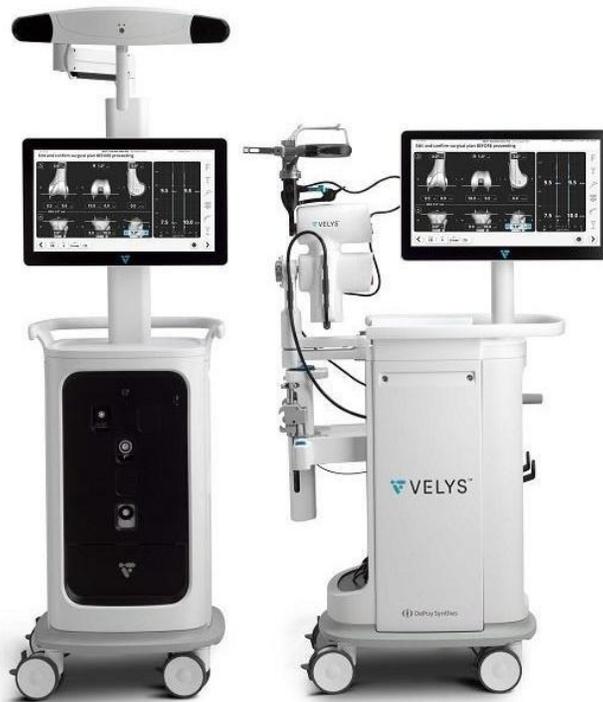


BENJAMIN K. WILKE, MD

www.BenjaminWilkeMD.com

Your Guide To Robotic-Assisted Total Knee Replacement (VELYS)



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You are entering a mutual relationship in which my staff and I are committed to improving the quality of your life. This booklet was developed as a resource and teaching tool to answer questions pertaining to your procedure.

Total knee replacement is a highly successful procedure. An important part of your recovery is your commitment to the care and rehabilitation of your new and improved knee. We understand that the preparation and recovery processes can be challenging. We encourage you to read through this packet and highlight questions or notes that you can then discuss with the staff.

Please bring this booklet to your pre-operative appointment so we can review it with you.

Thank you for allowing me and my staff to take part in your health care needs.

Sincerely,

Benjamin Wilke, MD



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About Dr. Benjamin Wilke

Benjamin Wilke M.D. FAAOS is an orthopedic surgeon specializing in total joint replacement and orthopedic oncology. He has special interests in hip and knee arthritis, bone and soft tissue tumors, and amputee care. He specializes in primary and revision hip and knee replacement procedures and enjoys utilizing the latest technology and advances in surgery, such as the direct anterior approach for total hip replacement and robotic surgery for partial and total knee replacements.

Dr. Wilke earned his bachelor's degree in science and graduated with honors and distinction from the University of Iowa in three years. He then went on to complete his Doctor of Medicine degree and graduated Cum Laude from St. Louis University School of Medicine. During his time in medical school, he received the Outstanding Scholar Award and was inducted into the Alpha Omega Alpha Honor Society.

Dr. Wilke then received his orthopedic surgery training at the Mayo Clinic in Rochester, Minnesota, where he had the distinction of serving as Chief Resident. He then continued his training with a fellowship in Orthopedic Oncology at the University of Florida.

