



Minimally Invasive Knee Replacement Surgery With Dr. Jared Foran



Instructions for Using This Book

1. Read **EVERY** page thoroughly. Most of your questions will be addressed here. Be sure to read “Frequently Asked Questions” at the end of this booklet.
2. Use the pre-operative checklist to ensure you are prepared for your upcoming surgery
3. Note the important names and telephone numbers listed on page 2.
4. There are sample medication regimens on pages 14-15. One sample is for patients who will be taking aspirin for DVT prophylaxis postoperatively. The other is for patients who will be on Xarelto for DVT prophylaxis postoperatively. Please note that adjustments will be made on an individual basis. Dr. Foran and his team will explain all changes to your plan.
5. Write down any questions you still have after reading this booklet, and call Dr. Foran or his team with these questions.

Table of Contents

Your Clinical Team



IMPORTANT PHONE NUMBERS

Medical Assistant:

Hayley Campbell MA
(303)233-1223 ext. 6556
(720) 497-6750 FAX

Surgery Scheduler:

Kyllie Bower
(720)-497-6602
twagener@panoramaortho.com

Physician's Assistant:

Jeff Hamilton PA
(303)233-1223

BEFORE SURGERY

- SCHEDULING PROCESS 3
- PRE-OPERATIVE CHECKLIST 4
- PRE-OPERATIVE EXERCISES 6
- MEDICATIONS TO STOP
- BEFORE SURGERY 8

THE DAY OF SURGERY

- YOUR HOSPITAL STAY 10
- WHAT TO EXPECT AFTER SURGERY 12

AFTER SURGERY

- MEDICATIONS AFTER SURGERY 13
- MEDICATION REGIMEN SAMPLES 14
- POST-OPERATIVE VISITS TO THE OFFICE 16
- FREQUENTLY ASKED QUESTIONS 17
- RECOMMENDED PHYSICAL THERAPY CLINICS 20

Medical Questions: For immediate assistance call 303-233-1223 and ask for Triage. Call Hayley for non-urgent matters.

Non-medical related questions: Billing office, worker's compensation, privacy office, etc. 303-233-1223

Scheduling Surgery

1. Decide with Dr. Foran that you wish to proceed with total knee replacement.
2. Dr. Foran will discuss with you the following:
 - a. Indications for surgery
 - b. Benefits/Risks of surgery
 - c. Alternatives to surgery
3. In the office you will sign a consent form stating that you understand the risks and benefits of surgery.
4. You will be contacted by Tina, Dr. Foran's surgery scheduler within one week of consenting for surgery, to schedule your procedure. (Tina's number is listed in the front of this booklet if you choose not to wait for her to call you) Tina will arrange the date of your surgery. Tina will also schedule your first post-operative visit (approximately 2 weeks after surgery- Please let Tina know whether the Golden or Westminster office is most convenient for you). Note, your first post-operative visit may be with Dr. Foran's physician's assistant, Jeff Hamilton, PA.
5. If you would like a comprehensive breakdown of what your insurance plan will cover, please call our business office (303-233-1223) and ask to speak to one of our preauthorization specialists.
6. Within 30 days prior to your scheduled surgery, you will need medical clearance from your primary medical doctor. If you do not have a primary medical doctor, we will arrange prior medical clearance for you. Medical clearance includes a physical examination, blood work, EKG within 6 months and any other tests deemed necessary by your doctor. Surgery cannot proceed without prior clearance!
7. To help prepare you and answer your questions, you will need to attend a "Total Joint" class at OrthoColorado Hospital in the days or weeks prior to your surgery. The hospital will contact you within 2 weeks of your surgery date to schedule this class. If you have not heard by this time please call the hospital at 720-321-5000 and ask for the total joint class.

Pre-Operative Checklist: What you should do to prepare for your surgery

2-4 WEEKS PRIOR TO SURGERY

- Arrange medical clearance from your Primary Care Provider within 30 days of surgery date
- IMPORTANT: You should assume that you are going home after surgery. Some patients “want” to go to rehabilitation or a skilled nursing facility following their surgery. However, it is not possible (per insurance regulations) to arrange for this ahead of time. In fact, only patients who meet certain medical criteria *while in the hospital* are eligible for rehabilitation or skilled nursing facilities upon discharge. If you qualify based on your medical condition, arrangements will be made while you are in the hospital. MAKE SURE YOU SPEAK TO DR. FORAN or Hayley about this prior to surgery if you have any questions.**
- Cancel any dental appointments within 2 weeks of your surgery
- Notify Dr. Foran if you are having any minor medical procedures done within one month of your surgery
- Avoid any injection into your joint 6 weeks prior to surgery
- Adjust work/social schedule accordingly during your anticipated recovery time
- Practice the exercises listed in this book on pages 6-7, as these will help with your strength after surgery
- If you smoke, you should attempt to stop smoking. If you cannot stop smoking permanently, if you can abstain for 24 hours before surgery, this is of benefit. It is essential to not smoke for at least 48 hours after surgery. All hospitals are NON-smoking facilities
- An automatized cold therapy unit (fancy Ice pack) is a nice item to have following surgery, but is NOT required. You will be given a standard ice-pack in the hospital, but If you would like to purchase a cold therapy unit, they can be purchased at Panorama: 303-233-1223. Most patients find these units very helpful in their recovery. If you purchase one, bring it to the hospital with you.**

