

OUTPATIENT JOINT REPLACEMENT GUIDEBOOK



WITH YOU IN MIND

As a group of leading orthopedic surgeons, we are dedicated to providing exceptional surgical care and outcomes for each of our patients. This commitment is at the heart of why we founded Capital Orthopaedic Surgery Center.

Our new surgery center is designed to provide a seamless, patient-first experience. Combining personalized care with world-class technologies, we are committed to providing the best treatment plan for you. We will never lose sight of the trust you place in us.



Dear Surgical Candidate,

Understanding the impact that joint pain has had on your quality of life, our goal is to guide you through this process and to maximize rapid return to your life in motion.

This Guidebook is your reference to defining the preparations, expectations, and understanding needed for a rapid recovery. This program was designed with your utmost health, safety, and well-being in mind in our new, state-of-the-art Capital Orthopaedic Surgery Center. We want this experience to be one that speeds your recovery, optimizes your outcomes, and returns you to your active lifestyle. Your participation and dedication are essential to your success.

Best wishes on an excellent recovery,

Outpatient Joint Replacement Team
Capital Orthopaedic Surgery Center



CAPITAL
ORTHOPAEDIC
SURGERY
CENTER

YOUR TEAM

The Outpatient Joint Replacement Team and Their Roles	5
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UNDERSTANDING YOUR SURGERY

Common Causes of Joint Pain	9
Causes of Osteoarthritis	9
Symptoms of Osteoarthritis	9
Types of Joint Replacements	10
Understanding Risks and Expectations	11
Outcomes in Recovery	13
How to Reduce Your Risks	14
Functional Pain Scale	15

PREPARING FOR SURGERY

Help From Your Coach	19
Scheduling Your Surgery	19
Evaluation and Tests	19
Medications	19
Infection Prevention	20
Diet and Nutrition	20
COSC Joint Replacement Education Course and Assessments	21
Tips for Preparing Your Home	22
Assistive Devices	23
Practicing Your Exercises	23
Countdown to Surgery	23

YOUR SURGERY

Day of Surgery Reminders	27
Arriving at COSC Surgery Center	27
Surgery Preparation	27
Family Waiting Area	28
The Operating Room	28
Recovery Care	28
Managing Your Pain	28
Additional Medications	29
Recovery Room Goals	29
Discharge Criteria	29
Transitioning Home	29
The Trip Home	29
Follow-Up Care	29

RECOVERING AT HOME

Medications	33
Activity	33
Incision Care	33
Diet and Rest	33
When to Call Your Surgeon	34
Managing Swelling	34
Pain Management	35

MOBILITY AND EXERCISES

Mobility and Safety Tips	39
Exercises, Phase I	42
Exercise Flow Sheet	44

USEFUL INFORMATION

Helpful Tips	47
Life After Joint Replacement	48
Notes	49
Medication Log	50
Driving Directions	51

Your Outpatient Joint Replacement Team

You are joining a team of highly skilled healthcare specialists who have developed this Outpatient Joint Replacement Program in order to provide a focused, quality, and outcome-based program designed to promote a safe and successful recovery. The Capital Orthopaedic Surgery Center (COSC) is a state-of-the-art facility providing a comfortable and confident experience.

COACH: This person is a family member or friend who is willing to support you every step of the way and who can participate fully in activities before surgery and during your recovery.

ORTHOPAEDIC SURGEON: Your surgeon is a board-certified orthopaedic surgeon who will perform your surgery and oversee your care.

PHYSICIAN ASSISTANT: Physician assistants are certified providers specialized in orthopaedic care. They may assist during preoperative care, assist during your surgery, and attend to postoperative needs.

MEDICAL ASSISTANT: The medical assistant is a certified technician who will gather vital information from you about your health and your symptoms and will assist in documenting and communicating your needs to the surgeon.

NURSE NAVIGATOR: COSC has a registered nurse with specialized training in guiding you and your Coach through the joint replacement experience. They will be your point of contact to coordinate care and facilitate your Outpatient Joint Replacement Education Course. They will follow up with you in your transition home. To reach the nurse navigator directly, please call (301) 701-6906.

IMAGING TECHNICIANS: Medical imaging plays an important role by taking the images that assist your surgeon in planning your surgery and monitoring your recovery.

ANESTHESIOLOGIST: A board-certified physician who will provide your anesthesia and appropriate medications to keep you comfortable and relaxed during your surgery.

PHYSICAL THERAPIST: A physical therapist is a licensed rehabilitation specialist who will work with you after surgery to assist in maximizing your outcome through evaluation, education, safety training, strengthening, and increasing mobility to return you to Your Life in Motion!

REGISTERED NURSE OR LICENSED PRACTICAL NURSE: COSC has a registered nurse with specialized training in guiding you and your Coach through the joint replacement experience. They will be your point of contact to coordinate care and facilitate your Outpatient Joint Replacement Education Course. They will follow up with you in your transition home. To reach the nurse navigator directly, please call (301) 701-6906.



UNDERSTANDING YOUR SURGERY

- Common Causes of Joint Pain
- Causes of Osteoarthritis
- Symptoms of Osteoarthritis
- Types of Knee Replacements
- Understanding Risks and Expectations
- Outcomes in Recovery
- How to Reduce Your Risks
- Functional Pain Scale

Understanding Your Surgery

Common Causes of Joint Pain

Most joint pain is associated with arthritic degeneration, or wear and tear of the inner surfaces (cartilage) of the joint. Cartilage is the buffering surface at the end of a healthy bone, which allows smooth and friction-free motion in the joint.

Like any piece of equipment, normal aging and repetitive use gradually wears down the parts until it comes to a grinding stop! This wearing down is known as arthritis. The word means joint inflammation or swelling. The grind and pain you have noted is called crepitus and is a product of the worn down cartilage.

Osteoarthritis is the most common form of arthritis, affecting nearly 21 million Americans. It is most commonly found in load-bearing joints such as your hips, knees, and those in your spine, but it can occur in any joint. The joint wears down but not normally equally within the joint or from one extremity to the other.

Causes of Osteoarthritis

Some arthritis is noted to be genetic (family history), such as rheumatoid arthritis, which is swelling of the material that surrounds and lubricates the joint. Rheumatoid arthritis affects 1% of Americans.

Joint size and alignment or position (i.e., knock-kneed or bow-legged) are also related to family history.

Obesity, overuse, injuries, and previous knee surgeries are also factors contributing to increased arthritic changes. Normal aging is still the most common factor.

Symptoms of Osteoarthritis

- Joints that ache and are sore after activity
- Painful or tight joints after periods of inactivity
- Swelling: frequently seen around the kneecap (patella) or lower part of knee
- Stiffness or tightness
- Loss of motion
- A grinding or popping known as crepitus



Outpatient Total Joint Replacement

An outpatient joint replacement is an advanced alternative to traditional inpatient care. Modern surgical and anesthesia techniques allow our surgeons to safely and efficiently replace the damaged areas of your joint in the outpatient setting. The surgery can eliminate pain and allow for a complete recovery at home, with fewer risks associated with staying in a hospital.

