapy - Lutherville**

1447 York Rd #401, Lutherville, MD 21093
410-842-0115

Available Services: Comprehensive Physical Therapy, Neurologic Therapy, Pre/Post Operative Therapy, Vestibular & Balance Physical Therapy, and Agility and Activity Therapy

BALTIMORE COUNTY

Active Life & Physical Therapy - Perry Hall
4337 Ebenezer Rd, Nottingham, MD 21236
410-529-2202

Chesapeake Bay Aquatic & Physical Therapy
2 Chartley Dr, Reisterstown, MD 21136
410-833-5300

ATI Physical Therapy
836 N Rolling Rd, Catonsville, MD 21228
410-788-8590

BALTIMORE CITY


Canton Orthopaedic & Sports Rehab
2809 Boston St #1B, Baltimore, MD 21224
410-522-6978

ANNE ARUNDEL COUNTY

Haile Physical Therapy
41 Old Solomons Island Rd, Annapolis, MD 21401
410-571-1151

Kennard Physical Therapy
650 Richie Hwy, Severna Park, MD 21146
410-421-5544

CARROLL COUNTY

Agape Physical Therapy & Sports Rehab 
1388 Progress Way, Eldersburg, MD 21784
410-795-7878


FX Physical Therapy
2710 Hampstead Mexico Rd, Hampstead, MD 21074
443-441-0660

CECIL COUNTY

Agape Physical Therapy & Sports Rehab
6 Barnes Corner Rd, Colora, MD 21917
410-658-6616

ATI Physical Therapy
52 Rising Sun Town Ctr, Rising Sun, MD 21911
410-205-9912

HARFORD COUNTY



Agape Physical Therapy & Sports Rehab 
2304 Churchville Rd, Bel Air, MD 21015
410-734-6556

ATI Physical Therapy 
3465 Box Hill Corp Dr #G, Abington, MD 21009
410-205-4866

HOWARD COUNTY

Howard County Physical Therapy
6011 University Blvd #120, Ellicott City, MD 21043
410-203-0391

McNerney & Associates, PA
5024 Dorsey Hall Dr #103, Ellicott City, MD 21042
410-740-1047

★ Preferred provider OT Has occupational therapy
 Has aquatic therapy  Has speech therapy

Companion Care, personal care, meal preparation, medication reminders, transportation, supportive services and light housekeeping, memory care, and more...



Avila Home Care is excited to announce its partnership with LifeBridge Health as well as GBMC HealthCare and Gilchrist. These are two of the leading medical systems in the mid-Atlantic region. By partnering with Avila, these respected healthcare systems will be able to provide a more seamless continuum of care for their patients and allow their patients to receive quality care in the comfort of their own homes.

Avila is a community of caregivers dedicated to providing everything you or your loved one needs to thrive in the home you love. Together, our leadership team has a wealth of experience in senior living and healthcare. We understand families, healthcare, and the elderly, and we're dedicated to providing extraordinary care delivered with unparalleled kindness.

We would love to meet with you at your convenience to answer any questions. We enjoy saying hello and hearing your story. How we can help?

Call us: (410) 826 6100

Email us: info@avilahomecare.com

Visit us: 1122 Kenilworth Drive, Suite 307, Towson, MD, 21204

Hours of Operation: Monday – Friday 8:30 a.m. – 5 p.m.



www.avilahomecare.com

References

- 1) Steiner, M.D., M.P.H., C., Karaca, Ph.D, Z., Moore, Ph.D., B., Imshaug, M.P.H., M. and Pickens, Ph.D., G. (2019). *Surgeries in Hospital-Based Ambulatory Surgery and Hospital Inpatient Settings, 2014 #223*. online Hcup-us.ahrq.gov. Available at: <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb223-Ambulatory-Inpatient-Surgeries-2014.jsp> Accessed 15 Jun. 2019 .
- 2) U.S. Food and Drug Administration. (2019). *Keeping Blood Transfusions Safe: FDA's Multi-layered Protections for*. online Available at: <https://www.fda.gov/vaccines-blood-biologics/safety-availability-biologics/keeping-blood-transfusions-safe-fdas-multi-layered-protections-donated-blood> Accessed 15 Jun. 2019 .
- 3) ERAS Society. (2016). ERAS Patient Info. online Available at: <http://erassociety.org/patients/> Accessed 15 Jun. 2019

Keep-in-Touch List

Name	Phone	Address	Type of Surgery

Sunday						
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						

Sunday						
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						

Community Outreach Information

1) Geckle Diabetes & Nutrition Center

Providing personalized diabetes self-management training, nutrition education, and emotional support to help people achieve optimal health.

