ERAS PROTOCOL AND PLAYBOOK: TKA IN THE ASC

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ERAS PROTOCOL AND PLAYBOOK: TKA IN THE ASC

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1. *Regularly scheduled pain medications*
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ENHANCED RECOVERY PATHWAY:

Total Knee Arthroplasty in the ASC Setting

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- **Presurgical Optimization**
  - Preoperative medical clearance required for all high-risk patients.
  - All patients have anesthesia preoperative visit. Required to bring caregiver who must also be available for 5 days and nights post-op. Preoperative teaching performed by Pre-op/PACU RN.
  - High-protein diet recommended for 4 weeks pre-op and 6 weeks post-op. Emphasize whole foods.
  - Patient selection:
    - Exclusions: Significant cardiac, pulmonary, renal or hepatic disease. Chronic anticoagulation with apixaban, rivaroxaban, enoxaparin or warfarin. Insulin dependent diabetes mellitus. Chronic pain patients. Patients with significant gait and/or balance issues. Prior CVA or significant thromboembolic disease requiring formal postoperative anticoagulation.
  - Patient optimization:
    - "Hard stops": BMI > 40, HbA1c > 8, Smoking cessation < 6 weeks (Confirmatory cotinine metabolite levels may be necessary on a case by case basis).

- **Infection Prophylaxis**
  - Electrostatic cleaning (IsoKlean®) of the ORs on the day prior to arthroplasty.
  - Universal alcohol-based nasal decolonization (Nozin®) bid beginning 3 days prior to surgery through POD 14 (including caretakers and OR staff).
  - Chlorhexidine (Sage®) wipes on the evening prior to surgery and on the morning of surgery.
  - Cefazolin preoperatively and prior to leaving facility. Vancomycin 15 mg/kg preoperatively for one dose only. Cefadroxil 500 mg PO X 7 days for high risk patients (diabetics, prior infection, inflammatory arthritis).
  - Space suits for team with sterile vests to cover back.
  - Maintain normothermia using an air-free patient warming system (HotDog®).
  - Chlorhexidine 0.05% (Irricept®) wound soaks for 3 minutes just prior to and after cementation of components.
  - Vancomycin powder, 1 gm, in the deep wound prior to wound closure.
  - Canister-less negative pressure dressing (PICO®) in conjunction with silver antimicrobial barrier dressing (Acticoat® Flex 7).

- **Anesthesia and Analgesia**
  - Solid food until 8 hours prior to surgery. Clear liquids exclusively between 8 and 2 hours prior to surgery. NPO for 2 hours prior to surgery.
  - Single shot adductor canal block under ultrasound. 10-20 ml 0.25% bupivacaine (0.2% ropivacaine as substitute).
  - Prefer short-acting spinal anesthetic using 3-4 ml mepivacaine HCL (20 mg/ml) with low dose IV sedation using ketamine (0.5 mg/kg) and propofol (75-125 mcg/kg/min). Anticipated duration of spinal is 90-120 minutes. Incidence of postoperative urinary retention is lower with mepivacaine vs. bupivacaine.
  - Ketorolac 15 mg IV immediately in PACU.
  - Goal is no parenteral narcotics intraoperatively or in PACU. For severe unremitting pain, consider fentanyl 50 mcg (1 ml) in PACU q10 minutes up to 100 mcg maximum.
  - No Foley catheters (patients void just prior to heading back to OR).
  - Multimodal opioid sparing oral cocktail:
    - Pre-op: pregabalin 75 mg PO, acetaminophen 1000 mg PO, celecoxib 400 mg PO, oxycodone hydrochloride ER 10 mg PO.
    - Post-op: pregabalin 75 mg PO bid for 7 days, celecoxib 200 mg PO bid for 30 days, Oxycodone hydrochloride ER 10 mg PO bid for 3 days, tramadol 50 to 100 mg PO q6h PRN, acetaminophen 650 mg PO q6h PRN, oxycodone 5 mg q4h PRN. Omeprazole 20 mg daily while on NSAIDs.
  - Post-op nausea and vomiting (PONV) prophylaxis:
    - Scopolamine 72h patch placed by patient 4 hours prior to scheduled surgery for patients with motion sickness or known problems with PONV (contraindicated for h/o glaucoma, urinary retention, psychiatric medications).
    - Ondansetron 4mg IV pre-op (repeated post-op as necessary).
    - Dexamethasone 8 mg IV pre-op.
    - Note that propofol drip used for sedation has a strong anti-emetic effect as well.
    - Patients receive at least 1.5 liters of IV fluid.

