

### Patient Experience of Undergoing a Knee Replacement

#### After Initial Consultation

##### When can I schedule the surgery?

- You will be given a list of needed things to complete prior to surgery. Once you have been cleared for surgery by your PCP, internist and or cardiologist which includes labs and EKG/chest x-ray. You will also need clearance from your dentist if you have an active tooth infection.

##### What can I do to best prepare my body for surgery?

- Please refer to more detailed handout, OYO- Optimize Your Outcome
- Stay as active as possible- the more active you are with range of motion, muscle strength and balance prior to surgery, the easier recovery after surgery will be. No specific pre-physical therapy or exercise type is recommended
- The better your nutrition is prior to surgery the better healing you after surgery will be. We recommend any protein supplement like Ensure, and any probiotic supplements that can be found at a health food store or pharmacy.
- We highly recommend you attend a pre-operative joint class at the hospital. This class will familiarize you with what to expect at the hospital. Many questions will be answered and our patients feel this class is highly beneficial to their experience. The class at OASIS Hospital can also be taken online.
- Discontinue all tobacco related products cigarettes, cigars, e-cigs, patches, and nicotine gum. Smoking decreases blood flow and increases the risk of infection and poor surgical outcomes. All of these products need to be stopped at least 3 weeks prior to surgery. If you are a smoker, you will be blood tested the week before surgery for serum Cotinine, which is a specific marker for Nicotine.

##### How many days do I spend in the hospital?

-1-2 days. You will need to have a ride arranged home from the hospital. Most of the time you will go home from the hospital even if you live alone. Make plans for someone to stay with you for the first couple of days after surgery. Skilled nursing facilities do not improve patient outcomes and we do not typically recommend them post-operatively. You will be evaluated by Occupational and Physical therapy post-operatively and arrangements will be made by case management based on your individual medical needs.

### **Do I need therapy after surgery?**

- Yes
- You will be evaluated and instructed and given exercises and guidance by the therapist at the hospital. Therapy will be arranged while you are at the hospital with either out-patient or home therapy being the options.

### **What type of Anesthetic is used?**

- Typically patients are given a spinal anesthetic, an adductor nerve block, a local block in the knee capsule during surgery, and also sedation for the procedure (you will be asleep). This ensures that you wake up with no pain, and typically the blocks last until the next morning. You will meet the anesthesia provider in the hospital prior to surgery and all questions will be answered. We use anesthesia providers that will not bill you out of network charges.

### **Do I need to have a catheter during/after the surgery?**

- No
- Sometimes catheters are used if there is a history of urinary incontinence.

### **What kind of wound care will be needed after surgery?**

- The incision is closed with a dissolving stitch under the skin, and then medical glue is used to seal the incision. The wound is then covered with a waterproof dressing that allows patients to shower immediately. The dressing is removed by the patient at home one week after the surgery then normal showering is continued and the wound does not need to be covered. Keep the wound dry especially if there is a large crease area. You can use dry gauze on the wound to keep clothing from rubbing as needed.

### **What can I do nutrition-wise to improve the outcome of my surgery?**

- Scientific literature has demonstrated that a protein supplement before and after surgery has shown to decrease chances of complications.

### **How long will my knee replacement last?**

- Typically modern knee replacements will last 25-30 years and then they can be revised/re-done and last another 20-25 years.



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### **Why do I need an MRI before my surgery?**

- When approved by insurance, Dr. Wilmink utilizes pre-operative imaging consisting of an MRI and or X-rays to make an individualized plan for each patient. This allows specific tools/jigs to be made that will be sterilized and used during the surgery to allow precise placement of the knee parts to re-create your specific anatomy. This technique of knee replacement is call “patient specific” or a “custom knee replacement”. This technique is an alternative to using a robot or using a navigation system.

### **What if my insurance has declined an MRI for the purpose of pre-operative planning or I can't have an MRI (pacemaker, metal in body, etc)?**

- We will still use the same knee prosthesis that we always use, the Journey knee replacement from Smith and Nephew. Intraoperative measurements will be used to complete the procedure. Dr. Wilmink does this technique at least once week because there are many patients who cannot have an MRI.

### **Will I need special equipment for home and when do I get this?**

- Sometimes patients will need an elevated toilet seat and a front wheeled walker. This will be arranged at the hospital once you have had your surgery and these pieces of equipment will then be authorized by your insurance. A cane is usually handy and this can be picked up at pharmacies, churches, or medical equipment stores if needed. We do not use continuous passive motion machines for patients after knee replacement.