1 WEEK PRIOR TO SURGERY:

- Notify Dr. Foran if there is a change in your medical condition (cold, infection, fever, etc.) prior to surgery. It may be necessary to reschedule your surgery
- If you live alone, arrange for someone to stay with you for the first night you return home and arrange for someone to stay with you or be immediately available the first week after surgery
- Arrange for a family member or friend to accompany you to the hospital on the day of surgery
- If you have pets, you may want to arrange for someone to assist in caring for them for a few days after you return home
- Remove small throw rugs or other small obstacles that may be in your path

DAY BEFORE SURGERY/DAY OF SURGERY:

- IMPORTANT:** To help prevent infection wash with a Chlorhexidine Gluconate (CHG) solution the night before surgery and the morning of surgery. **See page 21 for full instructions**
- Stay well hydrated the day before surgery- drink plenty of fluids including water, Gatorade, juice
- DO NOT eat or drink anything after midnight the day before your case or your case will be cancelled
- Wear loose casual clothing and do not wear makeup/jewelry to surgery. Leave jewelry, valuables, and contact lenses at home
- Please bring your insurance card and photo ID to the hospital
- Take medications as instructed by Dr. Foran or your primary care provider (see page 9)
- Arrive at the hospital front desk as instructed. Plan to arrive at the hospital 2 hours before your scheduled surgery time
- You do not need to bring a cane or walker. If you do not have these devices, they will be given to you the day of surgery by the physical therapist. Most health insurances cover the cost of a cane or a walker, but not both.
- Be easily available; as we may need to contact you in the event of any schedule changes or delays. Make sure your contact information is up to date

Pre-Operative Exercise

- If you are currently performing an exercise program, continue to do so.
- If you are not currently performing an exercise program, you may incorporate exercises as directed on the handouts in this binder.

After surgery your physical therapist will give you an exercise program and progress you appropriately. Quad Set



- Sit with involved leg extended
- Tighten quad muscles on front of leg, trying to push the back of the knee downward.

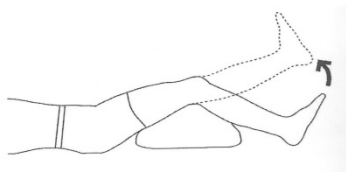
Special Instructions:

Do not hold breath.

Perform 1 set of 10 repetitions, once a day.

Hold muscle contraction for 10 seconds.

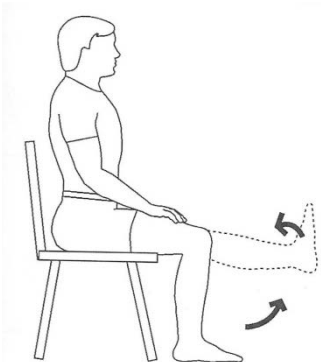
Supine Knee Extension



- Lie on back, with involved leg bent to 45 degrees, supported with a pillow, as shown.
- Straighten leg at knee.
- Return to start position.

Perform 1 set of 10 repetitions, once a day. Perform 1 repetition every 4 seconds.

Seated Knee Extension



- Sit against a wall, chair, or on firm surface, knee bent.
- Keep a proper curve in low back, as shown.
- Flex foot upward, while straightening knee.
- Repeat stretch with other leg.

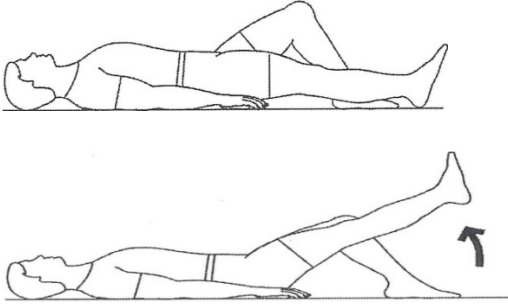
Special Instructions for Knee Extension:

Do not allow low back to lose the curve. It is common to experience shaking in the leg.

Perform 1 set of 4 repetitions, once a day.

Hold contraction for 20 seconds.

Straight Leg Raise



- Lie on back with uninvolved knee bent as shown.
 - Raise straight leg to thigh level of bent leg.
 - Return to starting position.
- Perform 1 set of 10 repetitions, once a day. Perform 1 repetition every 4 seconds.

Mini Wall Squat



- Lean on wall, feet approximately 12 inches from the wall, shoulder distance apart.
 - Bend knees to 45 degrees.
 - Hold 5 seconds.
 - Return to starting position.
- Perform 1 set of 10 repetitions, once a day.

Special Instructions:

Perform 1 repetition every 4 seconds.