6535 N. Charles St., Pavilion North, Suite 405

Towson, MD 21204

Tulip Parking Garage

(443) 849-2036

<https://www.gbmc.org/services/geckle-diabetes-and-nutrition-center/>

2) Surgery and Smoking

Smokers have a higher rate of complications after surgery than nonsmokers - in fact, smoking may be the single most important factor in postoperative complications. The most common complications caused by smoking include.

OrthoInfo, American Academy of Orthopaedic Surgeons. <https://orthoinfo.aaos.org/en/treatment/surgery-and-smoking/>

3) Smoking Cessation: It's Okay to Be a Quitter

Tobacco use negatively affects every system in your body. According to the Centers for Disease Control and Prevention (CDC), cigarette smoking causes approximately 1 in 5 deaths every year and it's the leading cause of preventable deaths in the United States

GBMC Greater Living, 2017.

<https://www.gbmc.org/greater-living/its-okay-to-be-a-quitter>

4) Alcohol and Opioid Epidemic Educational Resources

GBMC Our Community, 2018.

<https://www.gbmc.org/our-community/opioid-epidemic-educational-resources>

5) GBMC's Comprehensive Obesity Management Program (COMP)

6565 N. Charles St., Pavilion East, Suite 501

Towson, MD 21204

Iris Parking Garage

(443) 849-3779

<https://www.gbmc.org/services/bariatrics/medical-weight-loss-program>

NORTH CHARLES STREET

LA PETITE ACADEMY OF TOWSON

S SHUTTLE STOP V VALET PARKING

Labor & Delivery D

V VALET SERVICES

Valet services (cash ONLY) will be available

Monday through Friday

at the following times/locations:

7 a.m. - 6:30 p.m.

- Louis and Phyllis Friedman Building entrance
- Labor & Delivery (OB entrance) the Yaggy Atrium
- The Bus Loop outside Einstein Bros. Bagels (PPE)
- PPW, Physicians Pavilion West

SANDRA R. BERMAN PAVILION

BERMAN LOT

DAFFODIL PARK

CLOSED

BLUEBELL PARK

CLOSED

LOUIS AND PHYLLIS FRIEDMAN BUILDING

SANDY'S WAY

EMERGENCY DEPARTMENT

GOR 4th floor

Diagnostic Center LAB

PHYSICIANS PAVILION EAST

Pavilion West

Pavilion East

TULIP PARK

LILY PARK

PHYSICIANS PAVILION NORTH

NORTH CHARLES STREET

S SHUTTLE STOP V VALET PARKING

S SHUTTLE SERVICES

Beginning 11/9/2023 GBMC will

provide shuttle services

on a continuous loop

Monday - Friday

7 a.m. - 5 p.m.

The shuttle accommodates 4 passengers at a time and will pick up from 3 locations:

- Friedman Building entrance
- PPW, Physicians Pavilion West
- Bus loop, Physicians Pavilion East (PPE)

IRIS PARK

Friday, April 26, 2019

Orthopaedic Care that You Would Want for Your Loved Ones



Hip and Knee Replacement Certified

GBMC recently earned The Joint Commission's Gold Seal of Approval® for Advanced Certification for **Total Hip and Total Knee Replacement**.

We are only the third hospital in Maryland to earn this distinction. The advanced certification is for Joint Commission-accredited hospitals and ambulatory surgery centers seeking to elevate the quality of their care.

We underwent a rigorous onsite review in late January 2019, when Joint Commission experts evaluated compliance with advanced disease-specific care standards and total hip and total knee replacement requirements, including orthopaedic consultation, and pre-operative, intraoperative, and post-surgical orthopaedic surgeon follow-up care.