### **Will I need to stop tobacco prior to surgery?**

- All tobacco/nicotine containing products including cigarettes, chew, cigars, patches and e-cigarettes will need to be stopped 3 weeks prior to surgery. Tobacco is proven to cause increased surgical complications including increased risk of infection and delayed bone and soft tissue healing.

### **What instructions are given for medications and preparation prior to surgery?**

-2 weeks prior to surgery- you will need to stop all vitamins and herbal supplements- (i.e. fish oil, glucosamine, chondroitin, turmeric, etc.)

-1 week prior to surgery- All NSAID's need to be stopped. (i.e. Advil, Aleve, Meloxicam, Celebrex, etc.)



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-1 week prior to surgery- Aspirin must be stopped unless directed otherwise by your PCP or cardiologist

- 5 days prior to surgery begin showering using hibiclens (chlorohexidine wash) daily. This can be purchased over the counter at any pharmacy or drug store.

-Please follow PCP or cardiologist instructions regarding all other blood thinners (i.e. Eliquis, Coumadin, Lovenox, Pradaxa, Plavix etc.)

- Day before surgery- nothing to eat or drink after midnight

- Day of surgery- Take only the instructed to take medication with a small sip of water in the morning. Do not shave on the morning of surgery. Do not use lotion or makeup after showering.

### **What else can I do to be prepared?**

-We highly recommend attending a pre-op class at the hospital prior to surgery. This will help familiarize you with you hospital, the check-in process, the services available and will make the day of surgery more comfortable.

- Prepare your home- Pre-made meals that can easily be prepared. High protein and high fiber foods improve healing. Have healthy snacks like nuts, fruits, yogurt and cheese. It is not unusual to have a decreased appetite after surgery so small meals and snacks work well.

- Take up area rugs as they are a trip hazard. Move furniture to create wider walk ways so that you can easily move around with a walker. If you have stairs in the home, you will work with Physical Therapy in the hospital and learn the correct way to maneuver them prior to discharge home.

- Have a plan for pets. They will be excited to see you after surgery and can knock you over.

- Arrange friends or family to stay with you at home for at least 1-2 days after surgery. This will make the transition home much easier. This is not required but highly recommended.

- Arrange a ride home from the hospital, you will need transportation home. Most patients go home the day after surgery.

### **What should I bring to the hospital?**

- Bring all medication you normally take to the hospital in a plastic bag. These will be held in the pharmacy. Bring a comfortable change of clothes to the hospital. Bring chargers for your



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electronic devices. Bring a sweater as the hospital tends to be cold. A sleep mask and ear plugs may make you more comfortable sleeping. The hospital will have basic toiletries but if you want something specific, please bring it.

### **When do I return to the office for a follow up visit?**

- You will follow up 10-14 days after surgery. You can schedule this follow-up appointment prior to surgery. If this appointment is not made, please call our office 602-631-3161 to schedule a follow up visit.

## Hospital Course

You will be told by our schedulers what time to arrive at the hospital. This time may change several times due to the fact that surgery schedules change quite often due to patients being taken off the schedule if they have not been cleared for surgery. Please try to be understanding of the aspect that schedules often change in health care and Dr. Wilmink has very little control of the factors that cause these changes. You will also receive a call from the hospital 1-3 days prior to surgery with hospital specific instructions.

- Check in at registration. You will be brought to the pre-operative room and will change into a gown. All personal belongings will be put in a bag and will stay with you. Family members are welcome in the pre-operative area. You will meet the anesthesia team, the pre-operative and operative nurse in the pre-operative area. Dr. Wilmink will visit you in this area prior to surgery and will answer any other questions that you may have.

### **How long is the surgery?**

- Typically surgery is 1-1.5 hours, then 45 minutes in the recovery room and patients are then reunited with their family members. Dr Wilmink will call your family once the surgery is completed. You will be transported to your private room.

### **When do I start therapy?**

- Our goal is to have all patients up walking the day of surgery. You will work with Physical and Occupational Therapy.

### **What restrictions do I have after surgery?**

- Walking will be the most important activity after surgery. You will initially walk with a walker and will likely transition to a cane in the 1-2 weeks after surgery. No kneeling for 6 weeks. No



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soaking in a tub or pool until three weeks after surgery. We no longer use CPM (continuous passive motion) devices as they have not shown to have any affect on recover from TKA.