Total Knee Replacement

When non-operative treatment does not relieve arthritic knee pain, a total knee replacement is indicated. During surgery, an incision is made on the front of the knee. The damaged bone and cartilage are cleared away, and the surfaces are prepped to hold the new components. The new components are aligned and secured to the thigh (femur) and shin bone (tibia). A medical-grade polyethylene liner is placed in between the two components. This liner acts as cartilage and facilitates smooth and fluid movement of the knee.

Total Knee Replacement



Before

After

Partial Knee Replacement

Your knee has surfaces that sometimes do not wear down equally. Rather than disrupting healthy portions of the bone and cartilage in the unaffected surface, your surgeon may recommend a partial or "uni-compartmental" knee replacement if you only have arthritis in one compartment of the knee.

Partial Knee Replacement



Before

After

Total Hip Replacement

When non-surgical measures do not relieve the pain in the hip a hip replacement can revitalize the joint. During all forms of hip replacement surgery, the surgeon makes an incision on the front or side of the hip. The damaged bone and cartilage are carefully cleared away. The bone is prepped and shaped to hold the new metal components. A polyethylene liner is placed between the ball and the socket of the hip so the joint can glide smoothly over one another, as it does in a healthy joint. The new components are secured and aligned to the thigh bone and pelvis.

Total Hip Replacement



Before

After

Understanding Risks and Expectations

Not everyone is eligible for joint replacement surgery in an outpatient setting. You have been chosen because you have met health and lifestyle criteria, which will optimize your outcome.

Joint replacement surgery is a major surgery, and although advances in technology, medical care, and screening have made the procedure very safe and effective, any surgery has potential risks. These risks are outlined in the following pages.

The thought of surgery can be stressful—both physically and emotionally. It is normal to feel nervous or anxious. We encourage you to discuss your concerns with your orthopaedic surgeon, your family physician, and your family.

Support of family or friends can make this process much easier. You will want to identify your “Coach” for this process—someone that can be there not only during the initial days of home recovery but also part of the training processes leading up to surgery. They will be your extra set of ears for details. They will be instructed in how to assist you in mobility and home preparation.



Risks of Joint Replacement Surgery

Your Joint Replacement Team will take every measure to minimize the risks and avoid complications. Although complications are rare, we do our very best to avoid the most common risks which include:

BLOOD CLOTS: The most common postoperative complication or concern for total or partial knee replacements are blood clots or deep vein thrombosis (DVT). Clots form when blood cells clump together. These can form in a leg vein or could travel to your lung and can be dangerous.

As a normal preventative measure, patients are placed on a blood thinner after surgery and will continue for a period of time during recovery. You will also wear compression stockings after surgery as prescribed by your surgeon. Compression stockings apply compression and help minimize swelling, reducing your blood clot risk.

If you are experiencing a severe hypersensitivity to light pressure in your arms or legs, or if you have chest pressure or difficulty breathing, call 911 immediately.

INFECTION: Infection is very rare in healthy patients having total or partial knee replacement. During surgery, antibiotics are both administered and used to ‘cleanse’ the bone and surrounding tissue to reduce this risk. Smoking slows healing and may contribute to infection. Superficial wound infections are usually treated with antibiotics. Deeper infections inside the joint need further assessment and will be treated with more aggressive antibiotics and may require additional surgery. Following your surgeons postoperative instructions will greatly reduce your risk of an infection.

NERVE OR TISSUE INJURY: Damage to the surrounding structures in the joint, including nerves, blood vessels, and ligaments, are possible but extremely rare.

More commonly, small surface nerves are cut during surgery. This area of the incision will remain numb or with reduced sensation which usually, but not always, resolves in 6 - 12 months. As nerve sensation returns, it may feel itchy, prickling, or burning along the incision. With therapy, you will learn ways to help normalize these sensations.

WOUND HEALING: Surgical incisions can sometimes heal slowly. Swelling slows healing and can cause the appearance of blisters along the incision. Smoking has known effects of slowing wound healing. Most surgeons will require patients to quit smoking before undergoing joint replacement surgery. You and your Coach will be instructed on wound care and dressing changes to promote healing and to reduce the risk of infection.

Additional Potential Risks

SWELLING: It is normal to have swelling, also described as inflammation or edema, after surgery. It is the body's natural reaction to strain or trauma. You will see this at the knee joint and in the lower leg, foot, and ankle. But you may also see signs of swelling in the thigh—associated with foot elevation and muscle irritation from the surgery. Swelling causes increased pain and a burning sensation and can slow healing at the incision. Movement, compression stockings, and use of cold packs reduce swelling and are helpful for pain management.

BRUISING: Because tissue and bones are cut, bleeding occurs, which later shows up as bruising above, below, and around the knee or hip. This may show up immediately after surgery or a few days, and sometimes a few weeks later.

LIMITED MOBILITY/RANGE OF MOTION: Your surgeon checks your joint mobility throughout surgery to assess the glide and movement through the implant. Exercises and movement begin immediately after surgery to improve mobility and reduce other risk factors. With partial joint replacements, near normal mobility is expected and only a slight reduction with total joint implants.

However, joint reaction, scar tissue, new trauma, or other factors may limit this result. This will become evident normally within the first 6 - 8 weeks. If there are significant restrictions, your surgeon may discuss a surgical manipulation to break free the adhesions or restrictions impairing the motion.

PERSISTENT PAIN/HARDWARE SENSITIVITY: Joints have nerve sensation that tells us about pressure, position of the joint, and pain. With the surgical process of resurfacing the end of the bone, some people will have a heightened sensation or awareness to the implants.

Early and consistent movement and weight-bearing through the joint is the best way to reduce this sensitivity. It is important that you follow the instructions of your surgeon and physical therapist to reduce this occurrence.

LOOSENING AND WEAR OF THE JOINT: Over the long term, loosening of the implant is the most common risk associated with joint replacement surgery. The rate of wear may be associated with weight, activity level, bone density changes as we age, and changes in the pliability of tissues surrounding the joint and of normal wear. With the newer forms of implants and less invasive surgery, the longevity of a replacement has increased from 12 - 15 years to 20 - 30 years.

