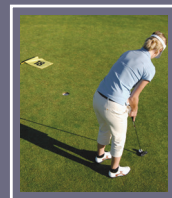
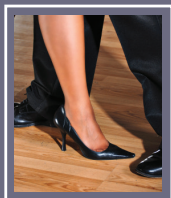
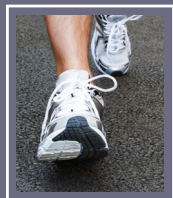


Moving forward with your

— LIFE —

Augusta  
Health™

Joint  
Center



in the garden ■ with your exercise  
in the ballroom ■ in the mountains  
at the beach ■ on the green  
with your family  
on the farm

PATIENT GUIDEBOOK FOR  
**TOTAL KNEE REPLACEMENT**





**Surgery Date:** \_\_\_\_\_

**Mandatory Joint Class date & time:** \_\_\_\_\_

- Please arrive 15 minutes prior to the scheduled class time
  - ▲ Please bring completed “Patient Preoperative Information Form” to class
- Location - Augusta Community Care Building (ACC)
  - ▲ See Campus map (back cover)

**YOUR PASSPORT TO SURGERY:**

The following may need to be completed prior to surgery:

**Preadmission testing (PAT) clinic visit:** \_\_\_\_\_

- ▲ (Medical Office Building Suite 310, phone: 540..245.7850)
- ▲ Bring Current Medication list to clinic visit
- Labs/EKG completed
- Additional physician appointments as directed by surgeon and/or PAT clinic
- Schedule your recommended prehab physical therapy appointment
- Begin preoperative exercise program found on insert
- Schedule your first outpatients physical therapy appointment now for 2-3 days after your planned discharge date
- Determine who will be your coach
- Have a positive attitude and be willing to work hard

**ATTENTION: PLEASE BRING YOUR GUIDEBOOK TO ALL APPOINTMENTS**

**PLEASE TURN THIS COMPLETED FORM IN AT JOINT CLASS**

Name \_\_\_\_\_ Date of Birth \_\_\_\_\_

Surgeon \_\_\_\_\_ Date of Surgery \_\_\_\_\_ Procedure  Knee

Your primary pharmacy \_\_\_\_\_ Pharmacy phone or location \_\_\_\_\_

**PERSONAL INFORMATION**

Who do you live with? \_\_\_\_\_ Relationship \_\_\_\_\_

Your Coach \_\_\_\_\_ Relationship \_\_\_\_\_ Coach’s phone \_\_\_\_\_

After your surgery, you will need some help with daily activities. Please have someone available to help with the following once you are discharged from the hospital:

- Dressing, bathing, meal preparation, shopping and housework
- Transportation home from the hospital
- Transportation to doctor appointments
- Transportation to physical therapy appointments 2-3 times a week, if necessary
- Transportation to the outpatient lab twice a week, if necessary

**INSURANCE**

Is your primary insurance Medicare?  Yes  No  
 If no, what is the name of your primary insurance carrier? \_\_\_\_\_

Is this a Workman’s Compensation Case?  Yes  No If yes, date of injury \_\_\_\_\_

Workman’s Compensation Company Name \_\_\_\_\_

Contact Person/Case Manager \_\_\_\_\_ Phone \_\_\_\_\_

- If you have private health insurance (Non-Medicare) you will need to:
1. Call the number on the back of your insurance card
  2. Verify if your choice for outpatient therapy is in network \*\*This is not authorization\*\*
  3. Verify your co-pay per visit

Please schedule your outpatient therapy appointment 2-3 days after your planned discharge. There is a list of outpatient therapy centers provided, but you can choose to use a center not on the list.

Outpatient Physical Therapy \_\_\_\_\_

First appointment Date \_\_\_\_\_ Time \_\_\_\_\_

**In order to assist with your discharge plan and transition to home, the following information will be useful. Questions related to the home should be the home you will be going to after discharge.**

1. Do you use a walker or cane?  Walker  Cane  Other \_\_\_\_\_
2. Number of stairs to enter the home \_\_\_\_\_ Handrail  Yes  No
3. Handrail location  Left side  Right side  Both sides
4. Do you have stairs inside the home that will be used frequently?  Yes  No
5. Number of stairs inside the home \_\_\_\_\_ Handrail  Yes  No
6. Handrail location  Left side  Right side  Both sides
7. What medical equipment will you have available for your use after discharge?

- |  |  |                                      |
|--|--|--------------------------------------|
| <input type="checkbox"/> Walker                | <input type="checkbox"/> Crutches        | <input type="checkbox"/> Cane        |
| <input type="checkbox"/> Elevated commode seat | <input type="checkbox"/> Bedside commode | <input type="checkbox"/> Sock donner |
| <input type="checkbox"/> Long handled sponge   | <input type="checkbox"/> Reacher         |                                      |
| <input type="checkbox"/> Dressing stick        | <input type="checkbox"/> Other _____     |                                      |

The only item covered by your insurance provider is a walker. All other items are out of pocket expenses. You may want to borrow the equipment as you only need them for a short period of time.

**Thank you for choosing Augusta Health for your joint replacement journey.**

## ATTENTION!

Insurance companies and the Center for Medicare and Medicaid Services have instituted a mandatory assessment before and 1-year after surgery for all patients. The goal of this survey is to capture the patient's self-assessment of their pain, function, and ability before and after surgery.

The survey aims to empower each patient's voice to ensure that our organization is doing everything possible to deliver the best outcomes.

Please complete the surveys when you receive them via email and/or SMS text messaging and help us continue to improve our patients' outcomes. Your responses will be used to ensure we are providing the best care possible to you and to other patients needing similar care in the future.

If you have any questions and/or concerns, please contact your surgeon's office.

Thank you for your participation,



## Joint Center and Spine Clinic

### PRE-OPERATIVE HIBICLENS BATHING INSTRUCTIONS

Before Surgery, you can play an important role in your own health. Since skin is not sterile, we need to be sure that your skin is as free of germs as possible before surgery. You can reduce the number of germs on your skin by carefully washing before surgery. Following these instructions will help you be sure that your skin is clean before surgery.

**Important:** You will need to shower with a special soap called chlorhexidine gluconate (CHG)\*. A common brand name for this soap is Hibiclens, but any brand is acceptable to use. The soap may come in a liquid form or in a scrub brush applicator. Either form is acceptable to use.

**\*Not to be used by people allergic to chlorhexidine (Hibiclens).**

1. Shower or bathe with the CHG the night before your surgery & the morning of your surgery. Do **not** shave the area of your body where your surgery will be performed.
2. With the shower or bath, wash your hair as usual with your normal shampoo and wash your body with your normal bath soap.
3. Rinse your hair and body thoroughly after your shampoo your hair and bathe to remove all residues.
4. Then apply the CHG soap to your entire body **only from the neck down**. Do **not** use CHG near your eyes or ears to avoid permanent injury to those areas. Wash thoroughly, paying special attention to the area where your surgery will be performed.
5. Turn the water off to prevent rinsing the soap off too soon. Wash your body gently for **five (5) minutes**. Do not scrub your skin too hard.
6. Turn the water back on and rinse your body thoroughly.
7. Pat yourself dry with a clean, soft towel.
8. Do not apply any lotions, perfumes, or powders after use.

### Table of Contents

<b>Section One: General Information .....</b>	<b>1</b>
Welcome to the Joint Center .....	1
Using the Guidebook .....	1
Overview of the Joint Center .....	1
Your Coach .....	2
Your Joint Center Coordinator .....	2
Your Joint Replacement Team .....	2
 <b>Section Two: Getting Ready for Surgery .....</b>	 <b>3</b>
Exercising Before Surgery .....	3
Stop Nicotine Products .....	3
Total Joint Replacement Patients and Infection .....	4
Wash Your Hands .....	4
Advance Directives .....	4
Prepare Your Home for Your Return from the Hospital.....	5
Breathing Exercises.....	6
Medications that Increase Bleeding.....	6
Special Considerations Prior to Surgery .....	6
The Night Before Surgery .....	7
The Morning of Surgery .....	7
Bring the Following to the Hospital with You.....	7
What Your Coach can Bring to Your Room After Surgery.....	7
 <b>Section Three: Hospital Care .....</b>	 <b>8</b>
Day of Surgery – What to Expect.....	8
After Your Surgery.....	8
Understanding Pain .....	8
But I’m Not A Diabetic.....	9
Day After Surgery.....	9
Same Day Discharge.....	9
Going Home.....	9

**Section Four: Living With Your Joint Replacement ..... 10**

Pain Management..... 10

Body Changes..... 11

Infection..... 11

Deep Vein Thrombosis (DVT) ..... 11

Pulmonary Embolus (PE)..... 12

What is Anticoagulant Therapy?..... 12

Basic Information About Aspirin ..... 12

Basic Information About Apixaban..... 13

Pre and Post-Op Exercises and Goals ..... 14

Activities of Daily Living..... 14

Personal Care ..... 15

Saving Energy Around the House ..... 15

Do’s and Don’ts for the Rest of Your Life..... 16

**Section Five: Helpful Resources..... 17**

The Importance of Lifetime Follow-up Visits..... 17

Preoperative and Postoperative Daily Exercise Program ..... 18

Knee Flexion Exercises ..... 20

Frequently Asked Questions ..... 21

**Section Six: Post-Hospital Care ..... 23**

Coach’s Checklist..... 23

Information About Your Surgical Dressing..... 24

How to Change Your Island Dressing..... 25

Total Joint Zone Tool..... 27

Managing Postoperative Constipation ..... 28

Steps to Access Virtual Pre-Operative/Discharge Joint Class ..... 29

Prosthetic and Orthotic Vendors ..... 29

Therapies..... 30

Campus Map ..... 31

Patient Medication List Worksheet..... 32

My Questions and Notes..... 33

SECTION ONE:

**GENERAL INFORMATION**

Welcome to the Joint Center

We are pleased that you have chosen Augusta Health for your joint replacement. Your decision to have elective joint replacement surgery is the first step towards a healthier lifestyle.

