



Minimally Invasive Knee 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 3.
4. There are sample medication regimens on pages 15-16. 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.



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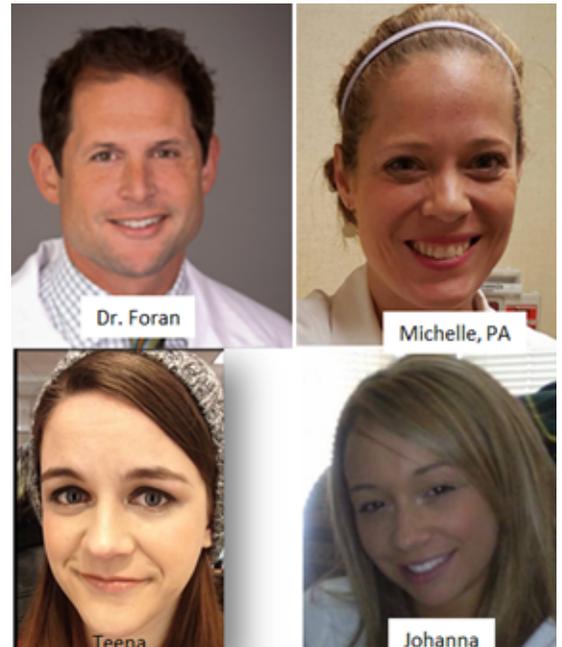
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Your Clinical Team

IMPORTANT PHONE NUMBERS

Medical Assistant:	Surgery Scheduler:	Physician's Assistant
Teena Fehling MA (303)233-1223 ext. 6556 FAX 303-233-8755	Johanna Jackson-Pearson (303)-233-1223 ext 7322 FAX 720-497-6722	Michelle Chambers, PA (303) 233-1223

Department	Reasons to Call	Contact Information
Triage (7am-5pm M-F) *Excluding Holidays	<ul style="list-style-type: none"> Medical questions or concerns that require immediate attention 	Call: 303-233-1223 Ask operator to transfer you to the Triage Department
Pharmacy Questions (7am-5pm M-F) *Excluding Holidays	<ul style="list-style-type: none"> Refills for Prescriptions New Prescriptions Questions about meds 	Call: 303-233-1223 Ask operator to transfer you to the Triage Department
Appointment Scheduling (9am-5pm M-F) *Excluding Holidays	<ul style="list-style-type: none"> Schedule follow up appointments and office visits Answer questions regarding patient appointments 	Call: 303-233-1223 Request Appointment scheduling or request ext 6060
Panorama Physical Therapy	<ul style="list-style-type: none"> Schedule physical therapy appointments Questions or concerns for your therapist 	Golden 720-497-6616 (7am-7pm M-F) Westminster: 720-497-6666 (7am-6pm M-F)
NavCare Team	<ul style="list-style-type: none"> 24 hour call service Live paramedics to help with all questions and urgent situations ; you will get to talk directly to a person 	303-233-21233 ask to be connected to the NavCare team 24 hours a day

Medical Questions: For immediate assistance call 303-233-1223 and ask for Triage. Call Teena for non-urgent matters. The electronic patient portal (NextMD) is the easiest and fastest way to communicate for non-urgent matters/questions. The portal uses email to communicate. Ask how to sign up if you haven't yet!

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 (example of consent on page 24)
4. You will be contacted by Johanna , Dr. Foran's surgery scheduler within one week of consenting for surgery, to schedule your procedure. (Johanna's number is listed in the front of this booklet-if you have not hear from Johanna in a week please call her) Johanna will arrange the date of your surgery. Johanna will also schedule your first post-operative visit (approximately 2 weeks after surgery- Please let Johanna know whether the Golden or Westminster office is most convenient for you).
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 Joint class page is live and can be accessed at

www.orthocolorado.org/inpatient

- Click on "For Patients and Families"
- Click on "Patient Pre-Operative Registration"
- Select the type of surgery you are having done
- Click on Dr. Foran's picture
- Complete Steps 2-4

If you do not have access to the internet, please contact OrthoColorado Hospital to sign up for a Total Joint Class. Main Number: 720-321-5450

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 Teena 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 3 months prior to surgery
- Adjust work/social schedule accordingly during your anticipated recovery time
- Practice the exercises listed in this book on pages 7-8, 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:

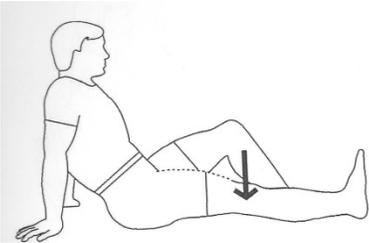
- ☐ **IMPORTANT:** To help prevent infection wash with a Chlorhexidine Gluconate (CHG) solution the night before surgery and the morning of surgery. **See page 22 for full instructions**
- ☐ Stay well hydrated the day before surgery- drink plenty of fluids including water, Gatorade, juice
- ☐ DO NOT 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 pages 9- 10)
- ☐ 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.