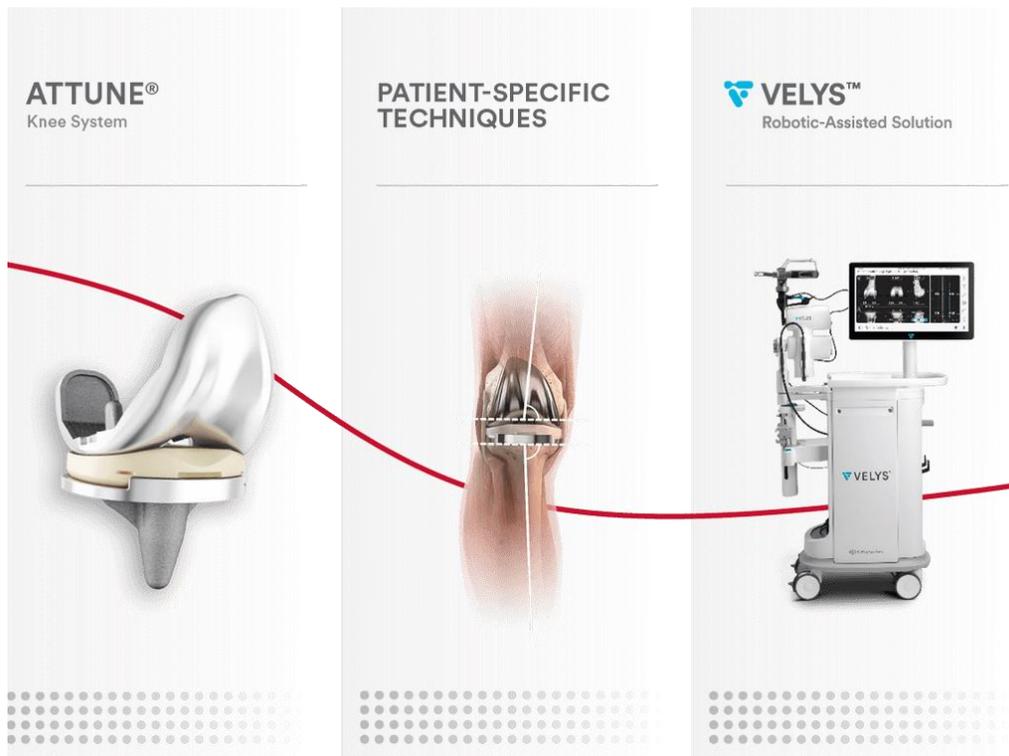
Dr. Wilke spent several years on staff at the Mayo Clinic in Jacksonville Florida where he mentored residents and fellows and rose to the rank of associate professor. He has authored over 80 research publications and has contributed to multiple book chapters. He has presented both nationally and internationally and was recognized as one of the most published and cited orthopedic surgeons by Doximity. He was recognized as a top orthopedic surgeon in 2024 by Best in Florida magazine.

Dr. Wilke joined North Florida Surgeons to improve his ability to provide care for the local community. In his free time Dr. Wilke enjoys spending time with his family and two dogs. He is an avid reader and enjoys learning new skills.

Robotic-Assisted Knee Replacement

Dr. Wilke has been using robotic technology for joint replacements since 2017. He understands every aspect of preoperative planning, intra-operative decision making, and execution of robotic joint replacement. This technology is completely under the control of the surgeon. With robotic assistance, Dr. Wilke can optimize surgical outcomes with more accuracy and precision of implant placement. Early studies indicate that robotic joint replacement patients may enjoy faster post-operative rehabilitation.

VELYS™ Robotic-Assisted Solution Designed for Use with the ATTUNE® Total Knee System



The VELYSTM Robotic-Assisted Solution allows surgeons to better streamline their surgical process and workflow. This technology helps tailor each knee replacement specifically for the patient's anatomy.

The Following Are Needed Prior to Surgery:

- **You must obtain clearance from your primary care provider (PCP) to have surgery**
 - *A consultation with your PCP and/or any specialists is required.*
 - You might need additional clearance from other providers i.e., cardiologist, pulmonologist, neurologist, etc.
 - If you are over the age of 40 or have a medical condition the surgical coordinator will go over this with you
- Required testing for ALL surgeries includes:
 - *Chest X-Ray*
 - *Blood work (CBC, BMP, HgBA1C)*
 - *EKG*
- **Please have these completed before your pre-operative appointment in our office. (approx. 2 weeks prior to your surgery)**
- If you are having surgery at the hospital, you will need to have Pre-Admission Testing performed
 - *You will be called a couple weeks before surgery from a nurse at St. Vincent's Southside. They will review your medical history, review your instructions prior to surgery, and schedule testing required by Anesthesia and Dr. Wilke that has not been completed.*