- **Surgery**
  - Surgical technique preferences for TKA:
    - Prefer tourniquet-less TKA for rapid rehabilitation.
    - Prefer patient specific instrumentation (PSI) as efficiency tool to minimize trays needed for surgery, to improve case turnover and to minimize sterilization burden.
    - Surgical technique should reestablish native pre-diseased joint line and perform only highly selective ligament releases to minimize soft tissue trauma.
  - Perform periarticular block with 102 ml **"CERTS"** cocktail:
    - "**C**lonidine (0.08 mg), **E**pinephrine (0.5 mg), **R**opivacaine (5 mg/ml 250 mg), **T**oradol (30 mg), **S**aline (0.9%-50ml)"
    - Fill 10 ml syringes X 10 (6 syringes with 20-gauge spinal needle and 4 syringes with 22-gauge 1 ½-inch needle):
      - Spinal needle injections with 20 ml placed 3 mm deep to posterior capsule, 30 ml placed between medial capsule and medial synovium at 1 cm increments from proximal to distal, and 10 ml directed proximally and medially toward adductor canal.
      - 22-gauge 1 ½ inch needle injections with 20 ml used to blister periosteum medially and laterally and 20 ml placed superficially in lateral aspect of extensor mechanism.
  - Placement of indwelling intraarticular catheter using On-Q® with Select-A-Flow® pump:
    - 400 ml pump filled to 550 ml with 0.2% ropivacaine with Select-A-Flow® set to 6 ml/hr.
    - Place catheter in the lateral gutter of the joint space just prior to wound closure:
      - Place entry site proximal and lateral to avoid midline dressing.
      - Aim like a 'dart' directly toward lateral gutter to avoid kinking the catheter.
      - Leave catheter tip just proximal to the joint line to avoid mechanical crimping of catheter end
      - Secure catheter at the entry point with an inverted 'V' Steri-Strip and the securement device provided.
    - Family instructed to temporarily increase flow rate to 8 ml/hr as needed for pain and to remove ON-Q® catheter when reservoir empty. Anticipated duration of pump therapy is 3 to 3 ½ days.
  - Surgical closure:
    - Prefer running, locked subcuticular closure (2-0 or 3-0 Stratafix® or Quil®).
    - Dermabond Prineo® Skin Closure System preferred.

- **Post-op**
  - PACU nurse instructs patient to ambulate WBAT with walker when spinal block has abated. Patient instructed on climbing wooden staircase prior to discharge.
  - Discharge home to caregiver when tolerating liquids and crackers, when pain and nausea are controlled, when adequately hydrated with stable blood pressure, when urinating, and when safely ambulating with a walker.
  - Re-dose antibiotics prior to discharge (Ancef or clindamycin only).

- **Home Care**
  - DVT prophylaxis: Aspirin 81 mg PO bid for 30 days beginning on evening of surgery. If risk factors for DVT, then apixaban 2.5 mg PO bid for 14 days beginning 24 hours after surgery followed by aspirin 81 mg PO bid for 30 days. Thigh-high TED stockings bilaterally for 21 days. Rechargeable Plasma Flow® intermittent compression stockings for 2 weeks.
  - Incentive spirometer: Instruct patient on hourly use while awake for the first 3 days after surgery.
  - Cold therapy: Recommend Game Ready® or similar device per manufacturer's recommendations for 4 weeks.
  - Showering: May begin showering in 3 days once the ON-Q® catheter has been removed from the knee joint.
  - Home exercises and outpatient physical therapy:
    - No home physical therapy.
    - Home self-exercise program is designed to promote early mobilization yet allow the soft tissues to "calm down" for a few days:
      - Limit walking and standing to 10-minute episodes every 1 to 2 hours with a walker while awake.
      - Begin the following home exercise program on the day of surgery:
        - Large towel roll under the ipsilateral ankle 4-6 X daily for 15 minutes to regain terminal extension.
        - Perform the following exercises three times daily:
          - "Dangle": Sit on the edge of the bed (or tall chair), support operative side ankle with opposite foot, dangle, and ultimately lower foot to the floor to regain 60-90 degrees of flexion.
          - Perform heel slides in the bed (sets of 20).
          - Standing hamstring curls (sets of 20).
    - Begin outpatient PT 48-72 hours post-op.
  - Office follow-up:

ENHANCED RECOVERY PATHWAY:

Total Knee Arthroplasty in the ASC Setting

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- Patient receives scheduled follow-up call from surgeon/office assistant/navigator on post-op day 1.
- First follow-up visit to surgeon is typically scheduled on post-op day 14.
- Driving typically 3 to 4 weeks post-op assuming no opioids. Return to work typically 4-6 weeks post-op.

THE SURGERY CENTER TOTAL JOINT REPLACEMENT PROGRAM

Total Knee Replacement

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1. General Information

i. Welcome and purpose

This booklet is designed to prepare you for your upcoming total knee replacement.

Two things are likely true if you are reading this information. First, you have been living with knee pain for an extended period of time. Second, you have probably lost the ability to function and exercise in the way that you would like to. As problems with pain and loss of function have become more severe, your quality of life has suffered. For these reasons, your doctor has recommended a knee replacement option for you.

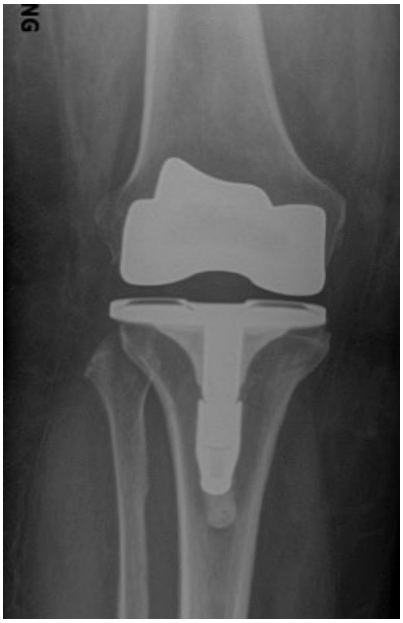
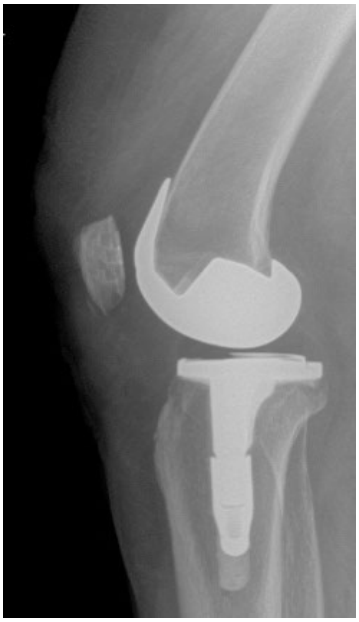
Those eligible for a total knee replacement are individuals experiencing chronic joint pain which interferes with daily life. You are not alone. Each year, over 600,000 Americans have a total knee replacement. A successful knee replacement combined with proper rehabilitation can help your knee pain and improve your daily function. For most people, a successful knee replacement leads to a higher quality of life, less pain, and better mobility. Your new knee can give you the quality of life that you may not have enjoyed for some time.