Each year, more than one million people make the decision to undergo joint replacement surgery. The surgery aims to relieve your pain, restore your independence, and assist you to return to work and other daily activities.

The program is designed to allow you to return to an active lifestyle as quickly as possible. Most patients will be able to walk the day of their surgery and move towards normal activity within four to eight weeks.

The Joint Center has planned a comprehensive course of treatment. We believe that you play a key role in promoting a successful recovery. Our goal is to involve you in your treatment through each step of the program. This guide will give you the necessary information to promote a more successful surgical outcome.

Your team includes orthopedic surgeons, the joint center coordinator, registered nurses, patient care technicians (PCT), physical and occupational therapists all specializing in total joint care. The team member roles are further discussed on the next page. Every detail, from preoperative to postoperative, is considered and reviewed.

**USING THE GUIDEBOOK**

Preparation, education, continuity of care, and a pre-planned discharge are essential for optimum results in joint surgery. Communication is essential to your joint replacement journey. The Guidebook is a communication tool for patients, physicians, physical and occupational therapists, and nurses. 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 your new joint



Remember, this is just a guide. Your physician, nurses, or therapist may add to or change any of the recommendations. Always use their recommendations first and ask questions if you are unsure of any information. Keep your Guidebook as a handy reference for at least the first year after your surgery. The information in the Guidebook covers a lot of details, so it may look overwhelming. We recommend reading the entire guide at a pace that suits you.

**OVERVIEW OF THE JOINT CENTER**

We offer a unique program. Each step is designed to encourage the best results leading to a discharge home from the hospital.

Features of the program include:

- Dedicated nurses and therapists trained to work with joint patients
- Casual clothes (no drafty gowns)
- Private rooms
- Family member or friend participates as a “coach” in the recovery process
- Electronic discharge presentation (with coach participation encouraged)
- Joint Center Team who assists you with pre-operative care and discharge planning
- Comprehensive patient guide for you to follow from six weeks before surgery until three months after surgery and beyond



## Your Coach

Your coach is a family member or friend of your choosing who will assist you through your joint replacement journey. Your coach should plan to visit during your hospital stay to provide support in therapy, view discharge presentation, and keep you focused on healing.

## Your Joint Center Coordinator

The joint center coordinator will be available to assist with your care needs from the preoperative course through discharge. The joint center coordinator will:

- Act as your liaison throughout the course of treatment
- Review what you'll need at home after your surgery
- Help assess and plan for your specific care needs

## Your Joint Replacement Team

### ORTHOPEDIC SURGEON

The orthopedic surgeon is the skilled physician who will perform the procedure to replace your damaged joint.

### REGISTERED NURSE (RN)

Much of your daily care will be provided by a nurse. Your nurse will assure orders given by your physician are completed; including medications, dressing changes (incision care) and monitoring your vital signs.

### PHYSICAL THERAPIST (PT)

The physical therapist will guide your return to functional daily activities. They will train you and your coach in safe transfer techniques, provide gait training and teach exercises designed to regain your strength and motion after surgery.

### OCCUPATIONAL THERAPIST (OT)

The occupational therapist will guide you on performing daily tasks such as bathing and dressing with your new joint. They may demonstrate special equipment used in your home after you receive your replacement; including shower benches, rails, or raised toilet seats.

### SOCIAL WORKER / CASE MANAGER

The social worker and case manager will work as a team to advocate and implement your discharge coordination.

### PATIENT CARE TECHNICIAN (PCT)

The patient care technician will assist you with your daily needs, monitor vital signs, assist with morning routine, and walking in the hall of the Joint Center.

## SECTION TWO:

# GETTING READY FOR SURGERY

In addition to completing your countdown to your total joint replacement checklist, (see inside front cover), the following are strongly encouraged to prepare you for the best outcome.

## Exercising Before Surgery

The goal is to be as flexible and strong as possible before undergoing total knee replacement. It is important to begin and exercise before surgery to make your recovery faster and easier. A preoperative knee exercise program can be found in the insert. Your surgeon expects you to start doing these now and continue until your surgery. You should be able to complete it in about 20-30 minutes, and you should perform at least once per day. Many of these exercises will look the same, or very similar, after surgery. Practicing these exercises now will prepare your joint for surgery and make your recovery process smoother. It is also recommended to do the exercises on both legs.



Remember that you need to strengthen your entire body. It is very important that you also strengthen your arms by doing chair push-ups because after surgery you will be relying on your arms to support you when walking with a walker. You will also rely on your arms to help you get in and out of bed, up from a chair, and up from the toilet. You should also exercise your heart and lungs by performing light endurance activities – for example, walking or stationary bicycling for 10-15 minutes each day, if tolerated.

**DO NOT DO ANY EXERCISE THAT IS TOO PAINFUL**



## Stop Nicotine Products

It is essential to stop all nicotine products before surgery. Nicotine delays your healing process and increases your risk for infection. Nicotine reduces the size of your blood vessels, decreases the amount of oxygen circulated in your blood, can also increase clotting which can cause problems with your heart and lungs and increases your blood pressure and heart rate. It is the expectation that you will be free of all nicotine products two months prior to your surgery day.

### GETTING READY FOR QUIT DAY

- Pick your QUIT DAY and mark it on your calendar
- Tell family and friends your QUIT DAY
- Stock up on sugarless gum, carrot sticks and sugarless hard candy
- Consider attending a smoking cessation class - program available at Augusta Health
- Get rid of all cigarettes, ashtrays, lighters, and any other smoking/nicotine related items

### QUIT DAY AND BEYOND

- DON'T use nicotine products
- Ask people you live with not to use nicotine products around you
- Attend the smoking cessation class if you have chosen one
- Reduce or avoid using alcohol
- Virginia smoking cessation help 1-800-Quit Now (1-800-784-8669)
- Replace smoking habits with new habits

- Use the four “A”s to deal with tough situations
  - AVOID people and places that tempt you to use nicotine products
  - ALTER some of your other daily habits, like your meal time, your route to work
  - ALTERNATIVES for your mouth - like healthy snacks
  - ACTIVITIES for your hands - like needlework, woodcarving or other hobbies
- If you are worried about gaining weight, increase your activity or see a nutritionist
- Remind yourself that QUITTING is the most important gift you can give yourself

## Total Joint Replacement Patients and Infection

### WHAT YOU NEED TO KNOW

Any infection needs to be addressed, whether it seems significant or not. If you develop a fever or chills any day within 7 days prior to your surgery, notify your surgeon. Infected scratches, cuts, and bug bites have been known to delay surgery if not treated.

Many things can increase someone’s risk of infection after surgery including:

- History of previous wound infections
- Repeat or revision surgeries
- Being overweight
- Diabetes, high blood sugars
- Nicotine product usage
- Steroid use, including prednisone
- Close contact with others with skin infections
- Infections at other sites, such as dental infections, chronic sinusitis, upper respiratory infections, rheumatoid arthritis
- If you have any of these risk factors listed above, tell your surgeon as soon as possible

## ADVANCE DIRECTIVES

Advance Directives alert your family and all caregivers regarding your wishes about your health care. When you have an Advance Directive on file with Augusta Health, the medical staff will work to honor your health care decisions. Pre-Admission Testing will ask you during your consultation if you have a current Advance Directive. Please bring a copy with you on the day of surgery.

To reduce your chance of infection:

- Shower with the antiseptic soap the night before and the morning of surgery as directed in Joint Class
- Do not shave the operative leg three days before surgery. Shaving increases the risk of infection
- For diabetics, maintaining a normal blood sugar before and after surgery is very important
- Washing your hands thoroughly and frequently helps to prevent infection before and after surgery
- Inform your surgeon if you have a history of MRSA

## Wash Your Hands

### IF HANDS COULD TALK, THEY WOULD TELL YOU THAT:

- They can offer hope, healing, and comfort
- They can create, protect, and defend
- **They also can be the route of spreading harmful bacteria**

Hand washing has been proven to reduce the spread of harmful bacteria and reduce overall infection rates. While in the hospital, the use of gloves does not eliminate the need for hand hygiene. Likewise, the use of hand hygiene does not eliminate the need for gloves. When using an alcohol-based handrub, apply product to palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry.

Please remember to wash your hands frequently and thoroughly before your hospital stay, during your hospital stay, and after your hospital stay. In fact, make this your healthy and protective everyday practice. Encourage your family and friends to follow good hand hygiene practices. Please feel free to ask your surgeon, nurse, or anyone who enters your room if he/she has washed their hands.