### **What can I expect in the hospital?**

- There will be many people involved in your post-operative care. You will have a Hospitalist managing your medication and medical care. You will have Occupational Therapy as well as Physical Therapy. You will have a Nurse Case Manager who will help with arrangements based on recommendations. You will be cleared by all of these people prior to discharge home.

### **What type of pain medication will I have?**

- You will have discomfort on the front and outside part of your thigh. This is mostly muscle pain from the procedure. Ice will be helpful with this discomfort. You will also have some deep aching from the bone.
- You will have an intraoperative pain block which will help pain significantly the day of surgery. You will be IV and oral pain medication available and will be adjusted as needed. You will go home with prescriptions for the oral medication regimen you are taking and these will need to be filled at an outside pharmacy. Medication is individualized for each patient and we cannot anticipate what you will need specifically after surgery.
- Prescriptions will be sent to your pharmacy on the day of discharge from the hospital.
- If not contraindicated, NSAIDs like Celebrex, Meloxicam, Ibuprofen or Naproxen will help significantly with inflammatory pain and muscle aching. Always make sure to take with food and a full glass of water. We recommend these for at least 2 weeks after surgery.

### **What kind of Physical Therapy will I have in the hospital?**

- You will have Therapy the day of surgery and twice daily while in the hospital. You will be instructed in specific exercises to do in the hospital and at home. You will be assessed based on your physical and home needs. If you have stairs in your home, you will work on proper stair mechanics with physical therapy. You will either be set up with a prescription for out-patient therapy or home physical therapy. The trend we are seeing is that the majority of patients are going to out-patient therapy right away. Therapy can be completed at a location that is conveniently located for you.

### **Can I shower in the hospital?**

- With the water-proof bandage in place, you can shower and get your leg wet without any wrapping or covering. You can shower with assistance in the hospital when you are ready to do so. You can shower with soap and water. You do not need any special soaps.

### Post-Operative Course

#### When can I drive?

- You can drive when you are off of all pain medication and can stomp your foot without hesitation. Driving while on narcotic pain medication is considered “Driving under the influence”. Driving is a personal decision in regards to liability. You should not drive until you feel safe and ready to operate your vehicle. Start in an empty parking lot and with short distances.

#### When can I leave my house?

- We encourage you to leave the house when you feel safe and ready. Short outings with normal activities are encouraged when you feel ready. You will fatigue quickly and easily so be gradual with increasing activity. It is advised to have a walker or a cane with you when you leave the house. This will give you something to grab onto should you have a muscle cramp or feel the need to sit down. This will make you more stable as well as keep others from bumping into you.

#### What is the best activity to do after surgery?

- Walking is the best activity. We recommend more frequent walking versus focusing on distance or speed. Proper walking mechanics are the most important activity in regards to rehab. If you start to limp or change your walking mechanics, this is the time to take a break. It is normal to feel stiffness and soreness after prolonged sitting. It is normal to limp for the first few steps after prolonged sitting. Continue to ice especially after activity. This will help with pain and swelling.

#### What can I do to prevent blood clots?

- You will be placed on anti-coagulants in the hospital. You will continue this at home until directed to stop. You will be sent home with lower leg compression stockings that we want you to wear them full time except for during bathing and when washing the socks for the first 2 weeks.
- You will be taking a medication to prevent blood clots which may be Aspirin or a higher intensity medication like Lovenox, Warfarin, Xralto, etc.

#### What type of swelling and bruising is normal after surgery?

- It is normal to have swelling and stiffness in the operative upper and lower leg. There may be bruising as well as swelling from the buttock to the foot. Swelling will likely worsen throughout the day as your leg is in a gravity dependent position. It is important to take frequent breaks



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and elevate the leg on a pillow or ottoman. If there is active bleeding from the incision, deep aching or swelling in the calf that does not improve with elevation, stretching or massage, shortness of breath or chest pain please proceed to the nearest emergency room to be evaluated.

### **I am having difficulty sleeping after surgery, is this normal?**

- Difficulty sleeping is one of the most common complaints after surgery. 85% of patients will have disturbance in sleep. Avoiding afternoon naps and caffeine after the morning can help with this.

### **Can I sleep on my side?**

Yes, you can sleep on your surgery or other side if comfortable. Use a pillow between your legs for support. You can sleep on your back.