While the results of the operation cannot be guaranteed, the American Academy of Orthopedic Surgeons (AAOS) reports that "90 percent of people who have a knee replacement experience a significant reduction in pain."

ii. Introduction to total knee replacement

The knee joint is composed of three parts: the end of the femur (thigh bone), the top of the tibia (shin bone), and the patella (kneecap). In a normal knee, these three bones are covered with a smooth cartilage that cushions the bones and enables them to move easily. In an arthritic knee, the cartilage layers are destroyed resulting in bone rubbing on bone which causes pain, muscle weakness and limited motion. Arthritis is often described as "bone on bone." Total knee replacement surgery involves the "resurfacing" of the knee joint.

Your surgeon will make an incision over the front of your knee. Damaged sections of your knee are replaced with artificial parts which may be made of metals, ceramics, or plastics. The parts are either cemented or press fit into the bone. Your surgeon decides which method is best for you. One segment of the prosthesis fits over the end of the upper leg bone (femur) and the other fits over the top of your lower leg bone (tibia). The underside of the kneecap (patella) may or may not be resurfaced, depending on need. The incision is closed with sutures, staples, tape and/or glue. The surgery typically improves the bowed or knock-knee deformity and eliminates arthritis. Pain should lessen and function should improve over time.

2. Prior To Your Surgery

i. Preoperative evaluation

Prior to the operation, your surgeon may request that you see your primary care physician for pre-operative testing, such as lab work, x-rays, and/or an EKG. Please notify your surgeon immediately if you suspect an infection of any kind: bladder, skin, tooth, etc.

The anesthesia team will be reviewing your medical record prior to your knee replacement. You may receive a phone call from the preoperative nurse or anesthesiologist to clarify your medical history. We typically have you come to the surgery center for a preoperative evaluation with the anesthesia team. The nursing staff will perform preoperative teaching at that same time to better prepare you for a successful surgical outcome. We ask that your family member and/or caregiver accompany you for the preoperative evaluation and teaching appointment.

3. Preparing For Your Surgery

i. Preparing your home environment for a safe recovery:

- Remove hazards such as throw rugs from walking areas.
- Ensure that all stairways have secure hand railings.
- Tuck away long phone and lamp cords.
- Arrange furniture to accommodate easy movement with a walker.
- Use non-skid tub/shower mats.
- Choose a chair from your home with a back, firm seat cushion, and arms. The height of the seat should be about 18-19 inches off of the ground. An extra pillow or cushion can be used to build height if needed.

- If your bedroom is upstairs, you may want to prepare a sleeping area downstairs for the first week or two after your surgery.
- Place clean sheets on your bed prior to surgery.
- Clean and disinfect your bathroom.
- Purchase night lights for your bathrooms and hallways.
- Move loose fitting, comfortable clothes and pajamas to an easily accessible place. Keep items in drawers that are at waist level or above only.
- Consider temporary placement of a small pet with a loved one. If this is not possible, then be sure to keep dogs and cats out of the bed during your recovery to lower infection risk.
- Relocate frequently used kitchen items to counters or cupboards that are at waist level and above.
- Prepare meals that can be frozen and easily reheated.

ii. <u>Help at home:</u>

To ensure your safety, you need to have a friend or family member available to help you for the first five days and nights after your surgery.

Confirm transportation to and from the Surgery Center. You are NOT permitted to operate a vehicle following your discharge from the Surgery Center. Assure that the passenger seat reclines and can be fully extended backwards. Have a pillow available for extra support if needed.

iii. <u>What you need to have at home prior to surgery:</u>

You will receive several prescriptions from your physician. **GET ALL PRESCRIPTIONS FILLED PRIOR TO SURGERY. ON THE MORNING OF SURGERY, YOU WILL NEED TO BRING ALL OF YOUR NEW PRESCRIPTION BOTTLES WITH YOU TO THE SURGERY CENTER.** This is very important! Your doctor has a specific combination of drugs prescribed for you that will aid in both your recovery and pain relief. Some medications may require pre-authorization by your insurance company, so it would be wise to have your prescriptions filled during the week prior to surgery. If there are problems filling a certain prescription, or if the cost is too high, please notify the surgeon's office so that they may substitute a different medication. **You will also be taking 81mg of Aspirin twice a day for 30 days postoperatively to prevent blood clots unless you are allergic or otherwise directed by your surgeon.** A stool softener such as Colace should be taken while on narcotic pain medication to prevent constipation. Baby aspirin and Colace are both available over the counter.

At your pre-op visit, the nurse will provide you with SAGE® chlorhexidine wipes and Nozin® nasal swabs with instructions for use in the days leading up to surgery.