Pre-Surgical Checklist

*In order for your surgical experience to proceed smoothly, each of the following items **must be completed prior** to the day of your procedure.*

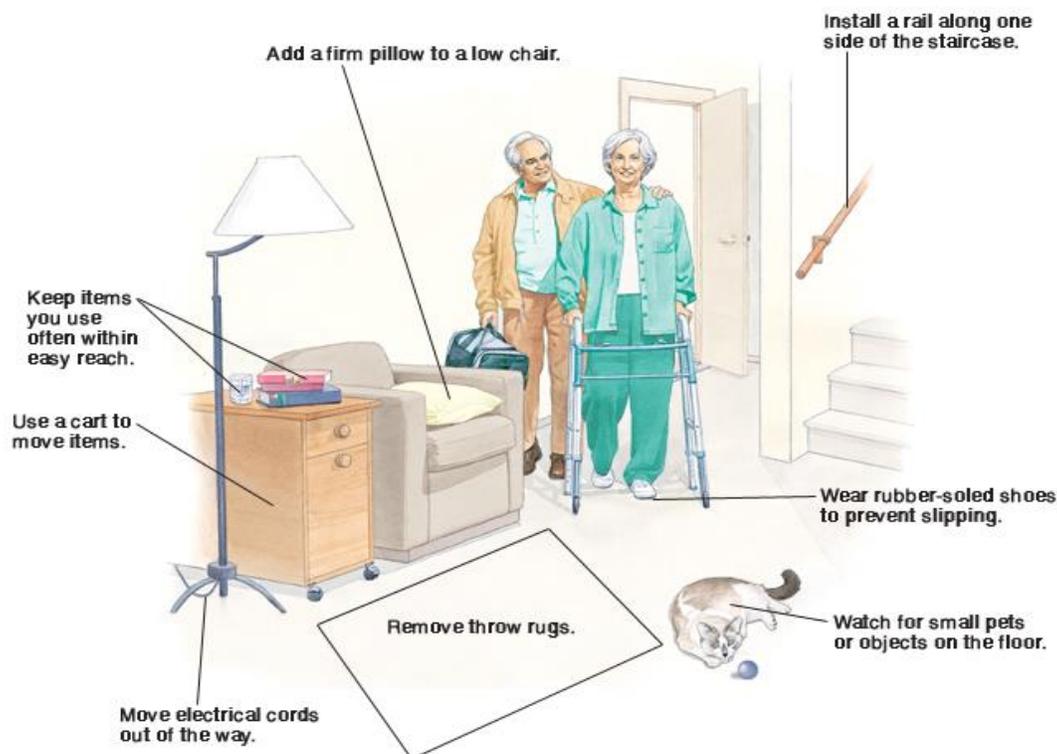
- Discontinuing Medication before Surgery:** Your medications will be discussed with you at your preoperative appointment. You will be given specific instructions on what medications you can continue to take and if any need to be stopped before surgery and if so, for how long.
 - **Two weeks before surgery** it is necessary to stop taking GLP-1 diabetes/weight loss medications:
 - Semaglutide, Wegovy, Mounjaro, Ozempic, Zepbound, Rybelsus, Victoza, or others
 - **One week before surgery** it is necessary to stop taking the following medicines unless otherwise directed by your medical physician:
 - All oral anti-inflammatory medicines (Aleve, Advil, Motrin, Ibuprofen, Voltaren, Diclofenac, Naprosyn, Celebrex, etc.)
 - Nutritional supplements (Vitamin E, Ginseng, Ginko Biloba, Garlic, Ginger, etc.)
 - **Consult with your prescribing physician** for the appropriate and safe discontinuation of any medication before surgery, particularly:
 - **Aspirin, Coumadin, Warfarin, Plavix, Heparin, Lovenox and/or any other blood thinning medications:** These medications need to be safely discontinued at a very specific time before surgery. Some medical conditions can be life threatening if these medicines are stopped without appropriate timing and precautions.
 - **Rheumatologic medicines** such as **Enbrel and Humira or others:** Discuss with your Rheumatologist as some medications need to be discontinued one month prior to surgery
- Arrange for transportation home following discharge:** You will not be permitted to drive yourself. Your surgery **will be cancelled** if this not arranged.
- Attend your pre-operative appointment with Dr. Wilke's staff.**
 - Please bring a copy of your current prescription medications.
 - All preoperative testing and labs that you had completed will be reviewed
 - You will discuss surgery and answer any questions you may have. We recommend reviewing this packet and writing down questions you have on the last .
- Avoid alcohol intake 3 days before surgery**
- NO smoking 1 month before surgery and 3 months after your surgery (Nicotine testing will be performed):** If you continue to smoke 1 month before surgery it will be cancelled. If you return to smoking during your post operative recovery you put yourself at risk of wound complications, infection, and additional surgery.