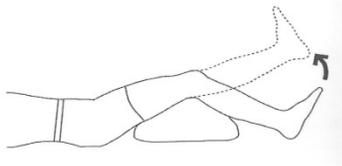
Special Instructions:

Do not hold breath.

Perform 1 set of 10 repetitions, once a day.

Hold muscle contraction for 10 seconds.

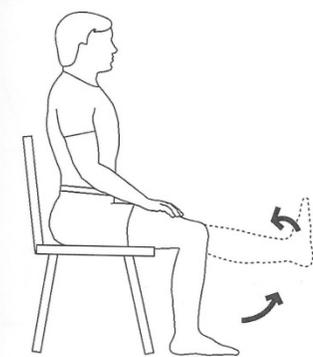
Supine Knee Extension



- 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.

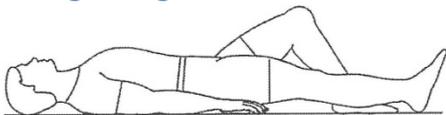
Special Instructions for Knee Extension:

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.

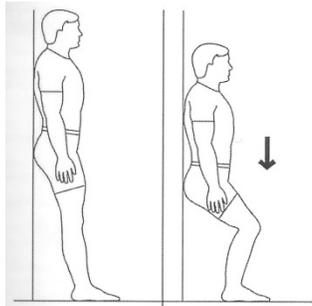
Straight Leg Raise



- 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.

Special Instructions:

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

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
Disalsid (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) (meclofenamate)	Aleve (naproxen)	Daypro (oxaprozin)	Meclomen
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 Cytosan Enbrel Imuran Librax Librium Methotrexate Remicade

YOU MAY CONTINUE TAKING THE FOLLOWING MEDICATIONS:

- Cholesterol medications
- Psychiatric medications
- Gabapentin
- 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

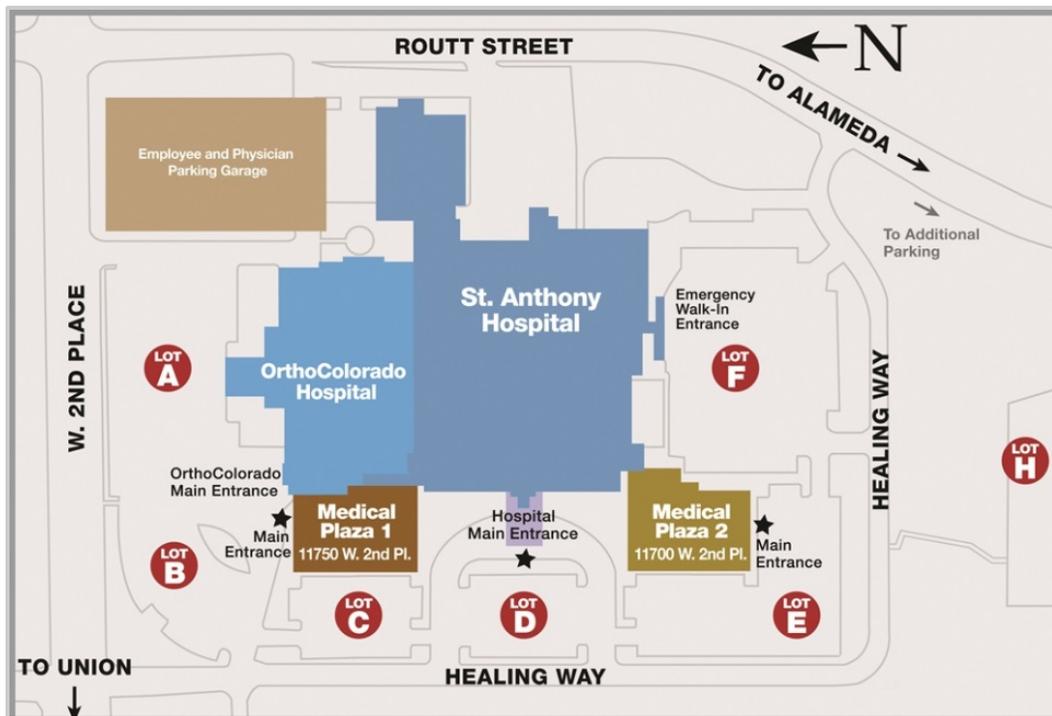
- Pills that contain combinations of ACE Inhibitors, ARBs or diuretics
- **It is OK to take the following blood pressure medications on the day of surgery:**
 - Beta blockers. Common beta blockers include
 - atenolol (Tenormin), metoprolol (Lopressor, Toprol), carvedilol (Coreg), propranolol (Inderal), 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:

- **For Constipation 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. If you are going to a rehab or nursing facility, transportation will be provided.