Medications to Stop before Surgery

7 Days Prior to Surgery

Stop birth control pills & any male or female hormone (including creams or patches)* such as:

Emcyt Estraderm Estratest Estrace Estradiol Estrogens Ogen Premarin Prempro
Testosterone

Vitamins such as: A, C, E, K, Multivitamins, Fish Oil / Omega 3,6,9, Juice Plus, CoQ10, Krill Oil

All herbal & weight loss medications such as: Alpha lipoic acid Acetyl L-carnitine Cinnamon Chamomile Creatine Echinacea Ephedra Fish oil Garlic Ginger Ginkgo Ginseng Glutamine Goldenseal L-carnosine Licorice Kava Milk Thistle Skullcap St. John's Wort Valerian Saw Palmetto

Joint Supplements such as: Glucosamine Chondroitin MSM

Stop all Aspirin* containing products such as: Alka-Seltzer BC Powder Bufferin Disalid (Salsalate) Dolobid (Diflunisal) Ecotrin or Uncoated Aspirin* (81 mg to 325 mg) Excedrin Fasprin (81mg) Goody Powder Norgesic Pepto Bismol Percodan

****If you have Heart Stents and take Plavix and Aspirin, DO NOT STOP ASPIRIN***

Antiplatelets such as: Aggrenox (aspirin + dipyridamole) Plavix*(clopidogrel) Pletal (cilostazol) Trental (pentoxil) Ticlid

**** If You Have Heart Stents: DO NOT STOP PLAVIX UNTIL SEEN BY A CARDIOLOGIST PRIOR TO SURGERY***

Anticoagulants: Coumadin (discuss the use of Lovenox with your Surgeon – you will receive special instructions and a prescription if you are on this medication)

5 Days Prior to Surgery

Stop all non-steroidal anti-inflammatory (NSAID) medications; examples include:

Advil (ibuprofen)	Celebrex (Celecoxib)	Clinoril (sulindac)	Lodine (etolodac)
Nuprin (ibuprofen)	Aleve (naproxen)	Daypro (oxaprozin)	Meclomen (meclofenamate)
Orudis (ketoprofen)	Anaprox (naproxen)	Diclofenac (Voltaren)	Mediprin (ibuprofen)
Oruvail (ketoprofen)	Ansaid (flurbiprofen)	Feldene (piroxicam)	Mobic (meloxicam)
Relafen (nabumetone)	Arthrotec (Voltaren+Cytotec)	Ibuprofen (Motrin)	Naprelan (naproxen)
Tolectin (tolmetin)	Cataflam (Diclofenac Potassium)	Indocin (indomethacin)	Naprosyn (naproxen)

Contact Your Medical Doctor for Instructions if You Take Any of the Following Medications:

Adderall Cytoxan Enbrel Imuran Librax Librium Methotrexate Remicade

YOU MAY CONTINUE TAKING THE FOLLOWING MEDICATIONS:

- Cholesterol medications
- Psychiatric medications
- Tylenol (regular, extra strength, arthritis)
- Ultram (Tramadol)
- Ultracet
- Iron Supplements
- Blood Pressure Medications:

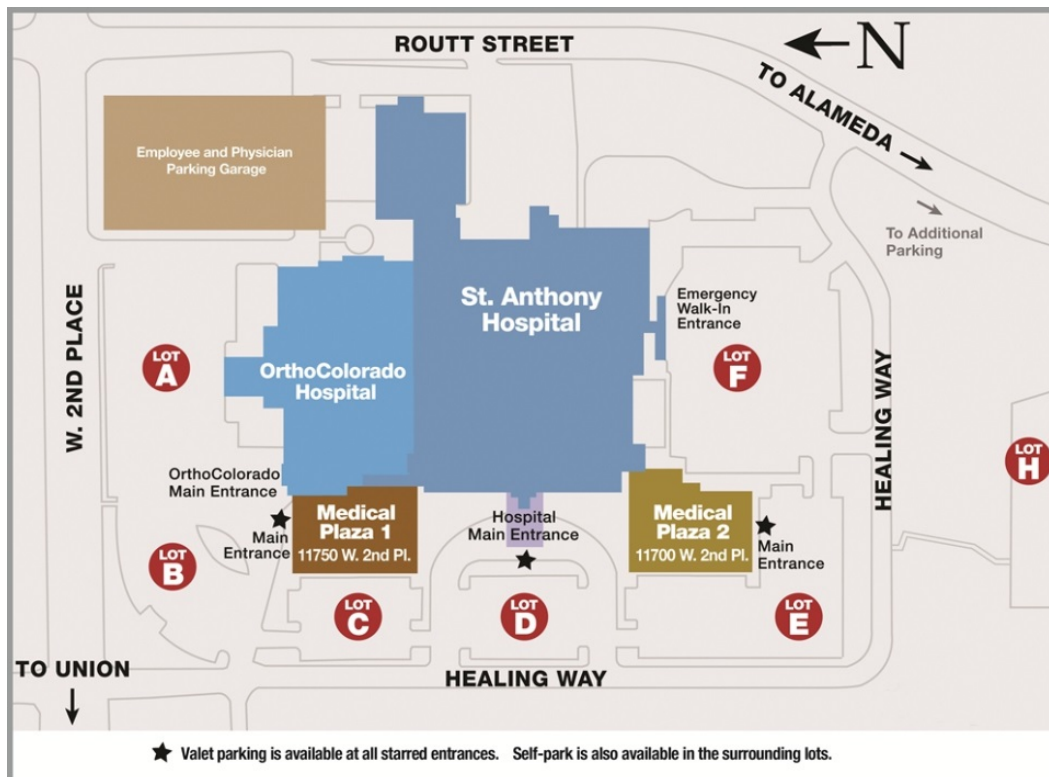
- You should **NOT** take the following blood pressure medications on the day of surgery:
 - ACE Inhibitors. Common ACE Inhibitors include: benazepril (Lotensin), captopril (Capoten), enalapril (Vasotec), lisinopril (Prinivil, Zestril), quinapril (Accupril)
 - Angiotensin Receptor Blockers (ARBs). Common ARBs include: losartan (Cozaar), olmesartan (Benicar), telmisartan (Micardis), valsartan (Diovan)
 - Diuretics. Common diuretics include: hydrochlorothiazide (HCTZ) (Microzide), furosemide (Lasix) spironolactone (Aldactone), triamterene (Dyrenium), chlorthalidone, bumetanide
 - Pills that contain combinations of ACE Inhibitors, ARBs or diuretics