# How to Handwash

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

⌚ **Duration of the entire procedure: 40-60 seconds**

<p><b>0</b></p>  <p>Wet hands with water;</p>	<p><b>1</b></p>  <p>Apply enough soap to cover all hand surfaces;</p>	<p><b>2</b></p>  <p>Rub hands palm to palm;</p>
<p><b>3</b></p>  <p>Right palm over left dorsum with interlaced fingers and vice versa;</p>	<p><b>4</b></p>  <p>Palm to palm with fingers interlaced;</p>	<p><b>5</b></p>  <p>Backs of fingers to opposing palms with fingers interlocked;</p>
<p><b>6</b></p>  <p>Rotational rubbing of left thumb clasped in right palm and vice versa;</p>	<p><b>7</b></p>  <p>Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;</p>	<p><b>8</b></p>  <p>Rinse hands with water;</p>
<p><b>9</b></p>  <p>Dry hands thoroughly with a single use towel;</p>	<p><b>10</b></p>  <p>Use towel to turn off faucet;</p>	<p><b>11</b></p>  <p>Your hands are now safe.</p>

## Prepare Your Home For Your Return From the Hospital

It is important to have your house ready for your arrival back home. Use this list to help you get ready for surgery.

- Clean and do laundry
- Clean linens on bed
- Prepare and freeze meals
- Tend to yardwork

- Pick up throw rugs and tack down loose carpeting
- Remove electrical cords and other obstructions from walkways
- Install night-lights in bathrooms, bedrooms, and hallways
- Check railings to make sure they are not loose or install a railing if you need access to stairs
- Install grab bars in the shower/bathtub. Put adhesive slip strips in the tub
- Arrange to have someone collect your mail and take care of pets

## INCENTIVE SPIROMETER

This will help you develop, improve and maintain respiratory fitness. It is necessary to expand the small sacs of your lungs with deep breathing exercises to prevent complications and to expedite recovery.



## Breathing Exercises

To prevent potential problems such as pneumonia, it is important to understand and practice breathing exercises. Techniques such as deep breathing, coughing, and using an incentive spirometer (described above) may also help you recover more quickly.

### DEEP BREATHING

- You must use the muscles of your abdomen and chest
- Breathe in through your nose as deeply as you can
- Hold your breath for 5-10 seconds
- As you breathe out, do it slowly and completely through your mouth
- Breathe out as if you were blowing out a candle, this is called pursed lip breathing
- Breathe out for 10-20 seconds
- Take a break and then repeat exercises 10 times

### COUGHING

- Take a slow deep breath. Breathe in through your nose and concentrate on filling your lungs completely
- Breathe out through your mouth and concentrate on your chest emptying completely
- Repeat with another breath in the same way
- Take another breath, but hold your breath and cough hard
- When you cough, focus on emptying your lungs
- Repeat all steps twice

## Medications That Increase Bleeding

In accordance with the anesthesia guidelines at Augusta Health, there are certain medications that need to be stopped at particular time intervals prior to surgery. We encourage you to discuss specific medication concerns with the joint center coordinator, pre-admissions testing clinic, and/or your surgeon. Anesthesia guidelines at Augusta Health:

- Two weeks prior to surgery, STOP Herbal
  - Garlic
  - Ginkgo Biloba
  - Cinnamon
  - Vitamin E
  - Other supplements
  - Echinacea
  - St. John's Wort
  - Saw Palmetto
  - Omega 3/Fish Oil

Medications, for example:

- STOP blood thinners as directed by your surgeon's office, for example:
  - Coumadin
  - Eliquis
  - Effient
  - Plavix
  - Xarelto
  - Pradaxa
- Three days prior to your surgery, STOP all Nonsteroidal anti-inflammatory drugs (NSAIDS) including prescription and over the counter for example:
  - Motrin/Advil/Ibuprofen/Aleve
  - Mobic/Meloxicam
  - Voltaren/Diclofenac
- DO NOT stop taking your single daily aspirin tablet if you normally take one, unless otherwise instructed

## The Night Before Surgery

- Do not drink, eat gum, food, or candy after 11:00pm
- You may drink apple juice, water, or Gatorade up until 1 hour prior to your arrival time
- Follow the pre-operative Chlorhexidine bathing instruction sheet; this soap helps prevent surgical site infections
- **Exception:** If you are on a GLP-1 medication, you are **ONLY** allowed clear liquids the whole day prior to surgery.

## The Morning of Surgery

- Take **ONLY** the medications that have been approved during your PAT appointment

## Bring the Following to the Hospital With You

- Copy of your Advance Directive, if you have one
- Insurance card, driver's license or photo I.D.
- Co-payment required by your insurance company
- Bring your CPAP, if you have one

## What Your Coach Can Bring to Your Room After Surgery

- Guidebook
- Rolling walker
- Loose fitting clothing and supportive sneakers
- Personal hygiene items



## Special Considerations Prior to Surgery

If you are currently taking any GLP-1 medications you will need to stop taking it prior to surgery. Please refer to the handout provided to you at the orthopedic clinic. If you have any follow-up questions or concerns, please contact the PAT clinic or your surgeon.



SECTION THREE:

# HOSPITAL CARE

## Day of Surgery - What to Expect

- Preparations for surgery include starting an IV line, fitting you for support stockings and scrubbing your operative site
- Once you have been “prepped” for surgery, your family may wait with you until you go to the operating room
- An anesthesiologist will talk with you prior to surgery and discuss the types of anesthesia:
  - General anesthesia provides loss of consciousness
  - Regional anesthesia involves:
    - Injection of a local anesthetic to provide numbness and loss of sensation from approximately the waist down
    - Medication will also be given through your IV to make you drowsy and blur your memory
- Prior to surgery your surgeon will meet with you and mark your operative site

Potential Side Effects of Anesthesia	
General Anesthesia	Regional/Spinal Anesthesia
Nausea and vomiting	Headache
Sore throat	Minor back pain
Muscle aches	Difficulty urinating
Itching	Itching
Chills and shivering	Chills and shivering

## After Your Surgery

- You will then be taken to the Joint Center where a specially trained nurse will care for you. It is very important to:
  - Begin ankle pumps on this day. This will help prevent blood clots from forming in your legs
  - Begin using your Incentive Spirometer and doing the deep breathing exercises that are explained in your Guidebook

## Understanding Pain

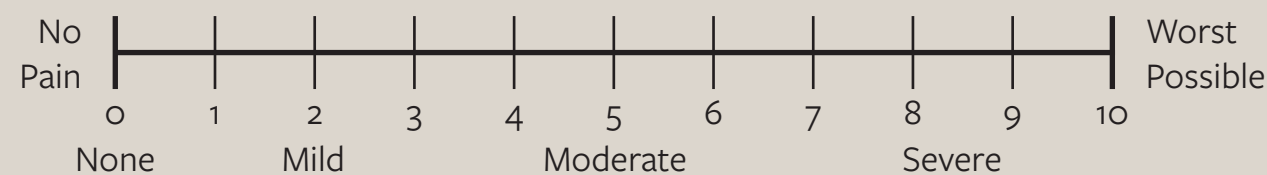
Your joint replacement team will work with you to manage your pain. Pain can be chronic (lasting a long time) or intense (breakthrough). Pain can change through the recovery process. It is important for you to stay ahead of your pain and to let your nurse know when you begin to feel discomfort.

### YOUR ROLE IN PAIN MANAGEMENT

Your joint replacement team will best understand your pain level when a pain scale is used. If “0” means you have no pain and “10” means you are in the worst pain possible, how would you rate your pain? With good communication about your pain, the team can make adjustments to make you more comfortable. Try to relax. When you are relaxed, medication works better.

## Pain Rating Scale<sup>®</sup> Mosby

- 0 = Pain Free
- 1-3 = Mild Pain
- 4-6 = Moderate Pain
- 7-10 = Severe Pain



## But I'm not diabetic...

### WHY ARE YOU CHECKING MY BLOOD SUGAR IF I'M NOT A DIABETIC?

- Surgery causes a “stress response” in your body that can cause high blood sugar
- Some medications used during surgery can also cause high blood sugar
- We monitor your blood sugar closely during this time

### WHY ARE YOU GIVING ME INSULIN IF I'M NOT DIABETIC? WHY AM I ON A “DIABETIC DIET” IF I'M NOT DIABETIC?

- Insulin is a natural hormone produced by your pancreas
- During times of high blood sugar, more insulin is needed to help your body process sugar
- Your body may temporarily need more insulin than your pancreas can produce

### DO I NOW HAVE DIABETES? DO I NEED INSULIN AT HOME? DO I NEED TO SEE MY PCP?

- You were already screened for diabetes before surgery and would have been notified if you were diabetic
- Post operative hyperglycemia (high blood sugar) is temporary and common, and is not diagnostic of diabetes

Please **DO NOT REFUSE** blood sugar checks or insulin. These treatments are for your health and safety.

## Same Day Discharge

If you and your surgeon have had a conversation about the possibility of you leaving the same day as surgery, this is referred to as a same day discharge. After surgery, you will arrive to the Joint Center and order lunch. After lunch, PT and OT will come to your bedside and provide therapy in sessions to include walking with a walker, leg strengthening exercises and stair climbing if applicable. In addition to needing to be cleared by both therapies, you will also need to be able to urinate an adequate amount (determined by your nurse and/or surgeon), stable vital signs and pain controlled by oral medication. The electronic discharge presentation will be provided for you to watch prior to discharge. You can anticipate to be discharged no earlier than 5:00 p.m.

## Day After Surgery

The day after surgery, you can expect to be bathed, dressed, and seated in a recliner by 7:00 a.m. Your surgeon or surgeon’s partner will see you and evaluate for discharge to home. If you have not watched the electronic discharge presentation, it will be provided. You will have an individualized physical therapy and occupational therapy session in your room. The therapy will include walking with a walker and leg strengthening exercises. Following your therapy session, you can anticipate being discharged between 10:00 a.m. and 12:00 p.m.