### **What can I do if I am having a problem and need advice?**

- Dr. Wilmink would prefer to evaluate and direct patients who are having difficulty. Please do not hesitate to contact our office during the week for an appointment. On days when Dr. Wilmink is not in the office an appointment can be made with another provider. There is always a physician on call 5pm-8am 7 days a week. Please call our main number 602-631-3161 to reach the on call physician if needed after hours. Non-surgical complaints should be addressed with your family physician or in the event of an emergency by your local emergency room.
- The Transitional Care Team is also available for questions/issues. You will be receiving calls from them during your recovery to check up on you.

### **What other side effects can I expect after surgery?**

- It is not uncommon to have appetite changes for the first couple of weeks after surgery.
- Constipation is also not unusual after surgery especially when taking narcotics. Over the counter stool softeners such as Colace, Bisacodyl or Senna and increasing water intake will usually resolve this problem. If this does not resolve, please make an appointment with your primary care or if an emergency go to the nearest urgent care or emergency room.
- You may need to make medication changes to your current medications such as lowering blood pressure medications, change in insulin requirements, etc. It will be important to follow up with your primary care provider.
- It will be normal to feel fatigued and have less energy in the first few months after surgery. This will slowly improve as your body recovers from the trauma or surgery.



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- Acid reflux is very common after anesthesia. An over the counter medication like Omeprazole or Pepcid will help this.
- Increased urination or urinary difficulty is also not uncommon after anesthesia especially with pain medication. If this does not resolve, please see your primary care provider.

### **How long does healing take?**

- You will see many changes in the first couple of weeks after surgery. You will likely need some type of pain medication for a couple of weeks. This may include narcotics but also may not need to be more than Tylenol. We recommend an NSAID as well if not contraindicated for at least the first 4 weeks after surgery.
- You will have muscle soreness, achiness and stiffness that can be present for the first few months. This will improve in the first couple of weeks but will still be present especially with increased activity or prolonged sitting for the first few months.
- It will take 6-8 months for full muscle strength.
- Full healing after any surgical procedure will take 1 year for complete recovery.

### **When can I fly?**

- If not necessary, we recommend not flying in the first 6 weeks after surgery. If you must fly, please wait until 2 weeks after surgery. You will need to wear your compression stockings in the plane for the first 3 months after surgery as well as take a baby Aspirin for the flight. Move around frequently to include ankle pumps and walking when able to.
- There is no card specific for the airport. If you have the option of the 3D body scanner, it will be easy for security to see your implant. The implant may or may not set off the metal detector. You will be required to undergo a security scan and there is no note or card that will excuse you from this.

### **When can I get my incision wet?**

- With the water-proof bandage in place, you can shower when ready. Do not soak in a bathtub, pool, hot tub or any other body of water until all scabbing has resolved. This can take 2-4 weeks or longer before all scabbing has resolved.

### **What can I put on my wound?**

- Please do not apply anything other than a dry bandage to your incision after the dressing is removed. Do not use Neosporin or peroxide. You can shower normally using anti-bacterial soaps (Ivory or Dial) and water. No scrubbing but ok to allow soap and water to run over the incision then pat dry with a towel. Once the scabbing has resolved you can begin a light scar



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massage using a circular motion with your fingers or a side to side up and down motion with your thumbs. . Scar treatments can begin at 3 weeks after your surgery. Mediums such as Vitamin E, Aloe Vera and Cocoa Butter are good to apply to the scar. The Erase Scar Gel is very effective for minimizing scars, it can be purchased from our office, or can be ordered online at [www.aprisaskincare.com](http://www.aprisaskincare.com)

### What should my wound look like?

- Your wound is closed with an absorbable stitch under the skin as well as with a skin glue called Dermabond. There is a mixture of scabbing and glue residue that will diminish over time. It is not unusual for there to be lumps and bumps along the wound, this occurs when there is swelling present. This will diminish and flatten over time. There should not be active drainage from the incision but you may see a small amount of clear or yellowish discharge on the bandage. Contact our office if you are concerned about any type of wound drainage. Taking a picture of the wound with your cell phone is also helpful. If you can be send this digitally to our nurse for more feedback that is extremely helpful.

### How will I know if I have an infection?

- It is not unusual to have sweats at night or have low-grade temperatures. Please call our office with any temperature spikes over 101. It is normal to have a feeling or warmth around the incision but this should not be hot with increasing pain, redness, wound opening or increasing drainage. Please return to our office to be evaluated if this occurs.