- It is **OK** to take the following blood pressure medications on the day of surgery:
 - Beta blockers. Common beta blockers include
 - atenolol (Tenormin), metoprolol (Lopressor, Toprol), carvedilol (Coreg), propranolol (Inderal), acebutolol, bisoprolol, nadolol, penbutolol, pindolol
 - Calcium channel blockers. Common calcium channel blockers include:
 - amlodipine (Norvasc), diltiazem (Cardizem, Tiazac), nifedipine (Procardia), verapamil (Calan, Verelan, Covera-HS, nicardipine (Cardene SR), felodipine
 - Vasodilators. Common vasodilators include:
 - hydralazine, minoxidil, clonidine (Catapres), doxazosin (Cardura)

MEDICATIONS BEFORE SURGERY/MORNING OF SURGERY

2 DAYS BEFORE SURGERY

- **Start Senokot**
 - Take 2 tablets, twice a day starting 2 days before surgery -If you experience loose or watery stools, STOP using the Senokot and resume it the night of surgery.



Your Hospital Stay

With minimally invasive knee replacement and contemporary pain control methods, most of Dr. Foran's patients will go home the day **AFTER** surgery. That is, you will spend one night in the hospital. The following outlines a typical hospital stay:

PREOPERATIVE UNIT: You will arrive at the front desk of the hospital 2 hours prior to your surgery. You will be taken to the preoperative area where you meet with nurses, anesthesiologists, and Dr. Foran. At this time IV lines will be placed in preparation for your procedure. Any remaining questions or concerns that you have will be addressed. You will then be taken to the operating room for your surgery.

RECOVERY ROOM:

After surgery you will spend approximately one hour in the recovery room, where nurses will monitor you as you recover from anesthesia.

HOSPITAL UNIT ("The floor"):

You will be admitted to a private room on the floor, where the nursing staff will care for you. Your pain will be monitored and controlled. **IT IS IMPOSSIBLE TO COMPLETELY ELIMINATE PAIN AFTER SURGERY.** Dr. Foran's goal is to keep your pain at a 3 or less at all times while you are at rest. (This may require periodic adjustments of your pain medication.)

On the day of surgery, you will walk with a cane, which is Dr. Foran's preferred assistive device. You may even walk without an assistive device. In some instances, a walker or crutches may be

substituted. Unless otherwise instructed, you WILL be allowed to AND are ENCOURAGED to put FULL WEIGHT on the operated leg. Although you may experience some discomfort in your operated leg, it will support you. Early walking is good for your new knee replacement. Walking is the most important thing YOU can do to prevent blood clots.

POST OPERATIVE DAY ONE (the day after surgery):

Labs will be drawn in the morning. Blood thinners will also be started in the morning.* The physical and occupational therapists will continue to work with you on walking, stairs, bathing, getting dressed, and other activities required for daily living. **Most patients will be discharged to go home on postoperative day #1.**

POST OPERATIVE DAY TWO:

If you are still in the hospital on postoperative day 2, you will work with physical and occupational therapists to help you regain independence. You will go home after you fulfill the goals of therapy. If it is determined that you require extra assistance, or that going home will not be ideal for your recovery, then our case managers will arrange for you to be transferred to a skilled nursing facility or rehabilitation until you are ready to go home.

Discharges generally occur in the afternoon/early evening- please prepare transportation at this time.

*Either Aspirin or Xarelto will be used as a blood thinner based on your medical history. In certain cases, other blood thinners (Lovenox or Coumadin) will be substituted.