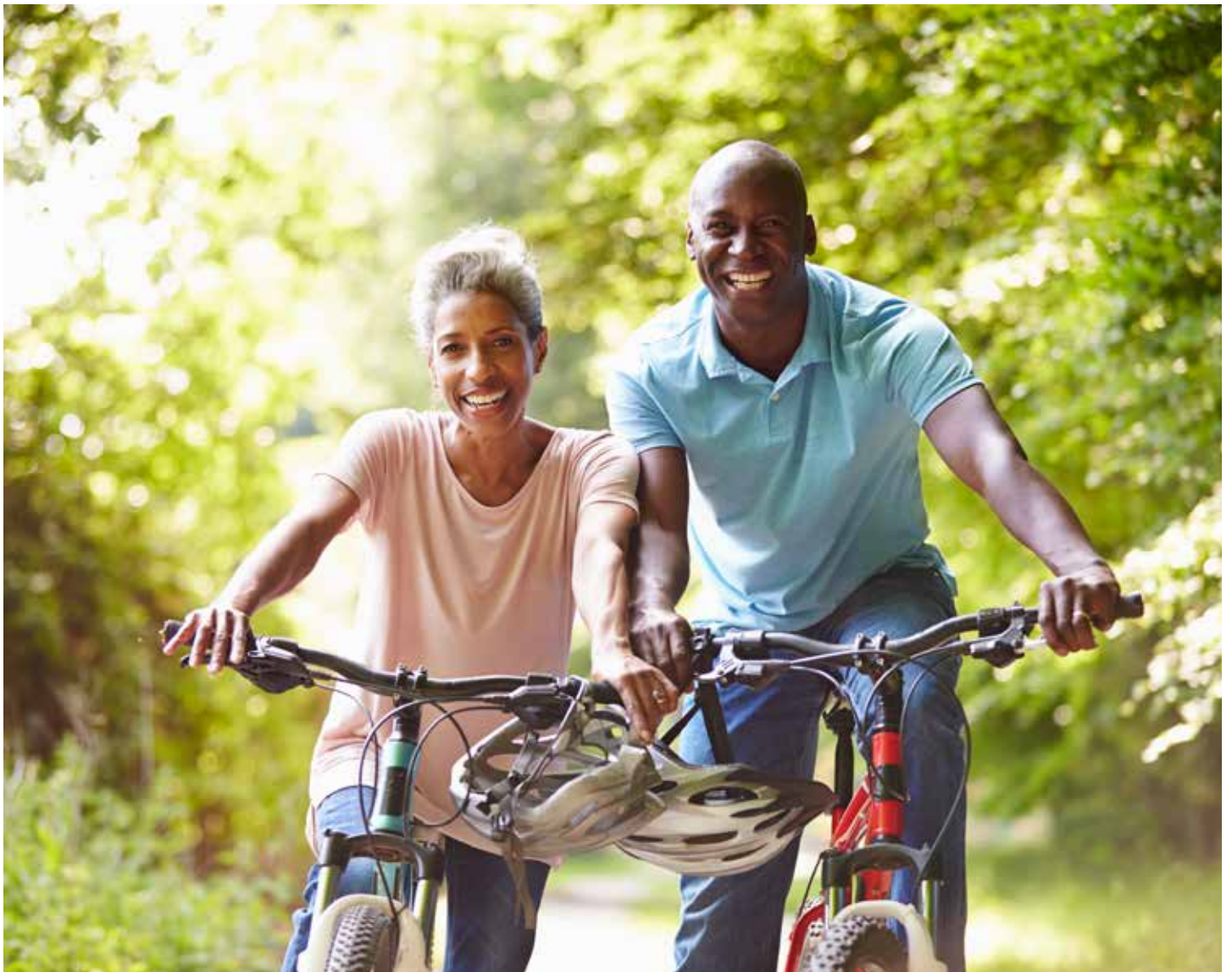


Outcomes in Recovery

You can typically expect a successful outcome from your joint replacement surgery. Generally, results include less pain, increased mobility, and an ability to resume most activities enjoyed prior to the onset of arthritis, though high-impact activities should be avoided. Long-term studies show that 85 - 90% of implants are intact and functional after 20+ years.

Our goal at COSC for any joint replacement surgery is to return you to a higher quality of life: one with increased mobility and reduced pain.

Getting you back to the life you deserve: a Life In Motion.



How to Reduce Your Risks

- Stop use of tobacco and other chemicals/substances, such as alcohol and illicit drugs.
- Maintain a healthy diet. Limit processed food and added sugar prior to and for a period of time after surgery.
- Take your medications as prescribed by your surgeon.
- Wear your compression stockings after surgery as prescribed by your surgeon. The compression stockings provide compression and help minimize swelling.
- Perform exercises and activity as directed by your surgeon and physical therapist. Complete exercises both prior to and after surgery. Include breathing exercises.
- Follow the precautions established by your surgeon. Avoid high-impact or balance activities until medically cleared to do so.
- Use good hand washing and wound care techniques.
- Awareness. Look for signs or symptoms of problems—early prevention and management improves recovery significantly! When in doubt, be sure to contact the nurse navigator or surgeon's office.








Keep track of your pain levels daily.

Functional Pain Scale

Pain is a very personal experience. It is difficult to describe and even harder to compare with others because how our body and mind interpret pain is unique to us as an individual. Throughout this surgical experience, you will be asked in various ways what your pain levels are. It is important to your recovery, as well as to your peace of mind, to know that pain protocols are in place to maintain a level of comfort for you.

Below is a common pain scale for your review. It includes examples of functional difficulties that may occur with various levels of pain. This helps associate some restrictions in activity to your reported levels of discomfort so that we may address any discomfort you may experience and direct you in better symptom management.

Pain Level	Functional Limitations	
10	Worst possible pain—unable to speak, have clear thoughts; requires immediate hospitalization	
7-9	Unable to do some activities due to pain, difficulty in conversation; you cannot use or move the painful area, are tearful, need to lie down	
4-6	Deep ache, pain is starting to affect your ability to perform current activity; require rest, pre-occupied	
1-3	Pain is present but doesn't prevent or limit participation in activity. Pain is tolerable—you are used to it	
0	No pain or discomfort—feeling normal	

These guidelines will prepare you for a more rapid and safe recovery in your quest for improved mobility and health.

To make sure you and your Coach are fully prepared for your joint replacement experience, it is important that you carefully and thoroughly review this and other educational guides given during this preoperative preparation.

You will be asked to participate in all exams or screenings from various healthcare providers and are required to participate in the Outpatient Joint Replacement Education Course that will promote success and speed in your recovery. Please call us if you have any questions or concerns regarding this information.

PREPARING FOR SURGERY

- Help From Your Coach
- Scheduling Your Surgery
- Evaluation and Tests
- Medications
- Infection Prevention
- Diet and Nutrition
- COSC's Joint Replacement Education Course and Assessments
- Tips for Preparing Your Home
- Assistive Devices
- Practicing Your Exercises
- Countdown to Surgery

Preparing for Surgery

Help From Your Coach

Recovering from a joint replacement is a team effort. Your Coach's support can make all the difference, not just at the surgery center but also throughout the weeks before and after your surgery. We strongly recommend that you bring your Coach with you to your preoperative visits and the Outpatient Joint Replacement Education Course.

Scheduling Your Surgery

Once it has been determined that surgery is your best option, your surgeon will introduce you to two members of the team: the surgery scheduler and the nurse navigator.

The surgery scheduler will obtain authorization from your insurance company. This may take several days to a week to accomplish, dependent upon your policy.

The nurse navigator will help to guide you through the joint replacement experience, facilitating any of the outpatient preoperative education and assessments that may be required. They will be your point of contact for questions or concerns as you progress through recovery care to help lead you to a successful outcome.

Evaluations and Tests

To promote safety and successful healing, standard screenings are completed to assess your overall health status. These may include physical examinations; imaging and blood work are standard for any surgery. Your surgeon's team will provide you with any forms or prescriptions you may need for these assessments.

Communication with your primary care physician is important, and they should be contacted by you as soon as it is determined that you are a candidate

for joint replacement surgery. Any concerns they may have should be brought to the surgeon's attention immediately.

Medications

You may take your prescription medications as directed by your surgeon. Some may need to be temporarily discontinued in the weeks or days prior to surgery. Your nurse navigator will review which medications you should take on the morning of surgery. Take the designated medications with small sips of water.