Some of the equipment necessary for home recovery (walker, elevated toilet seat, shower seat, ice packs or cold therapy cooler) will be delivered to the surgery center on the morning of surgery. Please be aware of this when selecting your vehicle. Items not provided can be found at medical supply stores, pharmacies, etc.

iv. <u>What to bring to the surgery center on the morning of surgery:</u>

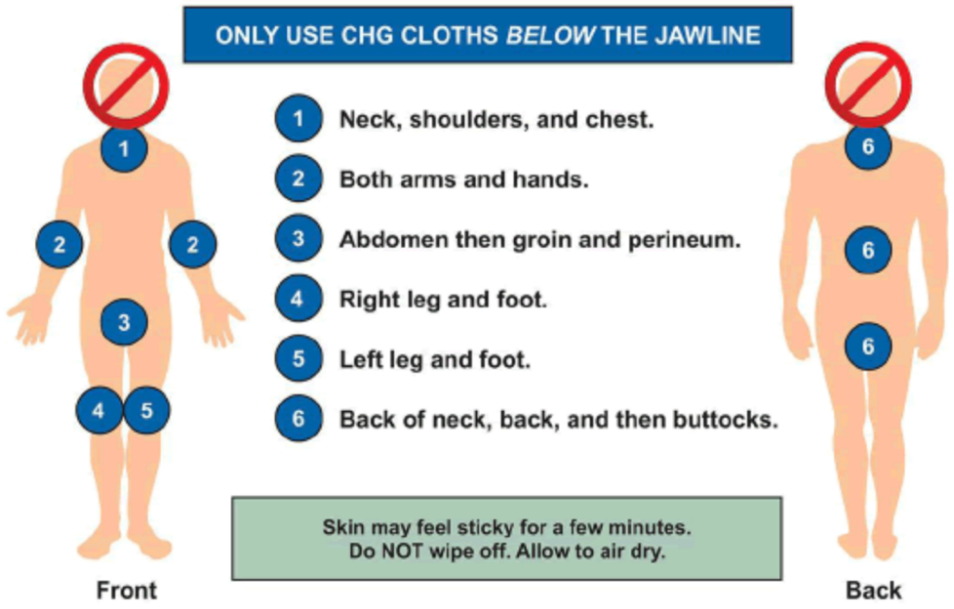
- Wear loose, comfortable clothing for easy dress following surgery
- Tennis shoes or flat rubber-soled shoes that tie or slip-on
- CPAP or BiPAP machine if used regularly for sleep
- Driver's license or photo ID
- Insurance card and payment if required
- Your list of current medications and supplements, noting medications that you have stopped prior to surgery
- Please leave jewelry, valuables, credit cards, and large sums of cash at home
- **BRING ALL NEW PRESCRIPTION IN ORIGINAL PACKAGING**

4. Prepping Your Skin and Nares (Nostrils) for Surgery:

i. How to use Sage® Wipes

Preparing or "prepping" your skin before surgery can reduce the risk of infection at the surgical site. SAGE® wipes are antibacterial wipes that are moistened with a rinse-free 2% Chlorhexidine Gluconate antiseptic solution. You have been given 3 packages of SAGE® wipes to prep the skin on the evening prior to surgery after taking a shower. There are 2 wipes in each package and thus you will have a total of 6 wipes. Please shower on the night before your surgery. **AFTER** you shower, wipe your entire body (except your face) with the SAGE® wipes. Please use wipes to cover each of the numbered areas below starting at your jaw line and going all the way down to your toes. Please refer to the diagram below for instructions.

DO NOT USE WIPES INSIDE GENITALS OR BETWEEN BUTTOCKS.



ii. How to use Nozin® Nasal Sanitizer

You will also be provided Nozin® Nasal Sanitizer. Nozin® is a safe and effective way to reduce nasal bacteria colonization (bacteria in your nose that may increase your risk of wound infection after surgery). Nozin® is a long-lasting antiseptic that kills 99.9% of germs and is clinically proven to decrease Staph aureus and other nasal bacteria flora. It is alcohol-based and contains no antibiotics. You will experience a pleasant, citrus-flavored moisturizing sensation in your nose with application. This is another important step in your skin prep. You will be provided a 12 ml bottle of Nozin® Nasal Sanitizer and Q-tips (you can use your own Q-tips at home if you run out). **Both you and your caregiver** will apply the Nozin® twice a day beginning three days before surgery, and you should continue to use for 2 weeks after surgery to significantly reduce the risk of developing a postoperative infection. To use your Nozin® nasal sanitizer:

- Shake bottle well
- Apply 4 drops to the cotton swab tip
- Swab one nostril 6 times clockwise and 6 times counter-clockwise
- Apply another 4 drops to the other end of the cotton swab
- Swab the other nostril 6 times in each direction
- Discard used swab and secure cap on bottle

Please refer to the Nozin® brochure for further instruction. Additional Nozin® can be ordered at www.Nozin.com

iii. Preoperative hygiene routine

On each of the three nights prior to surgery, please follow the hygiene routine below (for example, follow these routines on Friday, Saturday and Sunday nights before Monday surgery):

- Shower or bathe and shampoo your hair
- **DO NOT** shave at or near your affected knee
- **DO NOT** apply lotion or powder to your skin
- Dry your skin thoroughly
- On the night prior to surgery, open all three packages of Sage® wipes and wipe down your entire body except your face (see diagram). Keep wipes stored at room temperature
- Put on clean pajamas/sleepwear and sleep on clean sheets
- **Throw wipes away**; do not flush them down your toilet. If itching or redness occurs and persists after using the wipes, rinse the affected areas and contact your surgeon's office.
- Use Nozin® nasal swabs (twice daily) as directed above
- Put clean sheets on your bed

5. The Morning of Surgery

i. Please follow these preoperative instructions:

For your safety, please follow all instructions given by the nurse during your pre-operative visit.