Valid for 24 months, this advanced certification is evidence of the high standards of GBMC and our commitment to continually improve. Led by **Leroy Schmidt, MD**, our fabulous team of orthopaedists, advanced practitioners, nurses, physical therapists, occupational therapists, primary care providers, and other clinicians has generated outstanding outcomes with an excellent care experience.

In the past, joint replacement surgery meant a possible hospital stay of 1 to 2 weeks with significant post-operative pain, a significant risk of infection, and a lengthy recovery. Advances in joint replacement surgery have substantially reduced post-operative pain and complication rates, enabling us to discharge most patients after an overnight stay. I am happy to report that the risk of infection has been significantly reduced. In the past six months (September 2018-February 2019), we had 117 hip surgeries with 0 infections and 222 knee surgeries with 0 infections.

Our Enhanced Recovery After Surgery program (ERAS) allows for outpatient joint replacement surgery in selected cases. And, now we've started the Episode of Care Improvement Program (ECIP) to further improve the care experience and reduce waste. This innovative approach allows us to better prepare the patient for surgery and to eliminate the need for inpatient rehabilitation. Members of the care team educate joint replacement candidates about medical conditions that can negatively affect the outcome of their surgery and how to better manage these pre-existing conditions. In addition, the patient's functional mobility and support system is assessed to assure that they can receive their physical therapy in their dwelling rather than in a skilled nursing facility.

In addition to Dr. Schmidt, I want to thank all the members of our Joint & Spine Program for helping us attain this major achievement, especially April Asuncion Higgins, RN, BSN, CMSRN, Joint & Spine Program Coordinator, and Joy Reynolds, RN, Nurse Manager U58, and Joint & Spine Program.

Posted by John Chessare MD at 6:31 AM



“To every patient, every time, we will provide the care that we would want for our own loved ones.”

MISSION

The mission of GBMC is to provide medical care and service of the highest quality to each patient and to educate the next generation of clinicians, leading to health, healing and hope for the community.

VISION

As our national healthcare system evolves, for GBMC to maintain its status as a provider of the highest quality medical care to our community, we must transform our philosophy and organizational structure, to develop a model system for delivering patient-centered care.

We define patient-centered care as care that manages the patient’s health effectively and efficiently while respecting the perspective and experience of the patient and the patient’s family. Continuity of care and ease of navigation through a full array of services is highly important to us. Our professional staff can say with confidence that the guidance and medical care they are providing mirrors what they would want for their own family.

We will create the organizational and economic infrastructure required to deliver evidence-based, patient-centered care and for holding ourselves accountable for that care. This will be defined by collaboration and improvement. Physicians lead teams that will manage patient care.

We are moving into the future with renewed energy and increasing insight. We look forward to building relationships with both community-based and employed physicians that will form the foundation of Greater Baltimore Health Alliance. We welcome all those who share our vision of healthcare as it is transformed to meet the needs of our community.

VALUES

GBMC has formalized a series of specific behaviors that support its Greater Values of Respect, Excellence, Accountability, Teamwork, Ethical Behavior and Results. The Greater Values are intended to serve as the foundation upon which GBMC creates and sustains a culture of Service Excellence.

Respect: I will treat everyone with courtesy. I will foster a healing environment.

Excellence: I will strive for superior performance in every aspect of my work. I will recognize and celebrate the accomplishments of others.

Accountability: I will be professional in the way I act, look and speak. I will take ownership to solve problems.

Teamwork: I will be engaged and collaborative. I will keep people informed.

Ethical Behavior: I will always act with honesty and integrity. I will protect the patient.

Results: I will set goals and measure outcomes that support organizational goals. I will give and accept help to achieve goals.

ACCREDITATION

Greater Baltimore Medical Center (GBMC), is a non-profit healthcare organization, licensed and accredited by the Joint Commission on Accreditation for Health Care Organizations (JCAHO). All GBMC primary care practices are NCQA Certified Medical Care Homes and Gilchrist is CHAP accredited.