Some medications that you currently take may prove harmful during surgery because they thin your blood and increase the risk of bleeding after surgery.

Some may be necessary to avoid for weeks prior to your surgery so that they can clear from your bloodstream.

Examples of medications that will normally be stopped prior to surgery include:

- 2 Weeks Prior: Prescription diet medications, herbal supplements (such as St. John's Wort), vitamins, Methotrexate™, and other rheumatoid arthritis medications.
- 7 - 10 Days Prior: STOP taking blood thinners, aspirin, or medications containing aspirin.
- If you are taking a prescription blood thinner such as Pradaxa, Eliquis, Xarelto, Warfarin, etc., discuss when to stop your prescribed medications with your medical team.
- Anti-inflammatory medications, or NSAIDs (such as Aleve, Ibuprofen, Mobic, etc.), are also considered blood thinners. Please verify with your surgeon when to stop your anti-inflammatory medication.

*****These are examples only. Discuss all medications with your surgeon and your nurse navigator. They will give you specific instructions for which medications can be continued, or which will be discontinued*****

Infection Prevention

There are several steps that you can take to help prevent surgical site infections.

DENTAL CARE: All dental work, including cleanings, must be completed at least **THREE** weeks prior to your surgery. Following your surgery, do not make any appointments for dental work until you are cleared by your surgeon. You must call the office if any dental problems arise before your scheduled surgery date.

SHAVING: It is very important that you do not shave your legs or use any hair removal products anywhere near the surgical area for **SEVEN** days prior to surgery. Studies show an increased risk of surgical site infection associated with shaving. This is attributed to the microscopic cuts in the skin that allow bacteria to enter.

CLEAN HANDS: Hand hygiene is very important. You will notice your Joint Replacement Team washing their hands or using alcohol-based hand sanitizers prior to making contact with you. We also strongly encourage your family and friends to practice this same policy to prevent the spread of infection.

ILLNESS: If you become ill with a fever, cold, sore throat, flu, or any other illness, please contact your nurse navigator.

SKIN RASH: Broken skin or rashes should be reported to the nurse navigator.

PEDICURES: Do not trim your toenails or have a pedicure **ONE** week prior to surgery. Do not apply nail polish. Trimming nails may cause microscopic cuts, which can promote infection. Nail beds are good areas for assessing oxygen in our blood flow and seeing potential signs of infection or fungus present. Nail polish hides this view and may chip.

PRE-SURGERY BATHING: You will be instructed to shower with a special cleanser a few days leading up to your surgery. After your shower, use the special cleanser obtained at your preoperative appointment and carefully follow the instructions provided. Do not use any lotions, perfumes, or powders. Following your shower, put on clean, fresh pajamas and have clean sheets on your bed.

Diet and Nutrition

What you choose to eat and drink can affect your recovery. A healthy diet promotes proper tissue healing and improves energy.

After surgery, you may experience a decrease in appetite due to medication or discomfort. This is normal and should resolve gradually over the following week. Eating small nutrient-dense foods will assist in reducing the nausea and allow your body to heal optimally.

It is essential to stay hydrated after surgery. Dehydration can increase the side effects of some medications and delay healing. Make sure to drink plenty of water along with fluids containing electrolytes (coconut water, Gatorade, electrolyte water).



COSC's Joint Replacement Education Course and Assessments

There are two educational screening processes that patients are required to attend prior to surgery. These are designed to help identify your home needs; teach you wound care and pain management techniques; educate you in the use of walking assistive devices, activity restriction, and progression; and safety will also be reviewed.

Joint Replacement Education Course

All Capital Orthopaedic Surgery Center outpatient joint replacement patients are required to participate in this comprehensive course presented by your nurse navigator.

This Guidebook is your resource for your COSC Outpatient Joint Replacement Program. It is important that your Coach attends this course with you, as it will provide them with the tools necessary to assist you to transition back to independence quickly. It is an excellent opportunity to ask questions about the entire experience, expectations, and any concerns you may have. The course is scheduled for 1 hour to allow for proper interaction. It will be held virtually via the Zoom platform.

Physical Therapy

The effects of arthritis on your knee or hip can result in loss of strength and difficulty with many functional activities. The goal of the surgery is to restore you to a less painful and more functional level.

A Physical therapist will see you the day of your surgery and walk with you to ensure you are safe to go home. They will review postoperative exercises; the use of an assistive devices—crutches, walker, and/or a cane; and review home safety and other tools that may be helpful to you in your recovery. This will help you and your Coach participate in your recovery through education, practice, and encouragement.

This course will review important information to prepare you for the weeks leading up to surgery, your surgery encounter, and postoperative care.



Tips for Preparing Your Home

You and your family may want to consider these tips to help make your home safe and comfortable when you return from your surgery.

- Purchase a nonslip bath mat for inside your tub/shower.
- Check every room for tripping hazards. Remove throw rugs and secure electrical cords out of your way.
- A chair that has a firm back and armrests is recommended during your recovery. A chair that sits higher will help you stand more easily. Chairs with wheels should not be used under any circumstances.
- Install nightlights in bathrooms, bedrooms, and hallways.
- Since your safety is our primary concern. We require that your Coach or other support stay with you after your surgery until you are able to perform activities of daily living independently and safely. Typically, this occurs within a few days after you return home.

Assistive Devices

An assistive device is a tool that reduces strain and risk of injury to you as you recover. This may include a front-wheeled walker, crutches, or cane, as well as a raised toilet seat or a shower chair or bench.

Your surgeon will determine which assistive device is appropriate for after surgery. On the day of your surgery, a physical therapist will teach you how to walk with it. The purpose of the device is to offload pressure of your new joint, to help aid in the healing process. After a few days, you may no longer need the device. We will provide the assistive device for you on the day of your surgery. The physical therapist will adjust the device to make sure it is the appropriate size.

Practicing Your Exercises

Included in this Guidebook, you will find some sample exercises you will need to do before and after surgery. Performing these exercises regularly and properly is perhaps the most important factor in speeding recovery and determining the long-term success of your new joint. Keep in mind that the exercises are designed to strengthen muscles around the joint and improve mobility. The exercises are not always easy, but they are an important part of your treatment and recovery process. Some soreness in your joint is normal and will improve over time.

If you experience severe pain with any exercise, you should STOP immediately.

COUNTDOWN TO SURGERY

Your countdown to surgery for an improved quality of life and greater mobility is beginning! Here is a checklist to follow to make sure you are in step with your preoperative planning.

SURGERY ORDERED: APPROXIMATELY 6 - 8 WEEKS PRIOR TO YOUR SURGERY

- Notify your primary care physician that a joint replacement surgery has been recommended.
- If you see a specialist such as a cardiologist, pulmonologist, endocrinologist, oncologist etc., you must obtain medical clearance.
- Choose your Coach—coordinate schedules so that they may attend preoperative appointments and educational courses, be present on your day of surgery, and stay with you for a few days when you return home.
- Any dental work **MUST** be completed three weeks prior to surgery. You will need to wait until your surgeon clears you to have dental procedures following your surgery, including cleanings. If dental emergencies occur, you **MUST** contact the nurse navigator.