- **It is important that you eat no solid food for 8 hours prior to surgery. You may drink clear liquids (black coffee, Gatorade, water) until 2 hours prior to surgery. Nothing by mouth whatsoever for the final 2 hours prior to surgery.** If you were instructed to take medications, please take them with minimal water. No chewing gum, candy, mints, or ice chips. These items can increase production of gastric juices and cause possible aspiration during surgery.
- DO NOT bathe or shower on the morning of surgery. You may wash your face and hands.
- DO NOT put on any lotions, powders, perfumes, make up, nail polish or jewelry.
- Leave your valuables at home except driver's license/photo ID, insurance card, and payment if required.
- Put on loose comfortable clothing and flat rubber-soled shoes that are easy to slip on.
- Please make arrangements to arrive on time at the surgery center on the day of surgery.

6. Arrival at the Center

i. Reception area:

Upon arrival to the surgery center you will check in at the reception desk. You will be asked to present your insurance card and photo ID.

ii. Preoperative area:

You will be escorted by the pre-op nurse to the pre-operative holding area where we will start your admission process and begin your preparation for surgery. The pre-op nurse will ask you to undress, wipe yourself with the SAGE® wipes and swab your nose with the Nozin® swabs (each provided by the surgery center on the morning of surgery). You will then put on a hospital gown.

You will also be given a thigh-high stocking to wear on your non-operative leg. **The other stocking will be placed on your operative leg 3 days after surgery (after removing the ACE and white cotton wraps placed during surgery).** You will continue to wear these stockings for 3 weeks or as instructed by your physician. The stockings promote blood circulation and prevent blood clots. You will also have sequential compression devices (SCD's), which are sleeves that wrap around the lower legs and inflate intermittently with air to prevent blood clots. The brand that we use are known as "PlasmaFlow®." These SCD's are placed on your non-operative leg in the pre-op area and the SCD for the operative leg will be placed after surgery. These stay on as many hours as possible for 2 weeks.

If you are a female of childbearing age, you may be asked to provide a urine sample for a pregnancy test. Your pre-op nurse will then start an IV in order to administer necessary medications and fluids for your surgery. You will also be given the oral medications ordered for you by your surgeon. Your pre-op nurse will then clip and prepare your operative leg for surgery.

You will meet your surgery team in the pre-operative area. Your team consists of your operating room nurse, anesthesia providers, and surgeon.

- The anesthesia providers will ask you questions about your health history and past surgeries. Alert the anesthesia provider if you have had any unusual reactions to anesthesia or medications. Your provider will explain the anesthetic that you will receive and answer any questions you may have.
- You may receive a nerve block known as an "adductor canal block" just prior to your surgery. Your anesthesia provider will perform this procedure with light sedation in the pre-op area. This block is performed in addition to the spinal or general anesthetic used for the surgery itself. This "adductor canal block" is a block of the femoral nerve in the mid-thigh which will help alleviate pain during and after your surgery. This type of block preserves much of the thigh muscle strength making early ambulation and rehab safer.
- Your surgeon will speak to you and mark the operative area before surgery. Both you and your surgeon will write "yes" on the appropriate knee with a skin marker. You will have an opportunity to ask questions at that time.
- The OR nurse will review your health history. You may have to answer questions that you have already answered. This is part of our safety protocol. The nurse will then escort you to the operating room.

iii. Operating room:

Once in the operating room, you will be greeted by healthcare staff who will verify your name, birthdate, surgeon, and procedure. You will be transferred to another bed and connected to the patient monitors. At that time, you will either be receiving a spinal block or a general anesthetic for your surgery. A spinal block is when the anesthesiologist injects medicine around the nerves in the low back area. This will numb the lower half of your body during surgery. A short-acting medication will be used that will wear off shortly after your surgery. Medication will also be administered through your IV during surgery to make you more relaxed and comfortable. The average length of time for your surgery is 1 ½ -2 hours.

iv. Recovery area:

Once surgery is finished, you will be taken to the recovery area. Your surgeon will speak with your family and/or caregiver and discuss the surgery completed as well as the recovery plan. You will awaken feeling groggy from the anesthesia. Your recovery room nurse will continuously monitor your vital signs and evaluate your comfort level. You are expected to have some pain. The goal is to have your pain low enough so that you can rest and take part in physical therapy. Your surgeon has ordered several pain medications to help keep your pain at a tolerable level. Please communicate with your nurse if you are feeling significant discomfort or nausea. Also let your nurse know if there is anything else you need to make you feel more comfortable.

Once your spinal block has worn off and the feeling has returned to your legs, your nurse will help dress you and help you into a reclining chair. Before you are discharged, you will be expected to walk with a walker and go up and down stairs with assistance. The average length of stay in the recovery area is less than 4 hours.

7. Going Home

i. General instructions

Prior to discharge, you will be given detailed homecare instructions, including phone numbers to contact your provider if needed. Please call your surgeon's office if you have any questions or concerns that are not addressed in the instructions.

You will have a PICO® dressing over your incision area for 14 days. The plastic tubing and small white box with the orange button is the PICO® pump that creates a negative pressure or "vacuum" within the dressing to decrease the risk of infection after surgery. **If the dressing starts leaking or becomes saturated (or if you are having any other issues), please contact the surgeon's office immediately.**

You will also have an ON-Q® pain pump with a small catheter that is placed into your knee joint during surgery. This pump automatically and continuously delivers a non-narcotic local anesthetic to the surgical site for approximately 3 to 3.5 days after surgery. The purpose is to provide targeted pain relief to your knee during the days immediately following your surgery. While the pain pump will not completely eliminate your pain, patients have reported up to 69% lower pain scores when the pump is placed during surgery. After surgery, you will receive discharge instructions regarding the operation of the pain pump.