What to Expect After Surgery

- **EXPECT TO HAVE SOME PAIN AFTER SURGERY.** Knee replacement surgery is a major operation, and operations hurt. While Dr. Foran’s minimally invasive knee replacement is designed to decrease your pain in the first 6 weeks after surgery compared to a traditional knee replacement, there will still be pain. Dr. Foran’s goal is to keep you comfortable, but being “pain free” is not realistic after any total knee replacement. A reasonable goal is to keep your pain at 3 out of 10 or less while you are at rest. This is accomplished by providing you with the appropriate pain medications. You may have pain that is greater than 3 out of 10 while you are walking and moving your knee in the first several weeks. This is a normal part of the healing process. It is important that you stay “ahead of your pain,” meaning you should ask for additional pain medications when you are feeling greater than 3 out of 10 pain while at rest in the hospital.
- You will have mild bruising and swelling initially that will start at the surgical site. Bruising and swelling are normal after surgery and vary from person to person. Bruising and swelling will continue to increase over the first 2 weeks after surgery, especially after you have been up and standing/walking for prolonged periods. Bruising may travel up as high as your groin area and may move down to your toes within the first 2 weeks. In the first week or two, **expect significant swelling in your entire leg and foot. Wearing the compression stockings (TED hose) as instructed during the first 2 weeks will decrease your swelling. Elevating the operative leg also helps decrease swelling. The swelling will eventually resolve with time.**
- Sleeping may be difficult in the first several weeks. This is due to the physiologic burden of surgery, the new medications you are on, and a change in your activity level. Napping during the day may make sleeping at night difficult. It is also important that your pain is well controlled at night. If sleeping is or becomes an issue please let Dr. Foran know.
- Physical Therapy is an essential component of the recovery process. Physical Therapy (PT) typically lasts for 6 weeks, and is the **MOST IMPORTANT THING** you can do to optimize your outcome. Generally, a physical therapist will come to your home twice weekly for the first 2 weeks. Arrangements for this home PT will be made for you in the hospital. Over the next 4 weeks (weeks 2 through 6) PT will be performed on an outpatient basis (you will go to a physical therapy clinic). A list of recommended physical therapy clinics have been provided on the last page of this packet for your convenience. You will get a prescription for outpatient physical therapy at your 2 week postoperative visit at Panorama.

Medications after Surgery**

(You will be on SOME of these medications, based on your personalized pain regimen)

Aspirin: 325mg tablet to be taken twice a day for **30 days** after surgery, to help prevent blood clots

-AND-

Protonix (Pantoprazole): Stomach protector: Take 1 tablet daily, in the morning to protect your stomach. You should continue to take this medication for 30 days while you take aspirin.

-OR-

Xarelto (Rivaroxiban): 10mg tablet to be taken once a day for 14 days total after surgery to help prevent blood clots

Oxycontin (continuous release): Long-acting pain pill to be taken every 12 hours after surgery. You will get your specific schedule and dose at the hospital with your discharge instructions. You will be weaned off this medication after 10 days.

-OR-

MS Contin: Some patients (based on insurance) will receive MS Contin INSTEAD of Oxycontin. MS Contin is also a long-acting pain pill to be taken every 12 hours after surgery. You will get your specific schedule and dose at the hospital with your discharge instructions. You will be weaned off this medication after 10 days.

Oxycodone (Percocet): Short-acting pain pill to be used as needed for breakthrough pain. You may take 1-2 tablets every 4-6 hours. You are allowed to use Oxycodone while on Oxycontin or MS Contin

-OR-

Hydrocodone/Acetaminophen (Norco or Vicodin): Short-acting pain pill to be used as needed for breakthrough pain. You may take 1-2 tablets every 4-6 hours. The daily limit is 12 pills /24 hours. You are allowed to use hydrocodone while on Oxycontin or MS Contin

-OR-

Hydromorphone (Dilaudid): Short-acting pain pill to be used as needed for breakthrough pain. You may take 1-2 tablets every 4-6 hours. You are allowed to use hydromorphone while on Oxycontin or MS Contin

-OR-

Tramadol: Short-acting pain pill to be used as need. You make take 1-2 tablets every 4-6 hours.

Meloxicam (Mobic): Anti-inflammatory, take twice a day for a total of 6 weeks after surgery. Make sure you take this medication with food.

-OR-

Celecoxib (Celebrex): Anti-inflammatory, take twice a day for a total of 6 weeks after surgery. Make sure you take this medication with food.

Lyrica (Pregabalin): To prevent nerve pain and tingling sensations. Take twice daily for 2 weeks after surgery.

Senokot-S (Senna Plus): Stool softener/laxative for constipation. Take 2 tablets twice a day starting 2 days before surgery until you are off all narcotics after surgery.