4 WEEKS PRIOR TO YOUR SURGERY

- Complete any lab work or other assessments, ordered by your medical team.
- Schedule and attend your preoperative Joint Replacement Education Course.
- Begin your daily exercise program. (See Mobility and Exercises section.)

2 WEEKS PRIOR TO YOUR SURGERY

- Please confirm with your surgeon your plan for anti-coagulation for after surgery.
- STOP taking prescription diet medications and herbal supplements.

7 - 10 DAYS PRIOR TO YOUR SURGERY

- STOP taking blood thinners, aspirin or medications containing aspirin.
- If you take a prescribed blood thinner such as Eliquis, Xarelto etc., please confirm the plan for stopping this prior to surgery. If you are unsure, please contact the nurse navigator.
- STOP shaving your legs or using hair removal products.
- Do not get a pedicure or paint your toenails.
- Complete any additional testing or labs recommended by your surgeon.
- Notify the nurse navigator at (301) 703-6900 if you become ill, have broken skin, or have a rash.

4 DAYS PRIOR TO YOUR SURGERY

- Reduce or stop alcohol consumption.
- In order to stay hydrated after surgery, pick up some alternatives to water, for example: Gatorade, vitamin water, or coconut water.
- Your Coach should pack a bag of items to keep them occupied during their time in the Family Waiting Area.
- Make sure to obtain prescriptions given to you by your surgeon. It can sometimes take the pharmacy a few days to fill your medications.

THE DAY PRIOR TO YOUR SURGERY

- Change the linens on your bed, have clean towels and clothes.
- Complete house preparations 1 - 2 days prior to surgery to include grocery shopping, meal preparation, and cleared walkways.
- Take a shower following specific details provided to you by the nurse navigator.
- Do not eat anything eight hours prior to surgical arrival. You may have clear liquids (water, tea, black coffee without cream) four hours prior to surgical arrival.
- Get a good night's rest!!

**These are examples of medications. Review all medication with your surgeon and the nurse navigator for specific instructions on which medications to continue, which are to be discontinued, and the timeline it should occur.*



YOUR SURGERY

- Day of Surgery Reminders
- Arriving at the Capital Orthopaedics Surgery Center
- Surgery Preparation
- Family Waiting Area
- The Operating Room
- Recovery Care
- Managing Your Pain
- Additional Medications
- Recovery Room Goals
- Discharge Criteria
- Transitioning Home
- The Trip Home
- Follow-Up Care

Your Surgery



Day of Surgery Reminders:

- Wear clean, loose clothes to the surgery center.
- Take any prescription medications as instructed with a small sip of water.
- Remove all jewelry, including wedding rings and piercings.

Arriving at Capital Orthopaedic Surgery Center

It is important that you arrive at the center with plenty of time to check in and prepare for surgery. You will be instructed on your expected arrival time by the COSC Surgery Team or your nurse navigator. When you arrive, park in designated patient parking areas. For your convenience, a map and driving directions are provided at the back of this guide.

There may be several hours that pass between the time you check into the surgery center and the time that your surgery is completed. Your Coach should be prepared to wait for a few hours.

Due to limited space and the privacy of our other clients, we ask that you limit your support group to two people, including your Coach. No younger children are allowed.

Surgery Preparation

After you check in at registration, you will be directed to the surgical preparation area. A wristband will be applied at this time. If you have any allergies, an additional wristband will be applied. It is important for you to verify that all information on your identification bracelet is correct.

You will be asked to change into a surgical gown. Your clothes and any items you brought with you will be placed in a bag with your name on it and placed in a storage area.

DO NOT BRING VALUABLES!

Just before surgery, a nurse will review your medical records, take your vital signs, perform a brief physical exam, clean the surgical site, and make sure everything is in order.

As surgery approaches, a nurse will start an IV. This allows medication and fluids to flow directly into your bloodstream. We also utilize preoperative antibiotics to reduce the risk of infection.

Your orthopaedic surgeon and your anesthesiologist will visit you in the preoperative holding area prior to surgery. Among other things, your surgeon and anesthesiologist will ask you to identify which side is being operated on and will mark the surgical site with a special marker. Your anesthesiologist will review your pain management protocol and review any allergies or concerns.

Family Waiting Area

On the morning of surgery, your Coach will be able to stay with you until you are ready to be transported to the operating room. At this point, they will be escorted to a Waiting Area where they will obtain a cell phone application from our reception team for digital reminders to update them as to your status and when to return to the Waiting Area. While waiting they can enjoy the surrounding retail center and markets. Due to the limited space and presence of other outpatient patients, we ask that you limit family members to no more than two, and no children. We also encourage family to enjoy the surrounding retail area.

Once your joint replacement is complete, a member of the surgical team will speak with your Coach and any additional support person.

The Operating Room

Inside the operating room, you will be cared for by your surgeon's team, including physician assistant, nurses, and skilled technicians. The total time required for surgery will be different from patient to patient, depending on the complexity of your surgery. You can anticipate approximately 1 - 2 hours on average.

Recovery Care

After surgery, you will be transported to an area called the Post-Anesthesia Care Unit (PACU), or recovery room. Your stay in the PACU will depend upon your rate of recovery from the effects of the anesthesia. Typically, your PACU stay is 1 - 2 hours.

You can expect compression wraps on your calves when you wake up. This pump will gently squeeze your legs at regular intervals to circulate blood and to help prevent clotting. If you do not feel the compression, be sure to let your nurse know. You will take this device home to wear for a few days after surgery.

Nurses will check your vital signs: blood pressure, respiratory (breathing), and heart rate. They will also start your ice therapy.

Pain medications will be provided through your IV as needed until you are alert enough to eat and drink.

Nurses will check your bandages, check drainage from your surgical site, and encourage you to cough and take deep breaths. They will begin the process of having you sit upright.

Once you are more alert, the physical therapist will see you and begin gentle exercises and walking. Home activities will be reviewed with you and your Coach. Throughout this activity, we will be monitoring your safety, your pain levels, and your ability to move with independence.

Managing Your Pain

The amount of pain and discomfort you experience depends on multiple factors. You will receive pain medication by mouth and through your IV after surgery, if needed. Your surgeon and nurses will do everything possible to relieve your pain and discomfort using medications and other techniques, such as cold therapy and repositioning.

Communication is an important part of helping us manage your pain. It is important to share information with your nurses about any pain you experience. Be as specific as possible. For example, where is the pain? How often do you feel pain? What does the pain feel like: is it sharp, dull, aching, and/or spreading out? On a scale of 1 to 10, where 10 is the worst pain imaginable, how would you rate your pain?

Arrange to take your pain pills approximately 30 minutes prior to doing your exercises to help control the soreness that often accompanies activity in the first few days after surgery.

Coach's Clipboard:

*You may be waiting quite a while,
so have books and entertainment
ready!*

Additional Medications

During surgery, you received IV antibiotics and pain medications. You were given prescriptions to fill for pain medicines and other medications to help with other symptoms to include nausea or constipation. Both symptoms can be managed with medication, good eating habits, and healthy food choices.