## Medication Delivery to Bedside Program

As a convenience, Augusta Health offers a medication delivery to bedside program. This voluntary program allows patients to be discharged from the hospital with their discharge medications in hand. If this is a service you wish to utilize, insurance information will be obtained and billed to your insurance. Any remaining expense will be billed to you.

## Going Home

Please have someone available to pick you up. You will receive written discharge instructions concerning medications, activity, wound care, etc. We will help you obtain equipment if you have not made previous arrangements. It is very important that you continue to work on improving your knee range of motion. Please continue with your home exercise program provided. It is recommended that your first outpatient physical therapy appointment is within 1 – 3 days of going home. You should make this appointment a few weeks before surgery, to ensure that you get the therapist you want and in a timely fashion. Don't forget to take this guidebook home with you!



## SECTION FOUR:

# LIVING WITH YOUR JOINT REPLACEMENT

While you are recovering, it is important to listen to your body. You may have a poor appetite initially and your energy level may be decreased for at least 1-2 months. It is important to manage your pain, watch for signs and symptoms of an infection and other complications related to your surgery.

## Pain Management

### WHAT PAIN MEDICATIONS MAY BE PRESCRIBED?

- Analgesic medications help to relieve pain
- Acetaminophen (Tylenol)
  - Celecoxib (Celebrex)  
Non-steroidal anti-inflammatory drugs (NSAIDs) such as Naproxen (Aleve) and ibuprofen (Motrin/Advil) may be taken if directed by your surgeon
- Narcotic medications inhibit pain receptors in the brain and increase your pain tolerance. Examples include:
  - Oxycodone (Roxicodone)
  - Hydromorphone (Dilaudid)
  - Tramadol (Ultram)
  - Hydrocodone

### HOW DO I TAKE THIS MEDICATION?

- Take the medication ONLY as directed by your surgeon
- Narcotic medication may become habit forming, so use the lowest dose that is necessary to treat your pain
- Take medication with food or milk to avoid stomach upset
- It is important to stay hydrated while taking this medication

What Common Side Effects or Problems May I Experience? (See managing postoperative constipation page 25)

- Constipation
  - May be reduced by staying hydrated (drinking 6-8 glasses of water per day)
  - Ask your surgeon or pharmacist to recommend an over-the-counter product to reduce the risk
- Mild to moderate drowsiness or sedation
- Euphoria

Tell your surgeon immediately if you experience any of the following side effects:

- Slowed or trouble breathing
- Persistent nausea or vomiting
- Severe drowsiness, dizziness, or fainting
- Yellowing of eyes or skin
- Trouble urinating or dark urine
- Unusual thoughts or behaviors or severe mood swings

### ARE THERE ANY SPECIAL PRECAUTIONS?

- Mixing sedatives, benzodiazepines, gabapentin, or alcohol with opioids can result in fatal respiratory depression.
- Avoid activities requiring mental alertness or coordination
- Do not use alcohol while taking this medication
- Elderly patients may be more sensitive to the effects of this medication
- Make sure your surgeon is aware if you are taking muscle relaxants (e.g. Flexeril or Soma), anxiety medication (e.g. Ativan or Valium), anti-depressants (e.g. Amitriptyline), and medications to help you sleep (e.g. Ambien or Benadryl)
- It is essential your surgeon is aware of all your medications including over-the-counter and herbal supplements

### WHAT IF I MISS A DOSE?

- Since these medications are usually used on an “as needed” basis, you may not be on a regular schedule. If you miss a dose of this medicine, take it as soon as possible if you are having pain. If it is almost time for your next dose, skip the missed dose and resume your regular dosing schedule. Do not take double doses

### BE COMFORTABLE

- Acetaminophen (Tylenol) should be taken on a regular schedule after surgery to help relieve pain and reduce the amount of narcotics required. Follow the instructions on the medication bottle for dosing unless contraindicated or allergic
- **Note:** Please do not submerge your total joint replacement (pool/bath/hot tub/lake/ocean/etc.) for 6 weeks after surgery.
- Apply Ice
  - 20 minutes on/20 minutes off
  - Lay your spare ice packs flat in the freezer, changing them every 4 hours
  - Ice man circulating device is also recommended with appropriate towels for insulation. Check skin regularly
- Elevate surgical leg above the heart for reduced swelling

- Take your pain medication at least 30 minutes before physical therapy
- Follow up with your surgeon for ineffective pain management
- Change your position frequently to avoid stiffness
- Apply ice to your joint to decrease discomfort and swelling. Continue using the ice packs you received while on the Joint Center
- Other methods of ice therapy include:
  - Bag of frozen peas or corn wrapped in a towel, marked as ice therapy
  - Freezer bag with 3 cups of water and 1 cup rubbing alcohol
  - Freezer bag with dish detergent (e.g. Dawn®)

## BODY CHANGES

- You are allowed to sleep on your side. Placing a pillow between your knees can help
- Your appetite may be poor. Drink plenty of fluids to keep from getting dehydrated. Your desire for solid food will return
- Your energy level will be decreased for at least the first month or two
- Taking naps will help you heal. Don't sleep all day, you will not be able to sleep at night
- Pain medication that contains narcotics will cause constipation. Please be proactive in regards to your bowel habits. Drink prune juice, increase fluids and fiber in your diet and use stool softeners or laxatives if necessary



## SUPPORT STOCKINGS

You will be asked to wear support stockings. These stockings are used to help compress the veins in your legs. This helps to keep swelling down and reduces the chance for blood clots.

## INFECTION

Hand washing has been proven to reduce the spread of harmful bacteria and reduce overall infection rates.

## CARING FOR YOUR INCISION

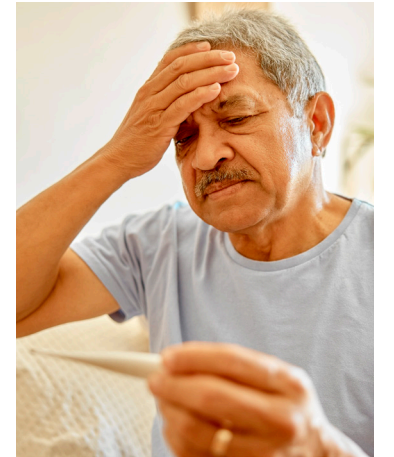
(See How to Change your Island Dressing pages 25-26)

- Your Aquacell Ag+ dressing will need to be changed in 14 days. A replacement dressing will be provided if it needs to be changed prior. (Instructions provided at discharge).
- You may shower with the dressing in place
- Your dressing should immediately be changed if it becomes loose or wet under the dressing

## Recognizing Signs of Infection

### SIGNS OF INFECTION

- Increased swelling and redness at incision site
- Change in color, amount, and/or odor of drainage
- Increased pain with both activity and rest in hip
- Fever greater than 101.5 degrees
- Chills



## DEEP VEIN THROMBOSIS (DVT)

Surgery may cause the blood to slow and clot in the veins of your legs, creating a blood clot. Creating a blood clot. It usually happens in the veins of your thighs and calves. They can travel to your lungs and cause major breathing injuries or permanent leg swelling. Blood clots can form in your operated and non-operated leg. This is why you take blood thinners after surgery. If a clot occurs despite these measures, you may need to be admitted to the hospital for further treatment.

### FACTORS THAT INCREASE RISK FOR DVT

- Cancer
- Obesity
- Heart and lung disease
- 40 years of age or older
- History of DVT
- Major surgery which limits mobility
- Pregnancy
- Diabetes
- Nicotine use
- Blood clotting diseases
- Birth control medication
- Smoking
- Hormone replacement medication
- Traumatic injuries
- Poor activity level

## PREVENTING DVT

- Perform ankle pumps - pump your ankles like you would on a car gas pedal
- Perform gluteal sets - squeeze your thighs and buttocks and hold them tightly for 3 seconds
- Get up and walk frequently
- Wear your support stockings
  - If swelling is bothersome, elevate the leg above level of the heart
  - Wear the stockings continuously, removing for one to two hours twice a day. Notify your surgeon if you notice increased pain or swelling in **either** leg
  - You will wear these stockings for at least two weeks after surgery
  - Ask your surgeon when you can discontinue the stockings
- Take your blood thinner as directed
- Do your postoperative exercises
- Drink plenty of fluids; avoid caffeine and alcohol
- Avoid tight socks, shoes, and clothing, which could cut off blood flow to your legs
- When you are traveling long distances, stop and get out of the car and walk around for 10- 15 minutes every hour

## SIGNS OF DVT

- Swelling in thigh, calf, or ankle that does not go down with elevation
- Pain, heat, and tenderness in calf, back of knee or groin area

## Pulmonary Embolus (PE)

A blood clot that breaks away from the vein and travels to the lung. This is an emergency and you should CALL 911 if you develop any of the following signs or symptoms:

- Sudden chest pain
- Difficult and/or rapid breathing
- Shortness of breath
- Sweating
- Confusion
- Rapid heart rate

## PREVENTION OF PULMONARY EMBOLUS

- Follow steps on how to prevent DVT
- Recognize the signs and symptoms of a DVT and notify your surgeon immediately

- Anticoagulant therapy

## What is Anticoagulant Therapy?

“Anti” means against and “coagulant” refers to the clotting of blood. An anticoagulant helps keep clots from forming in your blood. Your surgeon will prescribe an anticoagulant medication. These are often referred to as “blood thinners”. Examples of these medications include:

- Warfarin (Coumadin/Jantoven)
- Aspirin
- Apixaban (Eliquis)

## BASIC INFORMATION ABOUT ASPIRIN

- Known as a salicylate and a nonsteroidal anti-inflammatory drug (NSAID)
- Reduces the ability of platelets in the blood to clot
- May be used as a blood thinner to prevent blood clots after surgery
- It is essential your surgeon is aware of all your medications including over-the-counter and herbal supplements

## HOW DO I TAKE THE MEDICINE?

Take one 81mg or 325mg Aspirin (as instructed by your surgeon) tablet by mouth twice a day about 12 hours apart.