Preparing Your Home

(The following information was supplemented from material found on AAOS.org)

Several modifications can make your home easier to navigate during your recovery. The following items *may* help with daily activities. Many of these items are recommended but not required. Speak with your health care team about individual needs.

- ✓ Remove of all loose carpets, area rugs, and electrical cords from the areas where you walk in your home
- ✓ Rearrange furniture to allow adequate walkways
- ✓ Develop a plan for managing stairs in and around your home
- ✓ Secure handrails along all stairways
- ✓ Stock up on ice and easily prepared meals
- ✓ Keep items such as phone, television remotes, medications, and other frequently used items close-by
- ✓ Securely fasten safety bars or handrails in your shower or bath
- ✓ Obtain a stable shower bench or chair for bathing
- ✓ Obtain long-handled sponge and shower hose
- ✓ Obtain a stable chair for your early recovery with a firm seat cushion (that allows your knees to remain lower than your hips), a firm back, and two arms



The Day Before Surgery

- ✓ *Do not eat or drink anything after midnight before your surgery.* Your stomach needs to be empty for surgery. You will be instructed as to which of your medications can be taken on the morning of your surgery with **small sips of water only**.

- ✓ Shower with Hibiclens© antibacterial soap the night before and the morning of your surgery. Hibiclens© can be purchased as an over-the-counter item at your local pharmacy
 - Avoid using Hibiclens© on the face, genitals, or mucous membranes
 - You may use regular shampoo on your hair
 - Do not use lotions, powders, or deodorants after cleansing with Hibiclens©
 - If you have any allergies or sensitivities to soaps, you may use your own soap. Please discuss this with your health care team at your pre-operative visit.
 - Do not shave near the area of your surgery for 3 days prior to your surgery
 - Follow your normal oral care routine
 - Avoid wearing make-up and nail polish
 - Use clean towels and bedding



The Day of Surgery

Your surgical team will consist of Dr. Wilke, his physician assistant, surgical technologists, anesthesiologists, registered surgical nurses, and physical therapists. Everyone is important in your care and will provide their expertise to give the best surgical and rehabilitative experience.

- ✓ **Follow the fasting instructions.** If you were instructed to take any of your medications the morning of your procedure, do so with a sip of water.
- ✓ If you are diabetic, **do not** take any oral medication for your diabetes unless otherwise instructed to by your medical physician.
- ✓ Dress comfortably. You may also bring personal items such as toiletries.
- ✓ Comfortable walking shoes (preferably slip-on shoes with a back for stability while walking) are strongly recommended.
- ✓ Staff will guide you to the pre-operative unit. Here you will be asked to change into a gown and be prepared for surgery.
- ✓ The site of surgery will be shaved and prepped.
- ✓ You will need to remove contact lenses. Please bring glasses if needed.
- ✓ Any dentures or partials will need to be removed.
- ✓ Alert the RN of any allergies that you may have (penicillin, latex, iodine/shellfish).
- ✓ Dr. Wilke will see you prior to anesthesia to answer any last-minute questions, re-examine, and sign the surgical site.
- ✓ The Anesthesiologist will review your medical history and explain the methods for anesthesia and the risks and benefits involved.
- ✓ An IV will be inserted for access, fluids, antibiotics and medications. You will be given a cocktail of medications pre-operatively to minimize pain and inflammation.
- ✓ Family members or your designated contact person will be directed to the waiting room to remain during your surgery.