After surgery, you will typically begin outpatient physical therapy within 2 to 3 days. Depending on surgeon discretion and patient mobility, selected patients may have 2 to 3 home physical therapy sessions during the first week with a home health therapist prior to starting outpatient therapy.

ii. What to do and what to expect

Medications: Your doctor will be sending you home with several medications to aid in your recovery. **REMEMBER TO HAVE ALL PRESCRIPTIONS FILLED AND BRING YOUR MEDICATION BOTTLES WITH YOU ON THE DAY OF SURGERY.** Follow all instructions given by your surgeon. If you have any questions regarding medications, please call your surgeon's office.

Incentive Spirometer ("breathing machine"): Use the incentive spirometer every hour while awake for the first 3 days after surgery. Sit upright in a chair or in bed. Put the mouthpiece in your mouth and close your lips tightly around it. Breath in slowly through your mouth as deeply as you can (you will see the piston rise inside the large column). When you get the piston as high as you can, hold your breath for 10 seconds or as long as you can. Repeat this breathing exercise 10 times, trying to get the piston to the same level with each breath. Using the incentive spirometer will help to re-expand your lungs after surgery and prevent complications such as pneumonia.

Everyday Activities:

- **Showering- You may shower 72 hours after surgery, once you remove your ACE wrap and ON-Q pain catheter.** Your PICO® dressing itself is splash-proof; however, it should not be exposed to direct jets of water or at any time be submerged. Disconnect

the white PICO pump tubing prior to showering, keep the pump itself dry, and reconnect the pump tubing after showering. Then press the orange button to reestablish the vacuum in the dressing. Please refer to the PICO® information sheet for further instructions. Do not submerge your knee in a tub or pool for 4 weeks.

- **Range of motion exercises-**Use a towel rolled up like a sleeping bag placed under your ankle for 15 minutes 4 to 6 times daily to regain extension ("straightening") of your knee. Also, have a family member support your leg in bed while you actively slide your heel toward your backside ("heel slides", 20 reps, 3 times daily). Stand next to the bed and raise your heel toward your backside ("hamstring curls", 20 reps, 3 times daily). Sit on the edge of the bed (or tall chair) several times daily, support the underside of the "bad" ankle with the front of your "good" foot, dangle the operative leg, and ultimately lower your foot to the floor to regain 60-90 degrees of flexion. The physical therapist will further clarify the home exercises during your upcoming therapy appointment.
- **Climbing stairs**- When climbing stairs, go up using your good leg first; go down with your bad leg first. Please make sure to hold on to a railing when using stairs.
- **Sitting**- Use chairs that have arms, backs, and firm seats. Use the arms to help lift yourself out of the chair. DO NOT sit on low stools, low chairs, or low toilets.
- **Walking**- You will begin walking on the day of surgery. Each day, the distance you walk can be slightly increased. During the first two weeks, we recommend that standing and walking be limited to 10-minute episodes, 6 to 10 times daily. Always use your walker and avoid over-exertion. DO NOT walk on uneven surfaces such as lawns or gravel. It is important to follow directions from your physical therapist. You will be able to bear weight on the affected leg with the use of your walker. **Walk for short 10-minute bursts every one to two hours**.
- **Walking aides-** For the first 3 days after surgery, DO NOT get up by yourself. To ensure safety, you should have someone with you for all activities, especially for the first 3 days. You should continue to use an assisted walking device (walker then cane) until cleared by physical therapy to walk without support.
- **Eating**- You may experience a temporary decrease in appetite. Be sure to drink plenty of fluids and stay well hydrated. You may return to a regular diet the day after surgery. Incorporate protein, fresh fruits and vegetables into your routine. This is very important for wound healing. You may develop constipation from use of your pain medications. Use a stool softener routinely and consider a laxative if needed.
- **Driving**- You will be able to drive once you are no longer taking prescription narcotics for pain. Discuss this with your physician since return to driving times may vary.
- **Working**- Your return to work will be discussed at your follow-up appointment.

Discomfort: It is important to take pain medications with food and as prescribed by your surgeon. It may be helpful to take your pain medication approximately 30 minutes before your planned therapy/exercise session. Do not wait until you feel severe discomfort to begin taking medication. Do not drink alcohol or drive while taking pain medication. As discomfort lessens, decrease the number of pills you are taking and how often you are taking them according to your doctor's instructions.

Eventually, you will no longer need pain medication. **Applying an ice pack to your knee for "30 minutes on and 30 minutes off" for 7-10 days** can help to reduce pain and swelling. Change position at least every 45 minutes during the day to avoid stiffness. Avoid placing a pillow under your knee as this may cause stiffness when trying to straighten your knee. Numbness around the incision may be expected at this time. Contact your surgeon if your discomfort does not respond to the above measures.

Intimacy: Generally, most people wait to resume sexual activity for a few weeks after surgery. Your incision, muscles, and ligaments need time to heal. You can resume sexual activity when you feel ready. If unsure, you can discuss return to sexual activity with your surgeon.