- Drink a full glass of water unless you are on fluid restrictions
- Do not lie down for at least 30 minutes after taking the medication
- If stomach upset occurs, take Aspirin with food or milk
- Swallow the pill whole, do not crush, chew, or break the tablet
- Dosage and length of treatment will be based on your medical history and response to therapy
- Complete the provided prescription and refills are not needed

What Common Side Effects or Problems May Occur?

- Upset stomach and heartburn, take medication with food or milk if this occurs
- Easy bruising/bleeding

Call your surgeon immediately if the following side effects occur:

- Difficulty hearing or ringing in your ears
- Persistent or severe nausea/vomiting
- Black/tarry stools
- Persistent or severe stomach pain

Call 911 if you develop the following symptoms:

- Vomit that looks like coffee grounds
- Slurred speech
- Numbness or weakness on one side of the body
- Sudden vision changes
- Severe headache

## ARE THERE ANY SPECIAL PRECAUTIONS?

- Avoid use of alcohol and tobacco products
- Elderly may be more sensitive to the side effects of Aspirin
- Prior to taking Aspirin, your surgeon needs to be aware of a history of asthma, kidney issues, or stomach ulcers

## WHAT IF I MISS A DOSE?

- Take it as soon as you remember unless it is near the time for the next dose
- Do not take two doses at the same time

## BASIC INFORMATION ABOUT APIXABAN

- Brand name is Eliquis
- Anticoagulant which thins your blood to prevent blood clots
- It is essential your surgeon is aware of all your

medications including over-the-counter and herbal supplements

- If you are planning to become pregnant or breastfeeding, notify your surgeon.

## HOW DO I TAKE THE MEDICINE?

- Take one tablet by mouth twice a day about 12 hours apart
- Take with or without food
- Do not take additional doses or continue longer than recommended unless directed to do so by your surgeon

## WHAT IF I MISS A DOSE?

- Take it as soon as you remember unless it is the next day
- Do not take two doses at the same time

## WHAT COMMON SIDE EFFECTS OR PROBLEMS MAY I HAVE?

- Easy bruising/bleeding such as gums bleeding while brushing teeth and nosebleeds that are easily controlled

Call your surgeon immediately if the following side effects occur:

- Itchy rash
- Fainting
- Nausea
- Anemia
- Black/tarry stools

Call 911 if you develop the following symptoms:

- Vomit that looks like coffee grounds
- Severe headache or stomach ache
- Sudden vision changes
- Numbness or weakness on one side of the body
- Bleeding that does not stop in 20 minutes
- If you fall or hit your head

# PRE AND POST-OP EXERCISES AND GOALS

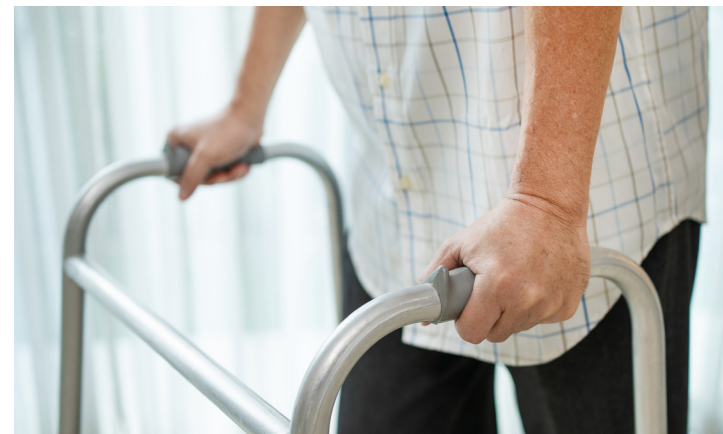
## ACTIVITY GUIDELINES

Exercising is important to obtain the best results from total knee surgery. You will need to complete the daily exercise program on pages 18-19 multiple times a day in order to achieve the proper bend in your knee and range of motion desired after surgery. This will keep you moving towards the goals listed on the next few pages.

## WEEKS 1-2

Most patients with a joint replacement discharge directly home the day of surgery, or the following morning. Most joint replacement patients go directly home. During weeks one and two of your recovery, typical goals are to include:

- Every hour you must completely straighten and hold your knee, and strive to bend your knee to 90 degrees or more. Repeat at least 4 times per hour unless there is increasing drainage in your dressing
- Continue using walker unless otherwise instructed
- Walk for a short time (5-10 minutes) in your home at least 5 times daily
- Sponge bathe or shower and get dressed
- Gradually resume gentle housework
- Attend outpatient physical therapy appointments (OPPT)
- Continue with daily exercise program (pages 18-19)
  - Days you attend OPPT, do the exercise program 1 time
  - **Off days from OPPT, do the daily exercise program 3 – 4 times a day**



## WEEKS 3-4

During weeks 3-4 you will gain independence. Even though you are receiving OPPT, you will need to be very committed to your daily exercise program to be able to achieve the best outcome. Your goals include:

- Continue 1 -2 week activities
- Move from full support to a cane as instructed by OPPT
- Progress your exercise program as directed by your outpatient physical therapist, which can include the Knee Flexion Exercises on page 20
- Move from sitting to standing and standing to sitting with both feet planted close to the chair

## WEEKS 5-6

In weeks 5-6 your daily exercise program will be even more important as you receive less OPPT. Your goal is to return to full independence.

## Activities of Daily Living

### WALKING

1. Push the rolling walker forward.
2. Step forward placing the foot of the surgical leg in the middle of the walker area.
3. Step forward with the non-surgical leg. DO NOT step past the front wheels of the walker.

NOTE: Begin walking with small, safe steps. Keep the legs of the walker in contact with the floor. Start with your surgical leg for stability and advance your non-surgical leg with support of your arms. As you progress, you can attempt to continue to roll the walker forward like a shopping cart, taking equal strides with both legs. You should be able to walk a normal pace as your knee “loosens up.” Do not walk too close to the front or way behind the walker’s rear legs

### STAIR CLIMBING

1. Ascend with non-surgical leg first (Up with the good).
2. Descend with the surgical leg first (Down with the bad).
3. Always hold onto the railing!

## Personal Care

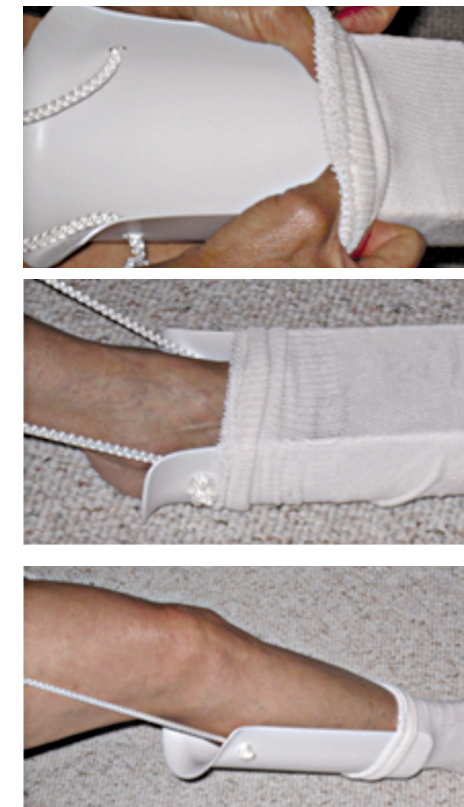
### PUTTING ON PANTS AND UNDERWEAR:

1. Sit down.
2. Put your surgical leg in first and then your non surgical leg. Use a reacher or dressing stick to guide the waistband over your foot.
3. Pull your pants up over your knees, within easy reach.
4. 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.
3. Push your underwear down to your knees.
4. As you sit down, keep your surgical leg out straight.
5. Take your non-surgical leg out first and then the surgical leg.
6. A reacher or dressing stick can help you remove your pants from your foot and off the floor.



### HOW TO USE 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.



### IF 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. Lean back, if necessary, as you lift your leg and place your toes in your shoe.
4. Step down into your shoe, sliding your heel down the shoehorn.

NOTE: This can be performed sitting or standing. Wear sturdy slip-on shoes, or shoes with Velcro closures or elastic shoelaces. DO NOT wear high-heeled shoes or shoes without backs.