Scopolamine patch (70 years of age or less): To prevent nausea. You will receive your first patch at the hospital the morning of your surgery. Change the patch every 3 days. You have 2 replacement patches to be used on post-op day #3 and post-op day #6

****Patients often wonder why they are on so many different medications postoperatively. You MUST take the anticoagulant to help prevent blood clots. The other medications are not required, but are HIGHLY recommended. This medication protocol is known as multi-modal pain control, and has been shown to substantially improve pain and comfort during your recovery. Everyone reacts to medications differently, and your specific postoperative medication regimen may be adjusted for your specific needs. |**

Post-Operative Home Medications- For patients on Aspirin for DVT prophylaxis

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
OxyContin ²	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin
Meloxicam ²	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam
Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica
Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot
Aspirin ²	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin
Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix
DAY 8		DAY 9		DAY 10		DAY 11		DAY 12		DAY 13		DAY 14	
AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
OxyContin		OxyContin		OxyContin		OxyContin(optional) ⁴		OxyContin (optional)		OxyContin (optional)		OxyContin (optional)	
Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam
Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica
Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot
Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin
Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix
DAY 15		DAY 16		DAY 17		DAY 18		DAY 19		DAY 20		DAY 21	
AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam
Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot
Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin	Aspirin
Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix	Protonix

1. MS Contin may be substituted for Oxycontin. Both are long acting narcotic pain relievers.
2. Meloxicam is continued for a total of 6 weeks from the operation (Celebrex may be substituted for Meloxicam)
3. Aspirin is continued for a total of 30 days from the operation
4. Three extra doses of OxyContin may be taken in the morning on days 11,12, and 13 in order to decrease withdrawal symptoms

Post-Operative Home Medications- For patients on Xarelto for DVT prophylaxis

DAY 1	DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
OxyContin ¹	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	OxyContin	
Meloxicam ²	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam
Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica
Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot
Xarelto ³	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto

DAY 8	DAY 9		DAY 10		DAY 11		DAY 12		DAY 13		DAY 14	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
OxyContin	OxyContin	OxyContin	OxyContin	OxyContin (optional) ⁴	OxyContin (optional)	OxyContin (optional)	OxyContin (optional)	OxyContin (optional)	OxyContin (optional)	OxyContin (optional)		
Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam
Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica	Lyrica
Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot
Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto	Xarelto

DAY 15	DAY 16		DAY 17		DAY 18		DAY 19		DAY 20		DAY 21	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam	Meloxicam
Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot	Senakot

1. MS Contin may be substituted for Oxycontin. Both are long acting narcotic pain relievers.
2. Meloxicam is continued for a total of 6 weeks from the operation (Celebrex may be substituted for Meloxicam)
3. Xarelto is continued for a total of 14 days from the operation
4. Three extra doses of OxyContin may be taken in the morning on days 11,12,and 13 in order to decrease withdrawal symptoms

Post-Operative Visits to the Office

- We will ask you to return to the office at routine times after your discharge from the hospital. You will be seen in our office approximately 2 weeks from the time of surgery for your first post-operative visit. You may see Dr. Foran's physician's assistant, Jeff Hamilton, PA, on this first visit.
- All patients are seen in the clinic approximately six weeks post-op to evaluate their progress. This includes a physical examination and x-rays.
- Further follow-up visits will occur at three months, one year, 3 years, and every 5 years thereafter, or as determined by your surgeon.
- Should you have the need for more frequent follow-up visits, you may be asked to return at shorter intervals. Should you desire to schedule a visit for any reason whatsoever, you are always welcome to do so.

1. What is the healing process like after a knee replacement

Expect to be in the hospital for one night. On the day of surgery you should expect to put full weight on, as well as walk on the leg with your new knee! Initially, you may use a cane or walker to help you walk. You can eliminate these walking aids whenever you feel comfortable in doing so. When you first begin to ambulate on your new knee, you may have pain. Pain generally improves dramatically in the first several days and weeks after surgery. The first 2 weeks are generally the most difficult. On average, by week 6 most patients are about 75% recovered ("healed") from surgery. By 3 months most patients are about 90% recovered. Complete recovery, including maximal pain relief and function, takes about 1 year. Patients generally begin driving and returning to work between 1 and 6 weeks after surgery. **MAKE SURE YOU SPEAK WITH DR. FORAN BEFORE DRIVING OR RETURNING TO WORK.**

2. What will my knee feel like when I am completely healed?

Having a realistic expectation about your knee replacement will ultimately lead to your satisfaction with the surgery. The goal of knee replacement is to improve your pain and your function. Hopefully 100% of your knee pain will resolve and you will have excellent motion in your knee. However, expecting 100% pain relief and perfect range-of-motion is not realistic for everyone. In general, if you were able to speak to 100 people with a knee replacement, you would likely find that about 50% (50 people) would say their knee feels nearly perfect, with almost no pain or stiffness. Of the remaining people, 45-48% would probably say that they still have some pain or stiffness, but that their knee feels much better than before surgery, that they are "happy" with their knee, and would do the operation again knowing how their knee now feels. Probably only about 2-5% of people would say that their knee feels bad enough (pain or stiffness) that they would not do the operation again if they had the choice.

3. How long will my knee last?

This is a difficult question to answer as many factors determine the longevity of a knee replacement. Major orthopaedic studies indicate that modern knee replacements last a long time. Several recent studies show that there is a greater than 90% chance that a knee will last 15 years or more.

4. Is swelling common after knee replacement?

Yes. In fact, you should anticipate quite a bit of swelling from your thigh to your foot after surgery. Your operative leg may swell to as much as 30% larger than your other leg. The swelling peaks at about 7-10 days after surgery and gradually diminishes. Sometimes the leg can have substantial bruising as well. This bruising is not dangerous. Elevating your leg and wearing a support stocking help decrease the swelling. It may take months for all the swelling to resolve.