Blood Clots: You will be asked to wear snug TED stockings at home **for at least 3 weeks**. Elevate your affected leg above heart level for reasonable periods throughout the day. Pumping your foot up and down for five minutes during every waking hour can help to prevent blood clots. Also, take your anticoagulant (aspirin or other medication) as directed. Perform your exercises and walk frequently but for short intervals. Following these instructions will help to prevent blood clots. A blood clot in the leg can move to the lung which can lead to shortness of breath, chest pain, coughing up blood, or unexplained anxiety, especially with breathing. **Call 911 for this medical emergency.**

iii. <u>Contact your surgeon right away if any of the following blood clot signs occur:</u>

- Pain or excessive tenderness in your leg or calf
- Redness or excessive swelling of your calf
- Chest pain or shortness of breath

Also contact your surgeon if you note any of the following:

- Increased redness, heat, or swelling around the incision
- Increased drainage or foul-smelling drainage from incision
- New onset of severe pain in the knee or increased pain in the knee
- Persistent fever greater than 101 degrees or chills
- Inability to walk or put weight on your leg
- Increased numbness or tingling of the leg after numbing medications have worn off
- Occurrence of a significant fall

iv. <u>Do's and don'ts after total knee replacement</u>

For your safety, you should adhere to the following precautions, particularly during the first 4 weeks after surgery.

- **DO NOT** sit on low chairs. A chair with arms will allow you to get up and down easier.
- **DO NOT** twist your knee for 6 to 8 weeks.
- **DO NOT** sit longer than 45 minutes at a time as this may make the muscles around your knee stiffen.
- **DO** attend Physical Therapy as prescribed by your surgeon.

- **DO** push to gain maximum motion of your knee during the first 6 to 8 weeks after surgery (straightening and bending!)
- **DO** stay active, but don't overdo it. Limit walking to 10-minute episodes 6 to 10 times daily.

8. Contact Information

Surgery Center Nursing Staff:

Name, title: phone number

Surgery Center Physicians:

Physician 1 name (physician office location): phone number

Physician 2 name (physician office location): phone number

Physician 3 name (physician office location): phone number

Surgery Center Street Address City, Zip Code Phone Number

Arrival Time: _____

REMEMBER TO BRING YOUR PRESCRIBED MEDICATIONS WITH YOU ON THE MORNING OF SURGERY.

FACILITY LOGO

Total Knee Replacement Pre-Operative Orders

Pre-Op Orders:

Diet:

- Solid food until 8 hours prior to surgery. Clear liquids exclusively between 8 and 2 hours prior to surgery. NPO for 2 hours prior to surgery.

Orders and Treatments:

- 2% Chlorhexidine Gluconate wipes (SAGE Wipes). Instruct patient or caregiver to use all three packs of SAGE wipes to clean each arm, each leg, chest, back, and perineal area. If patient is allergic to Chlorhexidine, then use Betadine only on the operative leg.
- Nozin nasal swabs to bilateral nares (nostrils). Have patient swab one naris 6 times clockwise and 6 times counterclockwise. Use a separate swab and have patient swab the other naris 6 times in both directions.
- Start 1 peripheral IV on the non-operative side.
- Clip and prep appropriate knee (6 inches above and below surgery site)
- Place TED stocking (thigh high) on the unaffected leg prior to surgery and send other stocking to OR with patient.

Antibiotics: *(note that usual routine is Ancef combined with Vancomycin unless PCN anaphylaxis and/or contraindication to Vanc)*

- ☐ Ancef 2 grams IV pre-op if weight 120 kg or less. Use Ancef 3 grams if weight greater than 120 kg. Start within 60 minutes of anticipated incision. Use Ancef unless history of anaphylaxis with PCN or cephalosporin.
- ☐ Vancomycin 15 mg/kg IVPB over 60 minutes x1 dose. Start within 60 minutes of anticipated incision. All medication must be infused prior to incision. Consult physician if allergic to Vancomycin.
- ☐ If Ancef contraindicated, give Clindamycin 900 mg IVPB x1.

Medications:

- Celebrex 400 mg PO x1 dose one hour prior to surgery in pre-op with a sip of water. Give Meloxicam 15 mg PO if sulfa allergy.
- Lyrica 75 mg PO x1 dose one hour prior to surgery in pre-op with sip of water. Hold for preexisting mild dementia or age over 70.
- Oxycontin 10 mg PO x1 dose one hour prior to surgery in pre-op with sip of water.
- Tylenol 1gram po x1 one hour prior to surgery in pre-op with sip of water

Labs/Radiology/Pre-Surgery Workup:

- Pre-op CBC
- If Diabetic obtain a finger stick blood glucose on arrival and cover if necessary per anesthesia.

Intraoperative:

- TXA 1 gram IVPB prior to incision. Repeat dose of TXA 1gram IVPB at the end of the case.
- PICO dressing and Acticoat to incision site.
- ☐ 1/8-inch Hemovac Drain to wound.
- ☐ Straight Cath at end of case

Note: If patient is currently prescribed a Beta-Blocker, patient to take Beta Blocker at home within 24 hours of surgery with a sip of water. Nurse to document date and time last taken on the medication reconciliation form.

MD SIGNATURE: _____ DATE: _____ TIME:_____

RN SIGNATURE: _____ DATE: _____ TIME:_____

YOUR LOGO

Total Knee Replacement Post-Operative Orders

Diet:

- Clear liquids and advance as tolerated

Orders and Treatments:

- Vital signs per policy
- Neurovascular checks per policy
- TED Hose to bilateral lower extremities (send operative side TED home with patient if limb wrapped with ACE wrap)
- PICO dressing to incision x14 days. Send additional dressing home with the patient if available.
- Weight bear as tolerated with assistance using walker
- Nursing to complete sit to stand transfer, toilet transfer, ambulation, and stairs with patient prior to discharge
- Give patient Incentive Spirometer and instruct them to use IS several times a day

Medications:

- Acetaminophen 1 Gram PO on admission to Phase 2
- Ancef 2 grams IVPB 3 hours after first dose, if no severe Penicillin allergy (anaphylaxis). For patients greater than 120 kg, administer Ancef 3 grams.
- All other medications per anesthesia orders

DATE/TIME:_____ MD SIGNATURE:_____

DATE/TIME: _____ RN SIGNATURE: _____

Logo for Ambulatory Surgery Center

Discharge Instructions: Total Knee Replacement

Activity

Weight bearing status: It's okay to bear weight on the affected leg with crutches or a walker. For the first 3 days after surgery, you should have someone with you for safety for all activities, particularly when you get out of bed. During the first 2 weeks, standing and walking should be limited to 10-minute episodes to minimize swelling in the knee and foot (6 to 10 times daily).