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- ✓ Staff will bring you to the operating room. You will be asked to position yourself on the operating room table. The surgical team will adjust your position, provide warming blankets, and ensure that all body parts are safely positioned and well-padded.
- ✓ After surgery is completed, you will be taken to the recovery room by the anesthesiologist and the nurses. Dr. Wilke will contact your family/friend at the conclusion of surgery
- ✓ In the recovery room, an experienced recovery room nurse will closely monitor you.

Discharge Protocol

When Discharged to Home:

- ✓ Take 10 deep breaths each hour.
- ✓ Get up and walk every hour.
- ✓ Walk as much as possible as tolerated
- ✓ Use a walker or cane as needed. Progress to full weight-bearing as quickly as possible, unless instructed otherwise. Physical therapy will assist with this transition.
- ✓ Keep your post-operative visit with Dr. Wilke's team scheduled at 7-14 days after your surgery.

We discourage discharging to a Skilled Nursing Facility unless it is an absolute necessity:

- ✓ Please discuss the need for a Skilled Nursing Facility with our staff at your preoperative appointment. Need for this service will be determined during your hospital stay.

Immediate Post-Operative Care

When the anesthesiologist and the recovery room nurse have determined it is safe for discharge to home, the nurses will go over a series of instructions and materials to ensure you are prepared for the next step in your recovery. Other materials given to you will include:

After Surgery Medicine Prescriptions

- ✓ Pain medicine prescription and directions for usage will be provided following surgery.

Commonly prescribed medications include:

- Oxycodone – Prescription narcotic
 - Colace (docusate) – Over-the-counter stool softener
 - Aspirin – blood clot prevention
 - Celebrex (celecoxib) or Naprosyn – anti-inflammatory and heterotrophic ossification prevention
 - Omeprazole – acid reducer/stomach protectant
 - Zofran (ondansetron) – anti-nausea
- ✓ Do not mix pain medicine with alcohol or other sedating drugs.
 - ✓ Start your medicine as soon as you have pain, when the regional anesthetic begins to wear-off, or just before bed, whichever comes first. Early signs that the anesthetic block is wearing off are the return of sensation and movement in your surgical hip/leg
 - ✓ ***Per Florida law, you are not allowed to drive while taking narcotic pain medication or while using a walker.***



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Medication questions

- ✓ For any questions, you may contact your pharmacist or our team. For urgent after hour questions please contact our on-call line at **(904) 204-5000**.
- ✓ **If you are having a medical emergency (such as trouble breathing, chest pain, etc.), call 911!**

Refill requests

- ✓ *For non-narcotic medications, please contact your pharmacy for refill requests*
- ✓ Refills are authorized Monday – Friday 8am-4 pm and may take up to 48 hours to be authorized.
- ✓ ***PLEASE NOTE:*** *A limited amount of narcotic pain medication can be prescribed through our office due to Florida state law and insurance guidelines. You will be issued ONE prescription for narcotic pain medication post operatively. If a refill is needed, please call our office. You may be required to return to office for evaluation before additional prescriptions can be filled. If you exceed the allotted refill amount, you must obtain your medication from a Pain Management Specialist or your Primary Care Physician.*

Physical Therapy Prescription

Physical therapy is an important part of your recovery. Everyone receives physical therapy, but your schedule may differ depending on whether you stay overnight in the hospital or are discharged the same day