## Saving Energy 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

- We recommend the installation of grabs bars to assist with safe transfers in and out of the tub or shower.
- A shower chair or tub transfer bench can be used for added safety during bathing if needed for balance or energy conservation
- Have a family member present the first time you attempt stepping into or out of the tub for added safety
- If you have a tub, make sure you feel ready to stand with all your weight on your operated leg while attempting to lift your non-operated leg into and out of the tub

## 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, toddlers, small objects, or uneven surfaces
- Provide good lighting throughout by installing nightlights in the bathrooms, bedrooms, and hallways
- Keep extension cords and telephone cords out of pathways
- Do NOT wear open-toe slippers or shoes without backs as they do not provide adequate support and can lead to slips and falls
- Sit in chairs with arms to make it easier to get up
- Rise slowly from either a sitting or lying position to avoid getting light-headed
- Do not lift heavy objects for the first three months

## Do's and Don'ts For the Rest of Your Life

Whether you have reached all the recommended goals in three months or not, you need to have a regular exercise program to maintain the fitness and the health of the muscles around the joints. With both your orthopedic surgeon and primary care physicians' permission, you should be on a regular exercise program three to four times per week lasting 20-30 minutes. High risk activities such as climbing a wet ladder are likewise discouraged because of the risk of fractures around the prosthesis.

## WHAT TO DO IN GENERAL

- If you are immunocompromised, please take antibiotics one hour prior to dental work or other invasive procedures
- Although the risks are very low for postoperative infections, it is important to realize that the risk remains. Even years after surgery a prosthetic joint could possibly attract the bacteria from an infection located in another part of your body. Notify your primary care physician immediately if you have signs and symptoms of an infection anywhere
- See your surgeon for check-ups as recommended

## STAYING ACTIVE AFTER SURGERY: FITNESS FOR LIFE

- It is important to maintain a good body weight to decrease the stress on your new joint
- Choose a low impact activity such as:
  - Walking program (indoors on the treadmill or at the mall, or outdoors)
  - Stationary bike
  - Swimming or water aerobics (buoyancy of water decreases strain on arthritic and new joints)
- Join an exercise class at local fitness center: group exercise is fun
- Sports such as golf and bowling are low impact
- Our goal is for you to return to activities you have missed

## WHAT NOT TO DO

- Do not participate in high risk activities such as contact sports, climbing a wet ladder, etc.
- Do not take up new sports requiring strength and agility until you discuss it with your surgeon or physical therapist

## SECTION FIVE:

# HELPFUL RESOURCES

## The Importance of Lifetime Follow-Up Visits

Over the past several years, orthopedic surgeons have discovered that many people are not following up with their surgeons on a regular basis. The reason for this may be that they do not realize they are supposed to, or they do not understand why it is important.

### SO, WHEN SHOULD YOU FOLLOW UP WITH YOUR SURGEON?

These are some general rules:

- Every 1 to 7 years, unless instructed differently by your surgeon
- Anytime you have new pain that is not improving after 3 weeks
- If you have new severe pain

### There are two good reasons for routine follow-up visits with your orthopedic surgeon:

If you have a cemented knee, the integrity of cement needs to be evaluated. Time and stress may lead to a crack in the cement. You would probably be unaware of this happening, because it usually occurs slowly over time. A crack in cement does not necessarily mean you need another surgery, but it means things need to be followed more closely.

Why? Two things could happen. Your implant 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 know this for years. Orthopedists are continually learning more about how to deal with both of these problems. The sooner we know about potential problems, the better chance we have of avoiding problems that are more serious.

The second reason for follow-up, the plastic liner in your knee may wear. Tiny 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 will be done in your surgeon's office.

We are happy that most patients do so well that they do not think of us often. However, we enjoy seeing you and want to continue to provide you with the best care and advice. If you are unsure how long it has been or when your next visit should be scheduled, call your surgeon. We will be delighted to hear from you.



# Daily Exercise Program for Total Knee Replacement

## ALL EXERCISES PERFORMED 20 REPETITIONS TO BOTH LEGS - SLOWLY

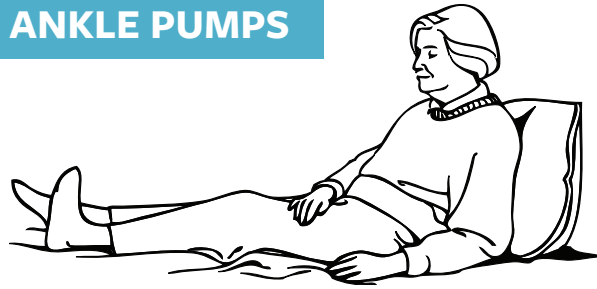
Exercises are to be completed in the bed or recliner, not on the floor.

Days you attend OPPT, do the exercise program 1 time.

Off days from OPPT, do the daily exercise programs 3 - 4 times a day.

Counting your repetitions as you exercise helps make sure you are not holding your breath

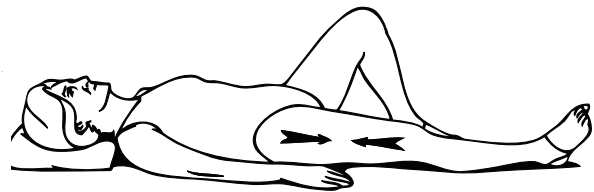
### 1. ANKLE PUMPS



Gently point toes up towards your nose and down towards the surface. Do both ankles at the same time or alternating feet. Perform slowly.

**Coach's Note:** Perform throughout the day - 20-30/hr while awake.

### 2. QUAD SETS



Slowly tighten thigh muscles of legs, pushing knees down into the surface. Hold for 5 count

**Coach's Note:** Looks and feel for the muscles above the knee to contract. As strength improves, the leg will be straighter, and the kneecap will move towards the thigh.

### 3. GLUTEAL SETS



Squeeze the buttocks together as tightly as possible. Hold for a 5 count.

**Coach's Note:** Patient can place hands on right and left gluteal (buttocks) area and feel for muscle contractions.

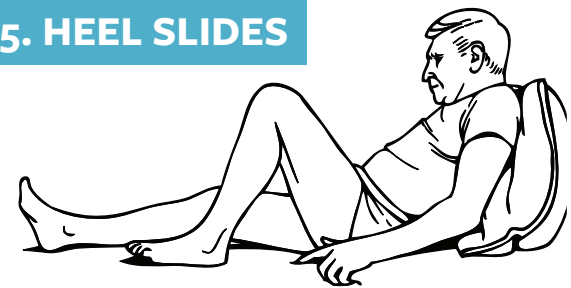
### 4. ABDUCTION & ADDUCTION



Slide leg out to the side. Keep kneecap pointing toward ceiling. Gently bring leg back to pillow.

**Coach's Note:** Perform slowly with 5 count in and 5 count out.

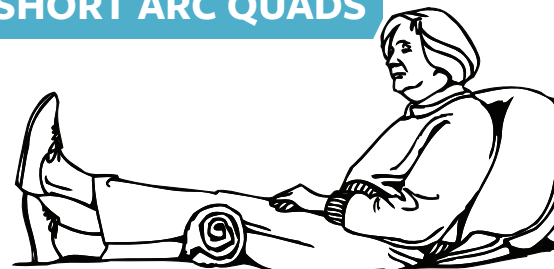
### 5. HEEL SLIDES



Bend the knee and pull the heel towards the buttocks. You may assist with the blue band or a belt to increase knee flexion.

**Coach's Note:** Patient should actively pull the heel up as far as possible, additional stretch can be achieved by pulling foot with the band or lifter.

### 6. SHORT ARC QUADS

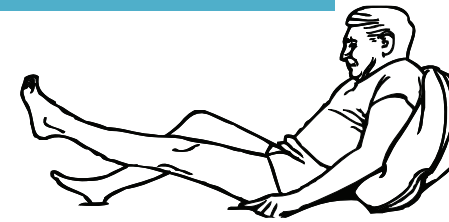


Place a large can or rolled towel (about 8" diameter) under the leg. Straighten knee and leg. Hold straight for 5 count

**Coach's Note:** Work for full extension (straightening of the knee. Use the blue band or a belt to assist until no longer needed.)

# Daily Exercise Program for Total Knee Replacement

### 7. STRAIGHT LEG RAISES



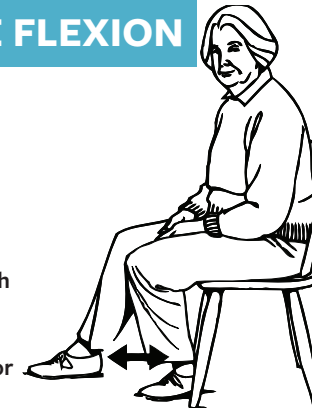
Bending the other knee can help take pressure off your back. Slowly lift straight leg 10 inches from the surface and hold for 2 seconds. Lower it slowly, keeping the muscle tight.

**Coach's Note:** Maintain the straight leg, and keep the knee from bending with the lift. Go slowly. If needed, use your blue band or a belt for support

### 8. SITTING KNEE FLEXION

Keeping feet on floor, slide foot of operated leg backward, bending knee. Hold for 5 count. Do 15 quality repetitions.

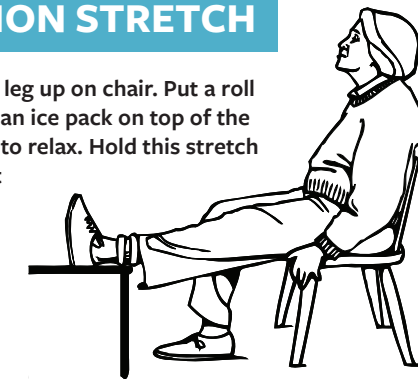
**Coach's Note:** Each time bend to the point of pain and then a little more. Slide foot underneath chair, keeping hips on chair. With foot planted, move bottom forward for final stretch. Hold for 10 seconds.



### 9. EXTENSION STRETCH

Prop foot of operated leg up on chair. Put a roll under your ankle. Put an ice pack on top of the knee. Sit back and try to relax. Hold this stretch for 10 minutes at least twice a day.