Some medications will be provided by mouth during recovery to reduce these symptoms. It is important that you talk with your nurse navigator if you don't feel well.

Recovery Room Goals

There are certain activities and goals that the Joint Replacement Team will look for that demonstrate you are recovering well and ready to advance towards transitioning home.

This includes:

- Sitting up in a chair as tolerated
- Tolerating small meals and snacks
- Ankle pumps as instructed
- Are able to urinate
- Able to cough and take deep breaths
- Dressings and ice therapy in place
- Walking and exercises completed safely with physical therapy and use of your assistive device.
- Are able to go up and down stairs with the physical therapist.
- Your pain is managed and you are comfortable
- You and your coach have a good understanding of your discharge instructions.

Discharge Criteria

Prior to leaving the surgical center, you will need to meet the following criteria:

- Demonstrate safe mobility of the extremity
- Pain level controlled
- Nausea is well controlled

- Independently able to function safely—sit up, stand, and walk with assistive device—with Coach monitoring
- Coach or family support present
- Are able to urinate

Transitioning Home

You'll be ready to go home once you're able to walk safely, perform your exercise program, and your surgeon or physician assistant determines that you are ready for dismissal. Your Coach or another support person must stay with you for a few days when you go home, or you will not be released from the Capital Orthopaedic Surgery Center in a timely manner.

Before you go home, we will make sure that all your discharge needs are met.

The Trip Home

Your Coach or other support person will need to drive you home. To make your ride more comfortable, your driver should bring pillows, slide your seat back, and recline the seat slightly. Be sure to use ice as needed.

If traveling long distances, you should attempt to change position or try to stand at least once every hour. Some of the exercises, such as ankle pumps, can also be performed should you need to sit for long periods of time.

Follow-Up Care

Following your surgery, you will have a follow-up call with the nurse navigator, will be seen by the surgeon and his team to ensure you are healing properly, and will begin physical therapy.

RECOVERING AT HOME

- Medications
- Activity
- Incision Care
- Diet and Rest
- When to Call Your Surgeon
- Managing Swelling
- Pain Management

Recovering at Home

Medications

It is normal to experience some discomfort after surgery. Movement and a gradual increase in weight in the leg will reduce this sensitivity. Medications have been prescribed to help you manage your symptoms and to encourage participation in recommended activities such as walking and physical therapy.

Be sure to take your pain medications by mouth with a meal or snack. Do not drink alcohol or drive while taking prescribed pain medication. Consider taking pain medication 30 minutes prior to performing the prescribed physical therapy exercises.

Most people experience constipation while taking pain medication. Drinking prune juice daily, drinking more water, adding fiber to your diet, or taking an over-the-counter stool softener may help to prevent this. Exercise and walking also help prevent constipation. Please call the nurse navigator if you have not had a bowel movement for three days or more.

Resume your home medications as instructed by your surgeon.

Activity

- Continue your exercises as instructed by your physical therapist three times every day. You may bear weight as tolerated on the surgical leg, unless instructed otherwise by your surgeon.
- Get up and walk for 5 - 10 minutes every hour using your front-wheeled walker, crutches, or cane for support and safety. Continue to use your assistive device for 1 - 4 days following surgery or longer if needed. In addition, take two 15 - 20 minute walks each day, increasing as tolerated.
- If you had a knee replacement, then bend and straighten your knee 10 - 20 times slowly every hour. Increase the amount you bend your knee with each exercise.
- You may resume driving when you are cleared by your medical team.

- Do not soak or submerge yourself in water; no pool exercises nor resistance training until cleared by your surgeon.

Incision Care

- Keep your incision clean and dry. Typically, a waterproof dressing is applied to protect the incision, allowing you to shower as needed or tolerated after surgery.
- Use regular soap but DO NOT use creams or lotions on your incision for four weeks after surgery or until cleared by your surgeon.
- Avoid soaking your incision in a tub bath or hot tub, and avoid participating in any water activities until the incision is completely healed, closed, and no longer draining. This typically occurs six weeks after surgery.
- Your dressing should remain intact until your follow-up visit with your surgeon. Contact the nurse navigator for instructions if you are having irritation, odor, or increased drainage from the incision.
- Wash your hands before touching anywhere around the incision or before you change the dressing.
- You may leave your incision open to air when there is no longer any drainage.

Diet and Rest

- Eat a healthy diet to promote healing. You may experience a decreased appetite after surgery. This is normal and should gradually resolve itself.
- Take rest breaks as needed during the day and get a good night's sleep to support the healing process. However, it is common to have difficulty sleeping after surgery. This will gradually improve. Contact the nurse navigator if you are having difficulty with sleep.
- You may sleep on your back or on your side with a pillow between your legs for comfort.

When to Call Your Surgeon

A moderate amount of bruising, swelling, and redness can be expected after joint replacement surgery. You should call (301) 701-6906 to contact your nurse navigator, who will discuss your status with the surgeon, if you experience any of the following:

- A fall
- Numbness, tingling, or burning that persist even after elevating your leg and applying ice
- Pain not relieved by medication or pain that is getting worse
- Thick, yellow drainage from the incision site
- Inability to do your exercises
- Increased redness or blistering around your incision
- A temperature over 101 degrees F (38.3 degrees C)
- Any unexpected problems, concerns, or questions

If you need a refill of your pain medication, please call your surgeon's office Monday through Friday, 8:00 a.m. to 5:00 p.m. Please plan ahead and call 24 - 48 hours prior to running out of medication.

Call the nurse navigator at (301) 701-6906 or your surgeon if you have a fever above 101°, if you notice moderate drainage from your incision, or if you have an increase in pain, swelling, or redness in either leg, or numbness or tingling in the operative leg that is not relieved by changing your position.

Managing Swelling

It is normal to have bruising around your hip, knee and down to your foot as well as up the inner thigh to the groin area. You may also experience swelling of the upper and lower leg down to the foot and ankle. Swelling usually peaks around seven days after surgery.

It is recommended that you elevate the leg and apply cold packs at least every two hours for the first week. Applying ice is beneficial as long as swelling or pain is present, whether days or weeks. Heat can promote swelling and bleeding; therefore, it should be avoided unless instructed otherwise by the surgeon, nurse navigator, or physical therapist.

APPLYING COLD PACKS:

Keep the cold pack on for 20 - 30 minutes, or until the tissue outside of the incision feels numb as well. Do not apply ice directly to skin.

You can repeat as often as needed allowing 30 minutes recovery/return to normal skin temperature before applying again.



Pain Management

Pain can be controlled by the use of medication, ice, elevation, rest, and movement. Your anesthesiologist will meet with you prior to surgery to outline the methods that your surgeon has prescribed for your pain control throughout surgery, immediately following surgery in recovery, and those ordered for home.

You will likely need some narcotic medication immediately following surgery. These types of medication will help reduce the sense of deep tissue and bony sensitivity, which in turn, encourages you to get up and complete the necessary movements and exercises that promote more rapid healing.

Whereas movement, walking, and exercises are important, you must find a balance to this and avoid the “more is better” or “no pain, no gain” personas. If you attempt more than your body is ready for, your body will have a natural reaction to the excessive activity by causing increased pain and swelling. This tends to cause that cyclical reaction of then avoiding activity, as you are afraid to trigger pain.