### What long-term restrictions will I have?

- You will be allowed to put full weight on your operative leg the day of surgery. At 6 weeks you can resume activity such as hiking, riding a stationary bike, light golf swings, lower body stretching, light weight lifting with the lower body as you feel comfortable. At 3 months after surgery you can resume more intense activity such as tennis, heavier lifting, mountain biking, yoga and Pilates. If a position doesn't feel right please don't do it.
- You can resume Skiing and surfing at 6 months after surgery.
- Running and heavy impact activity such as Cross Fit and jumping will accelerate wear of your knee and it not recommended. You will be able to do short bursts of jogging such as to catch a bus or cross the street.
- Your knee will feel warm for up to one year after surgery
- Your knee will feel numb on the lateral (outside) side of the incision from microscopic nerves that get cut during the incision. This sensation may never return to normal.
- You can kneel after 6 weeks, but it may feel awkward indefinitely. You are not damaging the knee replacement

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### **Why does my knee make noises, clicks and snaps from time to time?**

- Your knee is made from metal and plastic, and it may clunk or pop from time to time.
- Sometimes scar tissue will form that may cause popping/clicking/grinding and this will typically disappear after 3-4 months after surgery.

### **Why is my operative leg more swollen than my other leg?**

- It is normal to retain fluid in both legs after surgery, and also to retain much more fluid in your operative leg.
- This will typically go away after 3-4 weeks but if it persists, you may need to be started on a water-pill, also know as a diuretic.
- If you already take a water-pill, your dose may need to be increased for a week until your body gets rid of the extra fluids.
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### **Do I need prophylactic antibiotics after surgery?**

- You will need an antibiotic prior to dental work for the first 6 months after surgery. We can send this prescription to your pharmacy for one dose 1 hour prior to your procedure. Please do not schedule routine dental work in the first 3 months after surgery as this can increase your risk of infection. If you need to see a dentist for an emergency such as a broken tooth or a loose crown in the first 3 months, you will need an antibiotic.
- We also recommend an antibiotic for colonoscopies in the first year after surgery. Please do not schedule routine procedures in the first 3 months after surgery.
- You do not need antibiotics for other minor procedures such as toe nail removal, or Dermatology procedures unless directed otherwise by your treating provider.

### **When will I need to follow up?**

- Please expect to follow up in our office 2-3 times after surgery. We will see you for your first follow up visit 10-14 days after surgery. You will then likely be asked to schedule a follow up at 6 weeks after surgery. You may also be asked to follow up 3 months after surgery. These subsequent appointments are not set in stone and will depend on your progress. When released from active care, we will ask you to follow up every 5 years for repeat x-rays and evaluation.



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### **What will happen at my first follow up visit?**

- We will take x-rays of your new knee
- At the first appointment and review them with you. We will evaluate your wound healing. We will discuss your progress since you have left the hospital. We will discuss medications and provide prescriptions as needed. This will be your opportunity to review the surgery, healing course and any other questions with your provider.

### **When is my second post-operative appointment?**

- This will be at 6 weeks after surgery
- We will monitor your progress for pain, range of motion and swelling.
- We expect your knee to move past 90 degrees of flexion by this visit.

### **When is my last post-operative appointment?**

- This will typically be at 12 weeks after surgery. Some patients need further care after this time period.

### **I have pain at night still, when will this go away?**

- Pain at night after knee replacement is very common. Typically patients will experience pain over the inside (medial) of the knee. It will go away typically between 6-12 weeks after surgery. Your night dose of pain medication is typically the last one to discontinue. Taking an anti-inflammatory before bed is also helpful

### **When can I return to work?**

- Returning to work is individualized and job specific. You can return to light desk work within the first couple of weeks if ready but it is a good idea to anticipate being off work up to 6 weeks as everyone will have a different post-operative recovery timeline.
- Please bring your work and disability forms to your first appointment or drop them off at the front desk. There is a \$25 charge for these forms to be filled out. Please fill in all blanks that you can such as names and dates. Please provide an addressed stamped envelope for return or provide specific fax instructions. It can take 7-10 days for these forms to be returned.

### **What if I still have unanswered questions before surgery?**

- If there are still questions not answered and further discussion needed prior to surgery, please call our office 602-631-3161 to schedule a pre-operative visit.