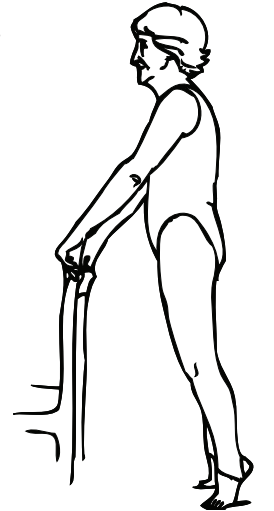
**Note:** Your legs should be elevated with knees straight most of the day for the first couple weeks. Occasionally sitting with your knees bent is allowed.



### 10. STANDING HEEL/TOE RAISES

Start standing exercises on Day 2. Hold onto an immovable surface, such as the kitchen sink. Push up on toes slowly and come back to foot flat, then lifting toes off the floor.

**Coach's Note:** When lifting up, do not lean backward.



### 11. STANDING KNEE FLEXION

Holding onto an immovable surface. Bend a leg behind you and then bring it back down to the floor. Complete 20 repetitions and switch to the other leg.

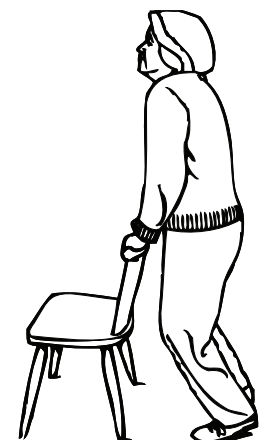
**Coach's Note:** The tendency is for the hip to come forward as the knee is bent. Encourage a straight line from the shoulder to knee.



### 12. STANDING PARTIAL SQUAT

Holding onto an immovable surface, slowly bend your knees as if you were going to sit down. Keep both feet flat. Come back up after a 1/4 squat.

**Coach's Note:** Encourage erect posture, with eyes forward. Do not bend at the waist.



## STAIR/STEP TRAINING:

1. The non-surgical ("good") leg goes **UP** first.
2. The surgical ("bad") leg goes **DOWN** first.
3. The cane stays on the level of the surgical leg.

## RESTING POSITIONS:

1. No pillows under knees.
2. Lie flat occasionally on your back in bed and elevate surgical leg above your heart.
3. Do not sit with your knee bent for prolonged periods - see #9

## Knee Flexion Exercises

- The following exercises will help you continue to increase the range of motion of your knee after discharge from the Joint Center.
- Please complete them 3-4 times throughout the day, about 20 repetitions, to your tolerance.
- Show them to your outpatient therapist so they are aware of your program.
- The most important step is to get your knee straight and keep it straight!
- Regaining full range of motion is very important in the first couple weeks of your recovery.

### ROCKING CHAIR

If you have a rocking chair, this is a great tool to use to improve the amount of bend in your knee. Push off with your feet on the floor, working to gradually rock further back and forth in both directions. To get additional bend, scoot your bottom further forward in the chair, keeping your feet on the ground, lean/slowly rock forward until you feel a stretch. Hold for 30 seconds or to tolerance. You may want to use anti-slip pads/strips under the rockers of the chair to prevent it from slipping on the floor surface.

### KITCHEN CHAIR

Sit in a straight back chair and place a towel or washcloth under your foot on the operated side. This will assist you in sliding your foot back underneath the chair as far as you can bend it on your own. Hold 30 seconds, then release. An additional method is to use your non-operated leg to help bend your new knee even further. Hook your (non-operated) ankle around the operated leg and pull back to make your new knee bend. Again, hold for about 30 seconds or to tolerance.

### USE OF A STEP

If you have a step or stairs in your home place your foot on the operated side up on the first or second step. Using a rail or wall for support, lean forward into your knee until you feel a good bend/stretch. Hold for about 30 seconds. If you do not get enough stretch on the first step you can try the second one. Alternatively, if you do not have a step or landing, you may place your foot up on a box or any item that would be sturdy and about the same height as a step.

### HEEL SLIDES

This exercise is part of the Preoperative and Postoperative Daily Exercise Program and is listed in your guidebook. You can use the blue elastic band that you received during your stay on the Joint Center, to help pull your operated leg/knee up to get as much bend as possible. Hold for 30 seconds or as per tolerance. You can also use a belt or towel to assist with this motion.

### STATIONARY BIKE

If you own a stationary bike, ask your outpatient therapist to show you how to use it safely after a knee replacement surgery. This is a great tool for increasing knee bend! However, you will need to learn how to get on it safely and how to adjust the seat properly before trying it.

## Frequently Asked Questions

We are glad you have chosen our Augusta Health Joint Center to care for your knee. People facing joint replacement surgery often have the same questions. If there are any other questions that you need answered, please ask your surgeon or the Joint Center Coordinator. We are here to help.

### WHAT IS OSTEOARTHRITIS AND WHY DOES MY KNEE HURT?

Joint cartilage is a tough, smooth tissue that covers the ends of bones where joints are located. It helps cushion the bones during movement, and because it is smooth and slippery, it allows for motion with minimal friction. Osteoarthritis, the most common form of arthritis, is a wear and tear condition that destroys joint cartilage. Over time, cartilage destruction can result in painful bone-on-bone contact, along with swelling and loss of motion. Osteoarthritis usually occurs later in life and may affect only one joint or multiple joints.

### WHAT IS TOTAL KNEE REPLACEMENT?

The term total knee replacement is misleading. The knee itself is not replaced, as is commonly thought, but rather an implant is used to re-cap the worn bone ends. This is done with a metal alloy or ceramic on the femur (thigh bone) and a plastic spacer on the tibia (shin) and patella (kneecap). This creates new smooth surfaces and a functional joint that can reduce or eliminate pain.

### HOW LONG WILL MY NEW KNEE LAST AND CAN A SECOND REPLACEMENT BE DONE?

A total joint implant's longevity will vary in every patient. The majority of knee replacements will last for a patient's remaining lifespan. It is important, however to remember that an implant is a medical device, subject to wear that may lead to mechanical failure. While it is important to follow all of your surgeon's recommendations after surgery, there is no guarantee that your particular implant will last for any specified length of time.

### WHAT ARE THE MAJOR RISKS?

Most knee replacements go well, without any complications. Infection and blood clots are two possible serious complications. To avoid these complications, your surgeon will use antibiotics and

blood thinners. Surgeons also take special precautions in the operating room to reduce the risk of infection.

### HOW LONG WILL I BE IN THE HOSPITAL?

If you have been identified as same day discharge by your surgeon and have met the criteria then you can expect to discharge the day of surgery or can anticipate a one night stay in the hospital.

### WHAT IF I LIVE ALONE?

Ideally patients are discharged from the Joint Center to their home-setting which should be your expectation and plan. Please make arrangements prior to your surgery.

### WILL THE SURGERY BE PAINFUL?

You will have discomfort following the surgery. The Joint Center team will monitor your pain level frequently. Pain control measures include:

- Anesthesia
- Oral pain medication
- Ice therapy
- Repositioning

### HOW LONG WILL MY SCAR BE?

Surgical scars will vary in length depending on your body's size and shape, but your surgeon will make it as short as possible. There may be lasting numbness around the scar.

### WILL I NEED A WALKER OR A CANE?

Patients progress at their own rate. We recommend using a walker for at least two weeks and then transition to a cane. Your outpatient physical therapist will be able to assist with this decision.

### WILL I NEED HELP AT HOME?

Yes. For the first few days or weeks, depending on your progress, you will need someone to assist you with meal preparation, etc. Family or friends need to be available to help if possible. Preparing ahead of time, before your surgery, can minimize the amount of help needed. Having the laundry done, house cleaned, yard work completed, clean linens on the bed, and single portion frozen meals will help reduce the need for extra help.

## WILL I NEED PHYSICAL THERAPY WHEN I GO HOME?

You are encouraged to utilize outpatient physical therapy. The duration of therapy varies with each person but is typically two to three times per week to assist in your rehabilitation. Please make your outpatient therapy appointment prior to your surgery. The first appointment should be 1-3 days after discharge from the Joint Center. Please verify insurance benefits prior to scheduling the appointment.



Thank you for choosing Augusta Health for your joint replacement. The Joint Center Team looks forward to assisting you on your journey. Contact the Joint Center Coordinator with any questions.

**See You Soon!**

## WILL MY NEW KNEE SET OFF SECURITY SENSORS WHEN TRAVELING?

Your joint replacement is made of a metal alloy and may or may not be detected when going through some security devices. Inform the security agent you have a metal implant. The agent will direct you on the security screening procedure.

## SECTION SIX:

# POST-HOSPITAL CARE

## Coaches Checklist

Do you know...?

- Anticoagulant (blood thinner) medication instructions
- Signs and symptoms of blood clots:
  - Deep Vein Thrombosis (DVT)
  - Pulmonary Embolism (PE)
- Applying and removing support stockings
- How to change the dressing
- Signs and symptoms of infection
- Pain medication instructions
- Ice therapy
- Use of incentive spirometer
- Mobility assistance including:
  - Assisting in/out of bed
  - Assisting up/down stairs
- Daily exercise program
- Use of equipment (walker, reacher)



Place a checkmark in each box if you understand the task. Any item requiring clarification must be discussed with your nurse when you receive your final instructions for going home.

## Information About Your Surgical Dressing

### WHAT ARE AQUACEL™ AG+ DRESSINGS?

Aquacel™ Ag+ dressings combine Hydrofiber™ Technology and MORE THAN SILVER™ Technology - a unique ionic silver-containing, antibiofilm formulation.