Prior to discharge from the hospital/surgery center:

- ✓ Your first session includes an evaluation and is tailored to your individual evaluation and recovery
- ✓ Your goal is to be able to walk as much as possible
- ✓ Home physical therapy and nursing care will be predetermined by the hospital and will begin after your surgery
- ✓ An order for physical therapy will be submitted at your preoperative appointment. This will provide details about your individual rehabilitation protocol.
- ✓ You will start outpatient physical therapy within 1 week of surgery, unless recommended to hold per Dr. Wilke.
- ✓ You may attend physical therapy at any location or facility of your choosing.

At Home Following Your Surgery

It is common to have the following reactions after surgery:

- Low-grade fever (<100.4° F) for about a week
- Small amount of blood or fluid leaking from the surgical site
- Bruising, swelling, and discoloration in the involved limb or adjacent areas of the body
- Mild numbness surrounding the wound site, possibly for 6-9 months

The following *reactions are abnormal*. If you should have any of the following symptoms, please contact Dr. Redmond or go to the nearest emergency room:

- Fever of > 100.4° F
- Progressively increasing pain
- Excessive bleeding
- Persistent nausea and vomiting
- Excessive dizziness
- Persistent headache
- Red, swollen, oozing incision sites

The following *reactions may require emergent intervention* or a visit to the Emergency Room:

- Chest Pain
- Shortness of breath
- Fainting or Loss of Consciousness
- Persistent Fevers > 100.4°F
- Weakness, numbness, or inability to move operative extremity
- Red, swollen, or painful calf and/or increased numbness or tingling in your foot

*****For any URGENT medical questions after business hours**

- Please call our main line at **(904) 204-5000** and the answering service will contact the on-call team

Incision and Wound Care

Initial Wound:

- ✓ Your knee will be wrapped in a compressive dressing. This should stay in place for 1 day following surgery
- ✓ You will have a waterproof dressing in place. This should stay in place until your first postoperative appointment.
- ✓ There will be sutures under the skin and a steri-strip dressing will be in place. This protects the skin from bacteria.
- ✓ You may notice 2 additional small incision sites, one on the thigh and/or one on the shin. These are for navigation pins that are placed in the bone for the robot to know where your knee is during surgery.
- ✓ **Please refer to dressing change instructions** provided during preoperative appointment and at discharge. You may shower on postop day 1.

Caring for Your Incision:

- ✓ Watch for signs of infection, which can include redness, pain, drainage, or foul odor. If you see any of these signs please call our office at **(904) 204-5000**
- ✓ If you feel warm or feverish, please take your temperature – call our office for temperatures > 100.4°F
- ✓ To properly clean your incision, wash with soap and water and pat dry. Avoid rubbing or applying lotions.
- ✓ Do not soak your hip in water by taking a bath, using a hot tub, or swimming

Blood Clot Prevention

Blood clots, also known as deep vein thrombosis (DVT), are a common complication after any orthopedic surgery. There are several things you can do to help decrease your risk. This page discusses signs and symptoms of a blood clot and prevention techniques.

What Are Signs of a Blood Clot?

If you experience chest pain, difficulty breathing, or severe headache call 911 immediately as these could be signs that a blood clot has broken off and traveled to other parts of your body.

Symptoms to look for in your lower legs:

- ✓ Redness
- ✓ Pain
- ✓ Warmth
- ✓ Swelling

What Steps Can I Take to Help Decrease My Risk?

- ✓ Stay mobile (walk) and avoid long periods of sitting or laying in bed
- ✓ Wear your compression stockings
- ✓ Use your compression devices (if applicable)
- ✓ Ankle pumps (pictured to the right)



There are several medications to help prevent blood clots. These medications are referred to blood thinners or anticoagulants. These medicines will be used for 2-6 weeks after surgery. You may notice that you bruise more easily when using this medicine. Your health care team will discuss the best medication options for you for use after surgery.