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. **Calf pain and thigh pain are particularly common.**
- 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)

***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.**

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

MS Contin: 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

-OR-

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.

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. Lyrica is given to patients 70 and younger.

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.**

	DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
	AM	PM	AM	PM								
in ¹	MS Contin											
am ²	Meloxicam Lyrica Senakot Xarelto	Meloxicam Lyrica Senakot										

	DAY 9		DAY 10		DAY 11		DAY 12		DAY 13		DAY 14	
	AM	PM	AM	PM								
in	MS Contin											
am	Meloxicam Lyrica Senakot Xarelto	Meloxicam Lyrica Senakot										

5	DAY 16		DAY 17		DAY 18		DAY 19		DAY 20		DAY 21	
	AM	PM										
am	Meloxicam Senakot											

MS Contin may be substituted for MS Contin. Both are long acting narcotic pain relievers.
 Meloxicam is continued for a total of 6 weeks from the operation (Celebrex may be substituted for Meloxicam)
 Xarelto is continued for a total of 14 days from the operation

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.
 - **Please bring ALL of the post-operative medications that you are currently taking in a bag so Dr. Foran or Michelle evaluate your further healing process can review and adjust them as needed.**
 - 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
 - **Note: occasionally, patients are sent home from the hospital with oxygen to help improve breathing for a few days or weeks. The decision to put you on oxygen is made by the internal medicine doctors and respiratory therapists at the hospital. To stop your home oxygen and to have your oxygen tank picked up by the company, contact your primary care provider. Please call your primary care provider to have your oxygen discontinued.**
-

FAQ's

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. **Calf and thigh soreness is especially common** in the first few weeks. 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 1-5% 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. Occasionally, patients get blistering on the operative leg. This is from excessive swelling. While blisters look alarming, they generally resolve without issue. If you blister please call Dr. Foran.

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 (MS Contin or OxyContin) 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. My Insurance doesn't cover some of my medications? What should I do?

The only medication you must take is your blood thinner (either aspirin, Xarelto, or in rare cases Lovenox or Warfarin.) The other prescribed postop pain medications (see page 15-16) are optional, but recommended. In the event that your insurance doesn't cover a particular medication, you can either choose to pay out of pocket (recommended if you are able) or simply go without that medication.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. 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, in rare cases 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-** 14100 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
303-421-2210
- **Fit Physical Therapy @ the Duncan YMCA-** 6350 Eldridge St, Arvada 80004
303-422-4977
- **Select PT-** 7777 W 38th Ave Suite A120, Wheat Ridge
303-940-0757

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/Parker

- **Panorama Physical Therapy-** 1060 Plaza Dr. Ste. 200, Highlands Ranch: 720-497-6170
- **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

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

- **Ascent Therapy Clinic** -9116 W Bowles Sve., Ste 10 Littleton 303-978-9200

- **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

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

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.



FOLLOW UP IS THE BEST MEDICINE®

HEALTHLOOP®

At Panorama Orthopedics and Spine, we believe in treating each patient as the most important person by providing you with the tools to support you in achieving the best possible outcome.

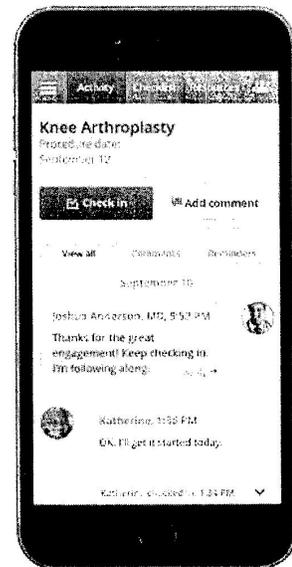
What is HealthLoop?

HealthLoop is a free service that may be offered to you by your physician to enable your care team to stay connected to you throughout your surgical journey. We want you to have the best outcome and your care team wants to deliver the best quality care.

How can I get on a "LOOP"?

Panorama is currently offering HealthLoop for patients undergoing specific procedures offered by our Sports, Total Joint and Spine physicians. Ask your physician if HealthLoop is an available tool for the procedure you are being scheduled for.