Your body has normal warning signs to let us know when it needs a rest or break. Prior to surgery, there was a certain amount of discomfort that you were accustomed to; therefore, you may be slower to react to them.

Common signs: You may feel a little cramping or tightness or a mild to moderate burning sensation, or your movement may start to deviate to avoid a painful area. Examples are when you turn your surgical leg outward and widen in base of support and postural changes—i.e., hunching forward or a slight bend sideways at the trunk. You will also have to give up the idea that “you can get it all done in one bout, then spend the day recovering.”

Your coach will be helpful in pointing out these signs.

A good rule of thumb is the “a lot of little” rule, particularly in the first weeks after surgery. This means we want you to do a lot of movement, activity, and exercises but in little spurts to your level of tolerance throughout the day.



The following pages contain some basic safety tips for mobility and exercises that will be part of your recovery program. These activities are vital in helping you return to your normal activities and are designed to help increase leg strength, flexibility, and function. Practicing the exercises at home prior to your surgery will make the exercises easier for you after surgery.

As a general rule, exercises should be performed, at minimum, three times a day. The recommendation in the “a lot of little” management, and to encourage more movement throughout the day, is to break up these 6 - 7 Phase I exercises—choosing 1 - 2 to do at a time, but a variety 6 - 10 times a day. The key to success with your exercise is in completing them in good posturing/positioning and proper technique.

Walking is not considered part of this exercise routine; it is its own activity and should be performed in short durations in the first week every waking hour with a gradual increase as tolerated.

Do not add weights or other resistance to these exercises for at least six weeks after surgery.

At the end of the pictured exercises is an exercise flow sheet where you can track your progress. This will help you review your progress with your physical therapist and surgeon.



MOBILITY AND EXERCISES

- Mobility and Safety Tips
- Exercises, Phase I
- Exercise Flow Sheet

Mobility and Safety Tips

Bed Mobility:

Getting Out Of Bed:

- Bend your nonsurgical knee with the foot planted onto the bed and scoot your bottom and hips to the edge of the bed.
- Slide one leg off the bed slowly (support with your hand under the thigh or using the pant leg if needed).
- Use arms to push off, or top sheet to pull, while you sit up.
- **ALTERNATE TECHNIQUE:** is to roll slightly towards edge of bed while letting legs slide off the edge of the bed, concurrently using your arms to help push you up. Exhale as you sit up.



Getting Into Bed:

- Step back so that you feel the bed against your thighs; slide surgical leg forward as you lower yourself to sitting with one hand on the bed or stable bedside table.
- Pushing off with your nonsurgical leg, scoot back onto the bed, bringing your legs onto the bed.
- Scoot up or over in bed by planting your nonsurgical foot into the bed to push. Exhale as you push.



Using a Walker or Crutches:

- Move the walker or crutches forward first then the surgical leg, followed by the other leg.
- Stand tall with the assistive device, do not lean or rest on them. Bend at the hip and knee to take the step, keeping your toes straight, setting your heel down first
- Stay in the middle of the crutches or walker; do not step beyond the front of your walker.
- Continue use of the walker or crutches until you can walk without a limp. If you fatigue quickly or need to hold onto items for support, then you still need an assistive device but may be able to transition to a single crutch or cane.

Safety Rule:

Before trying to stand or walk, allow yourself 90 seconds to see if you are going to get dizzy. There is a natural delay to this happening, and you do not want to move away from steady surfaces until you are sure that you are not going to become dizzy.

Climbing Stairs:

- Hold onto the railing. You can use your device with the other hand for additional support.
- “Up with the good; down with the bad.” When going upstairs, lead with the good (nonsurgical leg) and follow with the surgical leg. When going downstairs, lead with the surgical leg and follow with the good leg.
- Negotiate with one step at a time initially.



Transfers:

From sit to stand or stand to sit:

- Scoot to the edge of the seat, keeping your surgical leg forward for comfort.
- Push from armrests or countertop by the toilet to stand. Exhale as you push off.
- Back up (using a walker or crutches) until both legs touch the chair or toilet.
- Slide your surgical leg forward for comfort; reach back for the armrest, countertop, or toilet; then sit slowly. Exhale as you lower yourself.



Car Transfers:

- Slide the seat of your car as far back as possible, and if able, recline the seat.
- Back up to the car using your walker (or crutches). Reach back to the car seat or dashboard for support.
- Slide your surgical leg forward as you sit down on the edge of the seat.
- Scoot back on the seat as far as possible and lean back as you swing your legs into the car.
- To get out of the car, reverse the above procedure.



Tub/Shower Transfers:

- If you feel unsteady, place shower chair into the shower or tub.
- Stand near the shower lip or edge of the tub.
- *Shower:* Step over the shower lip with your nonsurgical leg first and then your surgical leg.
- Back up to the shower bench or seat.
- Slide your surgical leg forward for comfort, reach back for the chair or bench, and sit slowly. If available, use a hand-held shower and/or long-handled sponge to avoid excessive bending.
- *Tub:* Step back until you feel the tub behind your nonsurgical leg. Hold onto the countertop, rails, or steady support to lower yourself onto the seat. Do this technique only if you can sit safely onto the shower chair. Once seated, bring one leg over at a time, supporting under the surgical leg as needed.

Exercises, Phase I

Propped Knee Extension:

To fully straighten your knee, prop your surgical leg on a small towel or pillow under your heel, not under the knee. Maintain this position for 5 minutes, slowly increasing your tolerance to 30 minutes at one time.



Quad Sets:

To achieve a fully straight knee and to improve quadriceps strength, lie with your leg straight and toes pointed toward the ceiling. Tighten the muscle on the top of your thigh, keeping your thigh on the bed while attempting to raise your heel slightly off the bed. Hold your muscles tight for 10 seconds.



Ankle Pumps:

To promote circulation and to decrease swelling postoperatively, in bed or sitting in a chair, point your toes up, down, left, and right. Alternate feet.

Alternate technique: trace the alphabet with your foot, noting what letter you left off with last.

Heels Slides:

To promote active bending, lie on your back (bed or couch—DO NOT attempt on floor) with your legs straight and your toes pointed toward the ceiling.

Slowly pull your heel towards your buttocks as far as you can, attempting to achieve greater motion with each repetition.



Seated Knee Extension:

Sit with your knees bent at 90 degrees. Straighten your leg at the knee while keeping your back upright. Slowly lower your leg to the starting position.

Seated Knee Flexion:

To promote knee bending, sit in a chair with your knee bent to 90 degrees. Keeping your foot flat and fixed to the floor, gently move your buttocks forward in the chair. Relax in the new position for 20 seconds. For improved control, keep the good leg forward slightly.