Medications We Use to Help Prevent Blood Clots:

- ✓ Aspirin
- ✓ Eliquis
- ✓ Lovenox, Xarelto, Coumadin

Signs of Excessive Bleeding May Include:

- Nose bleeds
- Stomach pains
- Spitting up blood
- Blood in your urine or stool

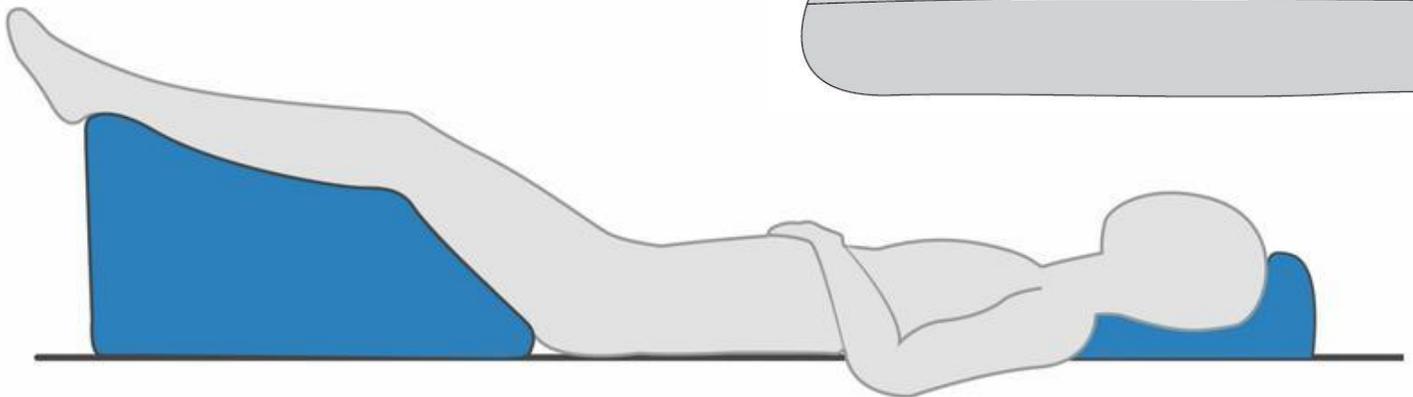
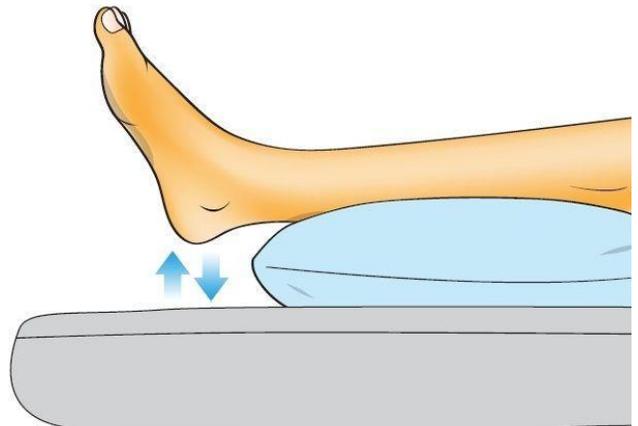
Self-Management

Reducing Leg Stiffness and Swelling:

- ✓ Continue physical therapy exercises regularly after surgery to strengthen the surrounding muscles and stabilize your joint.
 - Ankle pumps – Point and flex your feet 10-30 times an hour
- ✓ Elevate your leg(s) above your heart to help lessen swelling
- ✓ Use an ice pack. Do not place the ice pack directly on your skin. Use a towel or pillowcase to avoid direct contact with your skin.



compression stockings



Managing post-operative pain:

- ✓ Take pain medications with food and at least 30 minutes before a physical therapy session
- ✓ Tylenol or acetaminophen may be used instead of or in combination with a narcotic.
 - Do not exceed 4,000mg of Tylenol/acetaminophen in 24 hours
- ✓ Use your ice pack frequently, as tolerated.
 - Use it after you exercise to help decrease swelling and pain
 - 20 minutes on, 20 minutes off

Avoid constipation:

- ✓ This can be a common side effect from pain medications.
- ✓ Drink plenty of fluids; water is preferred.
- ✓ Use a stool softener, like Colace, while taking pain medicines.
- ✓ Take a laxative like Dulcolax, as needed.
- ✓ Eat a high fiber diet.