5. Why do I have to take all these medications after my surgery?

Medications after surgery are prescribed to help ensure a safe and comfortable recovery. Blood thinners are necessary to help avoid developing blood clots. Pain medications help decrease your discomfort after surgery. Dr. Foran uses “multi-modal” pain control, which has been clinically proven to be effective after total knee replacement. Multi-modal pain control uses different types of medication, which can decrease the need for narcotics. In general, patients are given an anti-inflammatory medication (Meloxicam) for 6 weeks, a nerve-pain medication (Lyrica) for 2 weeks, a long-acting narcotic (Oxycontin or MS Contin) for 10-14 days, and a short acting “as needed” narcotic medication (oxycodone, hydrocodone, or hydromorphone). The most common side effects from these narcotic medications are nausea, constipation, and itching. As such, you may be given an anti-nausea medication (Zofran or a Scopolamine patch), stool softeners (Senokot or Docusate), and anti-itching medication if needed (Benadryl, Atarax). IF YOUR INSURANCE DOES NOT PAY FOR A PARTICULAR PAIN MEDICATION, OR IF YOU DO NOT WANT TO TAKE ONE OR MORE OF THESE MEDICATIONS, YOU DO NOT HAVE TO TAKE IT. See pages 14-15 for sample medication schedules.

6. Is it normal to feel or hear clicking or clunking in my knee after surgery?

The short answer is yes. The ligaments in a normal (non-replaced) knee allow for subtle motion of the knee in many directions. When a normal (non-replaced) knee moves it has soft cartilage and other soft tissues that cushion this movement. In a knee replacement, this normal motion still occurs, but instead of soft tissues, there are metal and plastic parts that touch each other. When this happens you may feel (or less commonly hear) a click or clunk in the knee. This is normal and should be expected.

7. Is it normal to have numbness around the incision after surgery?

Yes. Knee replacement requires an incision to be made in the front of your knee. In most people, this incision cuts through the superficial nerve that provides sensation to the front of your knee. Most people will notice an area of numbness on the outside part of their knee. This area of numbness may be as big as several square inches, in some cases covering an area as big as the palm of your hand. In some people this area of numbness will diminish or resolve over time. In other people the numbness will be permanent. Eventually the numbness becomes less and less noticeable.

8. Can I kneel on my knee after surgery?

Yes. There is a common misconception that you cannot kneel directly on a total knee after surgery, or that kneeling will damage a total knee. In reality kneeling on a total knee is completely acceptable. Many patients, however, report that kneeling on their knee feels strange, uncomfortable, or even painful. Even so, kneeling is not bad for the knee. Knee pads can make kneeling more comfortable.

9. What should my activity level be after surgery?

Every patient is different. Each day you should be increasing your activity level, but let pain and swelling be your guide. The first 2 weeks are associated with the most pain. On average, you will make 75% of your recovery by week 6 and 90% by 3 months.

At some point, most patients overdo it with activities and therefore take a few steps back in their recovery temporarily. You may have increased swelling or discomfort if this happens. This is your body telling you to take it easy and let your knee rest for a few days.

10. When can I shower or bathe?

You can shower the day after surgery, and let water run over your knee. You should avoid soaking in a bath or pool for at least 3-4 weeks after surgery, when your incision is completely healed.

11. I just had a knee replacement. What positions can I sleep in?

You may sleep in any position you are comfortable in. Try to keep your leg as straight as you can. Although you can sometimes put a pillow under your knee for comfort, constantly sleeping with a pillow under the knee may lead to the inability to straighten your knee completely.

12. When can I restart the medications I was told to stop prior to surgery?

Usually, as soon as you are discharged from the hospital, but check with Dr. Foran or your primary care doctor if there are any medications in question. You will be informed which medications you should resume when you leave the hospital.

13. What should I do to avoid or alleviate constipation?

You should start taking your stool softener (Senokot) two days before surgery and continue it twice daily until you have a normal bowel movement or while taking narcotic pain medication. Stop the stool softener if you start to experience loose or watery stools. If you continue to have constipation you can take Milk of Magnesia, which is a mild oral laxative, or use Magnesium Citrate, which is much stronger. In addition, you can also try Dulcolax suppositories or a Fleets enema. All of these medications can be bought over the counter at your pharmacy.

14. What are the major risks of knee replacement surgery?

Infection: Infection remains the biggest risk after knee replacement and can occur anywhere from days to years after surgery. An infected total knee replacement requires surgery (sometimes multiple surgeries), and great measures are taken to help avoid infection. The national infection rate after knee replacement is about 1 in 100 (1%)

Blood clots: A Blood clot, also known as deep vein thrombosis (DVT), may occur after surgery and can be potentially life threatening if it travels to your lungs. The risk of death from blood clots has been **greatly** reduced in recent years by the use of anticoagulants (blood thinners) and early mobilization (walking, moving, etc.).