EXERCISE FLOW SHEET

(Check off when completed)

EXERCISE	DATE										
Prop Knee Extension											
Quad Sets											
Ankle Pumps											
Heel Slides											
Seated Knee Extension											
Walking											

USEFUL INFORMATION

- [Helpful Tips](#)
- [Life After Joint Replacement](#)
- [Notes](#)
- [Medication Log](#)

Helpful Tips

- You may shower the day after your surgery. Never shower when you are in your house alone, and keep your dressing as dry as possible.
- Increase your activity as pain and swelling allow.
- If you had a knee replacement, work on bending exercises 3 - 4 times a day.
- Continue use of ice therapy every 20 - 30 minutes, as needed.
- Take pain medications as needed.
- Elevate ankle above the knee and the knee above the hip to reduce swelling when not walking or doing your exercises.
- Outpatient physical therapy will begin to further help improve function and walking and reduce swelling.
- Unless otherwise noted, you can bear weight on the affected leg as you can tolerate.
- The anesthesia may take up to 12 - 18 hours to wear off. It is important to use crutches or a walker to prevent falls during this time.
- Most patients use crutches or a walker for 1 - 2 weeks.
- The amount of pain you experience and the improvement in your limp should be your guide for discontinuing the crutch use.

Exercise and maintaining an active lifestyle are important parts of health.

Life After Joint Replacement

Traveling:

When traveling long distances, you should attempt to change position or try to stand every hour. Some of the exercises, like ankle pumps, can also be performed should you need to sit for long periods of time.

Because your new artificial knee contains metal components, you will likely set off the security systems at airports or shopping malls. This is normal and should not cause concern.

Upon arrival to the security screening area, notify TSA of your joint replacement and they will complete a modified appropriate screening.

Exercises and Activity:

Exercise and maintaining an active lifestyle are important parts of health. Most patients with artificial joints are able to enjoy many activities, though some should be avoided. In general, high impact exercises, such as running, jumping, heavy weight lifting, or contact sports, are not recommended. Participating in these activities, or activities like them, may cause it to wear down much more quickly. Low impact activities like bicycling, swimming, walking, gardening, and golf are encouraged. You may kneel on your new knee without damaging it; however, it will likely feel uncomfortable.



Dental Care:

Following your joint replacement surgery, it is important to notify your dentist that you have a joint implant. It is essential that you obtain a prescription from your dentist for a prophylactic antibiotic to be taken prior to any dental cleaning or surgery for the rest of your life. You will need to remind your dentist before every scheduled appointment in the future of this requirement in order to reduce the risk of developing an infection in your joint.

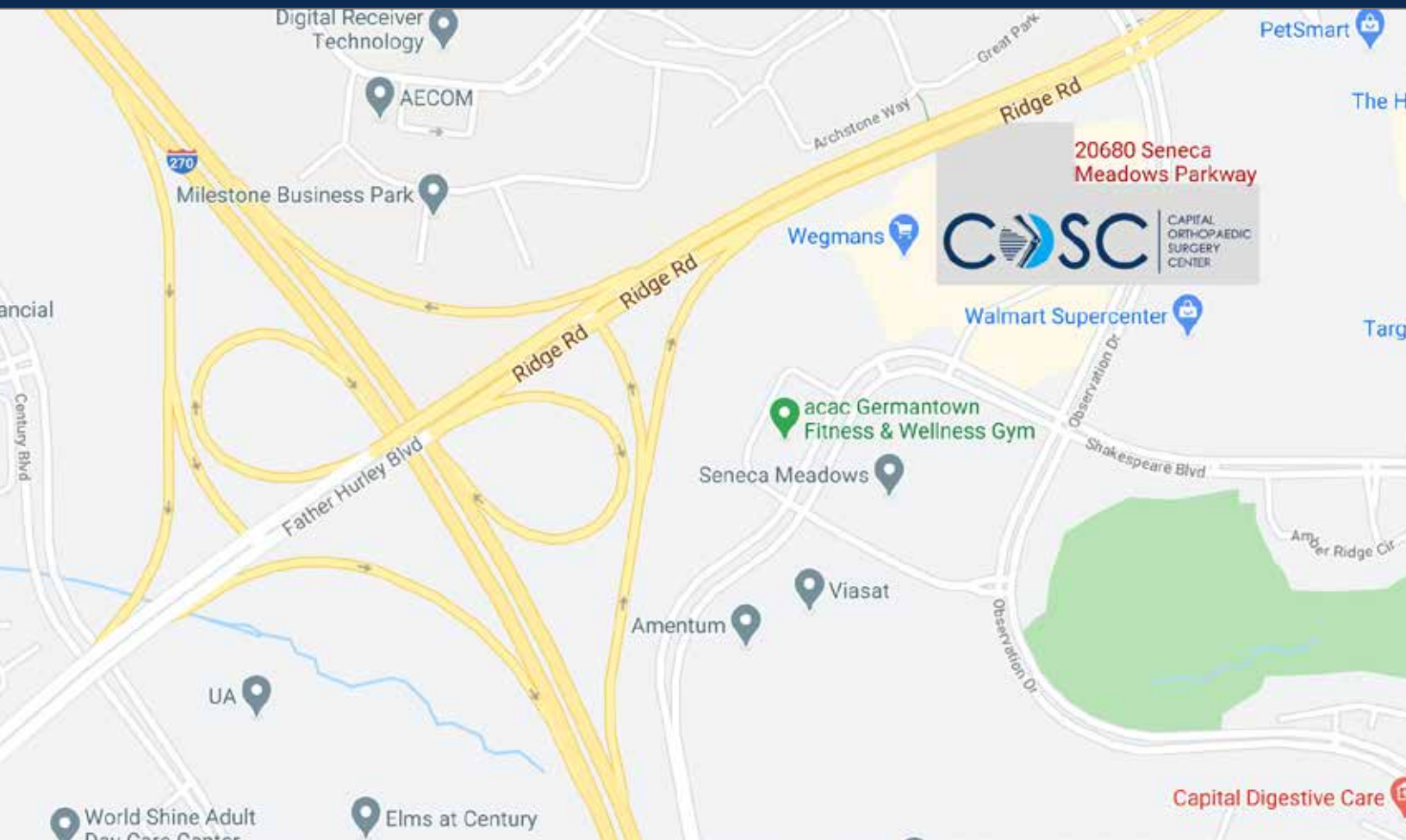
It has been an honor and privilege to care for you. We wholeheartedly thank you for your trust in our skills and for allowing us to assist you on this journey. We hope you have a speedy return back to Your Life in Motion!

Notes

[illegible]

Medication Log

MEDICATION	DATE	DOSE	TIME TAKEN



- From Highway 270 North
- Take the exit 15A- MD 118-N/Germantown Rd
- Follow Germantown Road up to third light
- Take a left at first stoplight on Seneca Meadows Pkwy
- Follow Seneca Meadows Pkwy for~ 3/4 of a mile
- Take left at The Shops at Seneca Meadows (next to Wegmans)
- Continue into the center and follow signs to the office building
- Proceed to the second level of two-story parking structure
- The Capital Orthopaedic Surgery Center parking and entrance will be to the right corner of the office building

CAPITAL ORTHOPAEDIC SURGERY CENTER

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WITH YOU IN MIND

As a group of leading orthopedic surgeons, we are dedicated to providing exceptional surgical care and outcomes for each of our patients. This commitment is at the heart of why we founded Capital Orthopaedic Surgery Center.

Our new surgery center is designed to provide a seamless, patient-first experience. Combining personalized care with world-class technologies, we are committed to providing the best treatment plan for you. We will never lose sight of the trust you place in us.



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