Sleeping:

- ✓ Avoid long naps during the day to help get back to a more normal sleep pattern.

Traveling

Driving:

You are not able to drive while taking narcotic pain medications. Driving should not be performed until you can drive safely. You must be able to quickly apply and hold pressure on the brakes. We recommend practicing in an empty parking lot before driving on the road and consulting with your physical therapist to determine your strength and reaction time.

If you have surgery on your **RIGHT** leg:

- ✓ Per Florida law, the soonest you can return to driving is 4 weeks after surgery

If you have surgery on your **LEFT** leg:

- ✓ The soonest you can return to driving is after you have discontinued use of narcotic pain medication

You can apply for a **temporary**, six-month handicap sticker from the state of Florida. We can provide this form in office; please ask about this prior to your surgery, as a health care provider's signature is needed on the form. You may obtain the form at your preoperative visit or the form can be mailed to you.

If seated in the car for a long period of time, 3 hours or more, please remember to take breaks to stand up and walk around often.

Flying:

For airplane travel in the first six weeks after your surgery, please notify our staff so we can adjust your blood thinner medication for safer travel.

If you do fly:

- ✓ Make sure you stand up and move around the cabin often and as able according to your flight crew. It is also a good idea to do ankle pumps while sitting in your seat.
- ✓ Compression socks should be worn on the plane.

Going Back to Work

Returning to work is different for each individual as it depends on your recovery process and the type of work you perform. Discuss your job tasks and responsibilities with your health care team so you can start talking with your employer about returning to work before surgery. Make sure you provide time to going to outpatient therapy.

Return to Work Low to Medium Demand:

Sitting job:	1 – 3 weeks after surgery
Combination sitting and standing:	1 – 4 weeks after surgery
Standing:	1 – 6 weeks after surgery

Return to Work High Demand/Heavy Labor:

Full unrestricted duty will be determined on an individual basis, usually around 3 months.

Family Medical Leave Act (FMLA) Paperwork

Many patients require completion of FMLA paperwork for their job.

This paperwork can be quite extensive and very detailed, please allow 7 – 10 days for completion.

- Please submit paperwork prior to your preoperative appointment.
- Make sure your paperwork indicates your name, date of birth, and includes a job description, which details specific tasks related to physical demands.

Family and
Medical Leave
Act

FMLA

Going to the Dentist

Current guidelines recommend avoiding dental visits (unless an emergency) for 6 months following your joint replacement. This includes routine cleanings. Between 6-12 months after your joint replacement, dental visits are allowed, but you will need to take a prescribed antibiotic prior to the dental visit. This is **required** for routine cleanings and other invasive dental work. Using antibiotics can lower the chance that slight bleeding from your gums can cause bacteria from your mouth to travel to your joint and cause an infection. This is a one-time preventative dose of antibiotics to protect you from a joint infection.

You will need to contact your dentist and let them know you have a joint replacement. We will prescribe the antibiotics you need to take before going to the dentist.

After 12 months you no longer need to take antibiotics prior to a dental appointment unless instructed by Dr. Wilke's team.

Do not schedule a dentist appointment during the first six months after your surgery.

- ✓ Exceptions include dental emergencies like a broken tooth or implant.
- ✓ Amoxicillin or clindamycin is typically prescribed
- ✓ Please let the team know if you have any allergies to antibiotics

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For your preoperative appointment, please use the space below to write down questions to discuss with the team.