Getting on a "LOOP" is easy. Once you have been invited by your physician you will get an email check in. After you activate through that email, you will be able to use your computer or smart phone to connect with your care team.



Is it difficult to work a "LOOP"?

HealthLoop is extremely intuitive and provides automated guidance and reassurance, helping you organize what to do, when to do it, tracking your progress the entire way and answering any questions through secure messaging. All this is without having to pick up the phone!

**Questions? Contact Julie Meurer, Director of Special Projects
at 303.274.7306 for more information**

Example of Consent



#OCH0066ED Revised 01/12
White – Medical Record
Yellow - Patient



Patient Label

PATIENT INFORMED CONSENT

PATIENT NAME: _____ DATE OF TREATMENT/PROCEDURE: _____
DIAGNOSIS/CONDITION: Knee pain/arthritis

I hereby authorize Dr. Jared Foran (Practitioner) and/or such assistants as may be selected by him/her to perform the following treatment/procedure: RIGHT/ LEFT Total Knee Arthroplasty

RISKS OF PROPOSED OPERATION/PROCEDURE. Dr. Foran (Practitioner) has discussed with me the above procedure or treatment, the anticipated benefits, likelihood of success, material risks and side effects. Alternatives and their risks, benefits and side effects have also been discussed as well as the results of declining recommended or alternative therapies. This authorization is given with the understanding that any treatment/procedure and recuperation involves some risks and hazards. The more common risks include infection, bleeding, nerve injury, blood clots, heart attack, allergic reactions, severe blood loss, risks of blood transfusion (see below), and Continued pain, stiffness, need for further procedures, blood vessel injury, fracture (complete as discussed with patient if not document elsewhere). These risks can be serious and possibly fatal.

ADDITIONAL PROCEDURES. I understand that other problems/conditions may develop in the course of the treatment/procedures that cannot be reasonably foreseen. It is also possible that my physician may discover a different, unsuspected condition at the time of the procedure. I authorize the above named physicians, his/her assistants or designees as indicated in the chart below, to perform such unforeseen procedure(s) that are necessary according to their medical judgment.

ASSISTANTS. I understand that some aspects or important tasks of this treatment/procedure may be performed by healthcare providers other than the primary surgeon/practitioner (i.e., residents, physician assistants, advanced practice nurses, etc.) I understand that the care provided by these practitioners will be within the scope of their practice or privileges granted and will be performed in accordance with the state law and the hospital's policies based on their skill set and under the supervision of their responsible practitioner.

IMPLANTS/DEVICES IMPLANTED DURING OPERATION/PROCEDURE. I am aware that some surgical procedures require the implantation of medical devices and the federal laws and regulations require manufacturers to track these devices. If applicable to this procedure, I understand the physician and/or medical facility will release my Protected Health Information to the appropriate device manufacturer(s) per State and/or Federal regulations.

_____ I consent to vendors/observers being present as described to me.

_____ I DO NOT consent to vendors/observers being present.

BLOOD TRANSFUSIONS. It has been explained to me that I may need a transfusion of various blood components or derivatives. I understand the benefits, and that there are risks and side effects associated with the transfusion of blood or blood products. These include serious reactions (allergic and other reactions including headaches, itching, rash, hives, nausea, transient fever, or chills), damage to my own blood cells, volume overload which could affect heart and lungs and infections such as hepatitis and AIDS. These risks can be serious and possibly fatal. General alternatives and their risks, benefits and side effects have been explained to me including the risks and consequences of not receiving this treatment or the alternatives to treatment. Alternatives to donor blood including pre-donation of my own blood (autologous blood donation), directed donations, epoetin therapy, and use of a cell saver during surgery have been explained to me. I also understand that if I refuse blood or blood products, possible risks may include organ damage from inadequate oxygen (such as heart attack or stroke), inability to control bleeding, and sometimes even death.

_____ I consent to a blood transfusion if my physician determines it is needed.

_____ I DO NOT consent to a blood transfusion

Signature of Practitioner who conducted the informed consent discussion.

Date: _____ Time: _____

PATIENT CONSENT

I understand that no guarantees have been made to me regarding the results of this treatment/procedure and that it may or may not improve my condition. I have had sufficient opportunity to discuss my condition and treatment with my physicians and/or their associates, and all of my questions have been answered to my satisfaction. I believe that I have been given sufficient information and adequate knowledge upon which to make an informed decision about undergoing the proposed treatment/procedure. I have read and fully understand this form and I voluntarily authorize and consent to this treatment/procedure.

Signature of Patient or Legal Guardian

Date: _____ Time: _____

Date: _____ Time: _____