When your dressing comes into contact with wound fluid, protect the wound from bacteria, and helps to create a healing environment.

The ionic silver in the dressing kills pathogenic microorganisms and helps reduce the risk of wound infection.

### CONTACT AND DURATION OF USE

The requirement for Aquacel™ Ag Surgical Cover Dressings should be re-assessed after 14 days or at your first follow-up appointment.

### INDICATIONS FOR REMOVAL

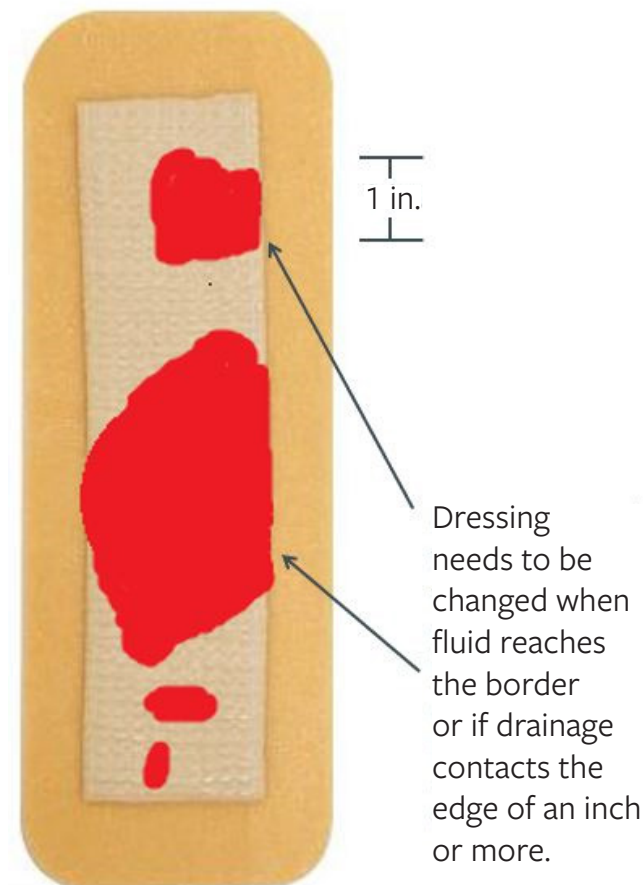
All wounds should be inspected frequently. Remove the Aquacel™ Ag dressing when clinically indicated (i.e. leakage, excessive bleeding,) or after a maximum of **14** days.

### DRESSING REMOVAL

To remove the dressing, press down on the skin with one hand and carefully lift an edge of the dressing with your hand. Sketch the dressing to break the adhesive seal and remove.

If you must remove your Aquacel™ Ag dressing prior to 14 days due to excessive drainage/bleeding/leaking, please use the Island dressing provided at discharge to cover your surgical incision. Instructions on how to apply the Island dressing are on the next page.

If you have any questions or concerns, please call and speak to your surgeon.



## How to Change Your Island Dressing

### STEP 1

- Skin prep helps dressing adhere better
- Skin surrounding the incision should be clean and dry before application
- Apply a uniform coat around the outer edge of incision
- Do not apply on incision
- Please allow skin prep to fully dry



### STEP 2

- Remove dressing from package
- Peel away the white/orange backing papers marked "1"



### STEP 3

- Holding the non-adhesive tabs at the end of the dressing, carefully position the dressing over incision



### STEP 4

- Smooth the dressing into place, applying light pressure around edges



# How to Change Your Island Dressing

## STEP 5

- Using the small tab, begin to gently peel off the top film marked "2"
- Smooth the dressing down



## STEP 6

- Apply a uniform coat around the edge of the dressing where the dressing and skin meet



## REMOVAL

1. Lift one corner
2. Pull towards you - away from the pad
3. Release
4. Repeat along the edge of the dressing



## CHANGE ISLAND DRESSING EVERY 7 DAYS.

## Other indications to change:



No change necessary



Dressing ready for change

# TOTAL JOINT ZONE TOOL

## RED ZONE: MEDICAL ALERT

- Unrelieved shortness of breath
- Chest pain

Call 911 or go to the nearest emergency room

## YELLOW ZONE: WORSENING SYMPTOMS

- Temperature over 101.5°F
- Significant increase in drainage from incision
- Colored or cloudy drainage from incision
- Odor or redness to the incision area
- Increase in swelling from previous day
- Significant increase of pain from previous day
- No bowel movements in 2 days

Urgent Questions:  
Call the office during business hours. Call the "on call" surgeon on weekends, holidays & after office hours - (540) 332-4000. The operator will page the "on call" surgeon on your behalf. Contact the "on call" surgeon before going the emergency room.

## GREEN ZONE: SYMPTOMS ARE UNDER CONTROL

- Low grade temperature: 100.0 - 101.4°F
- Bruising (sometimes from toes to groin)
- Swelling of operative leg
- Mild constipation
- Increasing activity every day
- Dressing change with possible light drainage
- Able to tolerate physical therapy
- Warmth of operative leg

Non-Urgent Questions:  
Call the surgeon's office:  
Shenandoah Valley  
Orthopedics  
(540) 332-5850  
Hours  
Mon-Fri 7:30am - 5:00pm  
Call Joint Center:  
Nurses Station (540) 332-4160

## Remember

- Take all medications exactly as ordered and pain medications as needed
- Keep All your follow-up appointments
- Drink plenty of fluids daily to help prevent constipation (unless ordered otherwise)
- Balance activity and rest
- Use Incentive Spirometer every two hours while awake for seven days

# MANAGING POSTOPERATIVE CONSTIPATION



## Causes

- Pain Medications
- Physical Inactivity
- Poor Appetite
- Anesthesia

## Treatments

- Get Moving
  - Therapy exercises
  - Walk
- Drink Plenty of Fluids
  - Water
  - Hot Liquids (Coffee, Teas)
- Increase Fiber (20-25 grams/day)
  - Whole Grains
  - Fruits
  - Vegetables
  - Beans

## Medications

### STEP 1

Take laxative/stool softener

- Senokots (Sennosides - Docusate Sodium) - 2 tablets twice a day (stop if loose bowel movements)

### STEP 2

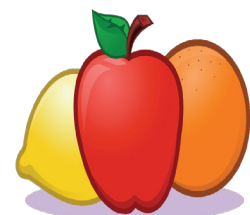
If no bowel movement, take

- Polyethylene Glycol (Miralax)
- Bisacodyl (Dulcolax)
- Magnesium hydroxide (Milk of Magnesia)

### STEP 3

If no bowel movement, take

- Phosphate emema (Fleet enema)
- Magnesium citrate



## Follow Up Care

If no bowel movement within 4 days after surgery, call your surgeon's office for further instruction

\*Note: This class is available at any time. This is not an interactive PowerPoint Presentation. You can access at your convenience any time of the day or night. If for some reason you aren't able to access the class, Please read your guidebook that was given to you by your surgeon's office.

## Steps to Access Virtual Pre-Operative Joint Class

1. Go to **www.augustahealth.com**
2. Select **"Services"** at the top of the page
3. Under the **Orthopedics header**, select **"Joint Care (Hip, Knee, and Shoulder)"**
4. Scroll down the page and select **"Joint Center"** on the bottom right side of the page
5. Using the drop-down menu titled Subpages, select **"Protected: Joint Center Education"**
6. Enter the password **jointclass**
7. Select **"Joint Center Class PowerPoint Presentation"**
8. Select **"Slide Show"** at the top of the screen
9. Select **"From Beginning"** at the top left of the screen to start the presentation

\*Once the slideshow begins, the presentation will change slides automatically. There is no need to click anything to advance the slides. Please ensure you have speakers/ volume to hear the presentation.

<https://www.augustahealth.com/service/joint-center/education/>



## Steps to Access Virtual Joint Discharge Class

1. Go to **www.augustahealth.com**
2. Select **"Services"** at the top of the page
3. Under the **Orthopedics header**, select **"Joint Care (Hip, Knee, and Shoulder)"**
4. Scroll down the page and select **"Joint Center"** on the bottom right side of the page
5. Using the drop-down menu titled Subpages, select **"Protected: Joint Center Education"**
6. Enter the password **jointclass**
7. Select **"Discharge Class PowerPoint Presentation"**
8. Select **"Slide Show"** at the top of the screen
9. Select **"From Beginning"** at the top left of the screen to start the presentation

\*Once the slideshow begins, the presentation will change slides automatically. There is no need to click anything to advance the slides. Please ensure you have speakers/ volume to hear the presentation.

\*This represents the most comprehensive listing of community providers known to us; however, it may not be all inclusive.

\* This service Provider is an Affiliated Department of Augusta Health.

Prosthetic and Orthotic Vendors				
Indicate Choice	Providers	Address	Phone	Fax
	Fuller Life Prosthetics and Orthotics	Charlottesville, VA	434-529-8882	
	UVA Prosthetics and Orthotics	Charlottesville, VA	434-243-4670	
	Virginia Prosthetics and Orthotics	Fishersville, VA	540-949-4248	540-322-3928
	Virginia Prosthetics and Orthotics	Harrisonburg, VA	540-433-3831	
	Independence Prosthetics & Orthotics	Fishersville, VA	540-917-0806	









PATIENT GUIDEBOOK FOR  
**TOTAL KNEE REPLACEMENT**