Continued pain or stiffness: As noted above, rarely people will continue to have significant pain after a total knee replacement. Often the cause of this pain can be determined, but rarely it may be difficult to tell why a knee still hurts. Fortunately, this is uncommon. Some people's knees may become stiff after surgery. It is important to diligently perform your physical therapy exercises after surgery in order to prevent stiffness.

Nerve or blood vessel injury: Major nerve or blood vessel injury is exceedingly uncommon after knee replacement surgery.

Recommended Physical Therapy Clinics

Aurora

- **Physiotherapy/Benchmark Physical Therapy Aurora**- 14,100 E Jewell, STE 14, Aurora 80012
303-745-6717
- **Select PT (Southeast Aurora)**- 3102 S Parker Rd
STE A15, Aurora 80014
303-338-8598

Arvada/Wheat Ridge

- **Accelerate PT**- 11651 W 64th Ave Unit A5, Arvada
303-411-2210
- **Fit Physical Therapy @ the Duncan YMCA**-
6350 Eldridge St, Arvada 80004
303-422-4977
- **Select PT**- 7777 W 38th Ave Suite A120, Wheat Ridge
303-940-7222

Broomfield/Lafayette/Louisville

- **Accelerate PT PC**- 3951B E 120th Ave
303-920-3710
- **Anchor Physical Therapy PC**- 320 E 1st Ave,
Broomfield 80020
303-460-0329

Centennial/Highlands Ranch/Lone Tree/Parkers

- **Physiotherapy Highlands Ranch**- 9330 S
University Blvd #140, Highlands Ranch
303-471-4506
- **Physiotherapy Homestead Park**- E Arapahoe Rd
STE 250, Littleton
303-694-0400
- **Select PT Parker**-17825 Cottonwood Dr., Parker
303-617-4700
- **Select PT Highlands Ranch**-151 W. Mineral STE
116A, Littleton
303-798-5602

Denver

- **Blue Sky Physical Therapy**- 155 S Madison St STE
303, Denver
303-388-1537
- **Physiotherapy Cherry Creek**- 50 S Steele St STE
500, Denver 80209
303-393-6533

- **Physiotherapy/Benchmark Midtown PT**- 2005
Franklin St. #685, Denver 80205 303-388-0717
- **Physiotherapy/Benchmark PT Denver**- 400 S
Colorado Blvd STE 640, Denver 303-320-4450

Evergreen/Conifer/Idaho Springs

- **Evergreen PT Specialists**- 30940 Stage Coach
Road STE E110, Evergreen 303-674-1594
- **Vertical Motion PT**- 29023 Upper Bear Creek Rd.,
Evergreen 80439 303-324-5329

Englewood/Littleton

- **Fit PT in the Peak Community & Wellness
Center**- 6612 S Ward St., Littleton 80127 303-
409-2133
- **Panther PT**- 5935 S Zang St Unity 9, Littleton
303-979-5511
- **Physiotherapy Greenwood Athletic Club**- 5802
S Quebec STE 100, Greenwood Village
303-779-0566
- **Select PT**- 155 W Hampden STE A, Englewood
303-789-0772

Golden

- **Panorama Physical Therapy**- 660 Golden Ridge
Rd. STE 103, Golden 720-497-6616

Lakewood

- **Belmar PT**- 325 Teller St. STE 270, Lakewood 80226
303-274-2404
- **St. Anthony Hospital Outpatient Therapy**- 34
Van Gordon St, STE 240 Lakewood 80228 720-
321-8920
- **Select PT South Lakewood**- 3355 S Wadsworth
STE 104, Lakewood 303-985-1185

Thornton/Westminster

- **Fit Physical Therapy@ The Westminster
Fitness Center**- 10485 N Sheridan Blvd,
Westminster
303-469-1190
- **Panorama PT**- 8510 Bryant Street STE 130
Westminster, 303-280-1211

Chlorhexidine Gluconate (CHG) Pre-Op Bathing Instructions

OrthoColorado Hospital follows a standardized process for the prevention of surgical site infections. Below is a summary of the things you can do to help.

PLEASE READ ALL INSTRUCTIONS COMPLETELY PRIOR TO BATHING

All Surgical Procedures

- Most drug stores will carry small bottles of chlorhexidine gluconate (4% CHG) that you may purchase for about \$5.00. Look for Hibiclens® or Dyna-Hex®, or ask the pharmacist
 - **NOTE: this product will not be covered by insurance**
- The night before surgery, place a fifty-cent piece size of CHG solution onto a clean washcloth and apply to all body surface areas (excluding face and genitals), concentrating on the area where your surgery will be. Use additional soap when needed to cover all areas.
- At the end of your shower, wait 2 minutes before thoroughly rinsing the soap-like material off of your skin surfaces.
- Do not apply lotion, creams, or deodorant after your shower.
- If possible, sleep in clean pajamas and on clean sheets the night before surgery.
- Do not shave the area of surgery. Do not shave legs before hip or knee surgery
- Repeat this process on the morning of surgery.

CAUTION: Do not use on face, eyes, ears, or mouth- and avoid use in genital area. If you accidentally get some of the soap in those areas, rinse immediately. If you experience burning or irritation on the skin, rinse immediately and do NOT reapply.