Range of motion exercises: Use a towel rolled up like a sleeping bag placed under your ankle for 15 minutes 4 to 6 times daily to regain extension ("straightening") of your knee. Also, have a family member support your leg in bed while you actively slide your heel toward your backside ("heel slides", 20 reps, 3 times daily). Stand next to the bed and raise your heel toward your backside ("hamstring curls", 20 reps, 3 times daily). Sit on the edge of the bed (or tall chair) several times daily, support the underside of the "bad" ankle with the front of your "good" foot, dangle the operative leg, and ultimately lower your foot to the floor to regain 60-90 degrees of flexion.

The physical therapist will further clarify the home exercises during your upcoming therapy appointment.

Climbing stairs: You can climb stairs on a limited basis after surgery, though it would be best to set yourself up in a downstairs bedroom during the first week after surgery. When climbing stairs, go up using your good leg first. Then, go down the stairs with your bad leg first ("up with the good and down with the bad"). Please make sure to hold on to a railing when using stairs. Having your caregiver next to you when you climb stairs during the first 5-7 days after surgery is important for safety.

Driving: Typically 3 to 4 weeks postoperatively or when approved by your physician. You should be off all opioid pain pills prior to driving.

Return to work: This will be discussed at your follow-up appointment. Typically 4 to 6 weeks.

Pain

We have used a "4-pronged approach" to manage your pain after knee replacement surgery:

1. "Cocktail" of various medications given by mouth before and after surgery that are designed to reduce your pain. Several different medications are used with complementary modes of action that work together in order to reduce the need for "opioid" pain medications after surgery. See the discharge medication list for further details.
2. ON-Q® Pain Pump. A hair-fine catheter was placed into your joint during surgery that will deliver numbing medicine into your knee joint for approximately 3 to 3 ½ days. See below.
3. "Periarticular block": During your surgery, approximately 100 injections were given into the muscles, ligaments, tendons, joint capsule and skin tissue around your knee using a mixture of injectable medications including numbing medication, anti-inflammatory medication and other pain-relieving

medications. These injections into the tissues around the knee during surgery should help greatly with your pain during the first 24 hours.

4. "Adductor canal block": This nerve block was performed by the anesthesia team prior to surgery. A needle was used under ultrasound guidance to numb the nerve that runs along the inner aspect of your thigh. The nerve block typically helps with pain around your knee for approximately 18 hours.

Using this 4-pronged approach to pain management, your pain should be reasonably well controlled for the first 24 hours after surgery. However, you should expect that your pain will increase during the second evening and night after your surgery since the numbing medication injected around your knee joint will begin to wear off. In other words, if your surgery was on Monday, expect an increase in pain on Tuesday night. Strict elevation of your leg, cold therapy, and use of additional pain medication by mouth on the second evening after surgery should help to "stay ahead" of the pain. The pain should begin to improve again on the following day.

Diet

Day of surgery: Eat lightly. Hydrate. Clear soups (chicken noodle soup). Toast. Crackers. Jell-O. Ginger Ale. Gatorade, etc.

Next morning: Eat a regular breakfast.

Subsequent meals: Emphasize protein. Fresh fruits and vegetables. Small frequent meals. This is very important for wound healing. Continue to hydrate well.

Incentive Spirometer

Use the incentive spirometer every hour while awake for the first 3 days after surgery. Sit upright in a chair or in bed. Put the mouthpiece in your mouth and close your lips tightly around it. Breath in slowly through your mouth as deeply as you can (you will see the piston rise inside the large column). When you get the piston as high as you can, hold your breath for 10 seconds or as long as you can. Repeat this breathing exercise 10 times, trying to get the piston to the same level with each breath. Using the incentive spirometer will help to re-expand your lungs after surgery and prevent complications such as pneumonia.

Wound and Dressing Care

☐ PICO® dressing. Refer to PICO patient handbook. This "negative pressure" dressing should remain in place for **14** days to help to decrease the chance of infection. The pump should be temporarily disconnected from the tubing during showering and reconnected immediately after showering. The dressing itself is splash-proof but should not be exposed to direct jets of water. Never submerge the dressing or pump in the tub. The actual pump portion of the PICO® dressing is designed to stop working permanently 7 days after surgery. If desired, you may cut the pump tubing at that time, leave the actual dressing in place, and discard the pump and tubing.

Note: If the dressing is very soiled at the end of the 7-day pump function, you can remove the dressing on the 7th postoperative day, cover the wound with dry 4X4's and paper tape, and change the dressing daily

until follow-up. If the dressing appears reasonably clean, you may leave the dressing in place until you see your physician.

☐ Aquacel® dressing: This antibacterial dressing should remain in place for at least 7 days postoperatively. Do not remove the Aquacel® dressing unless requested to do so by your care team. You may shower with this dressing in place since it is waterproof. Do not submerge this dressing in tub. If the Aquacel® dressing becomes completely saturated, please notify the surgeon's office immediately for further instructions.

☐ Prineo® dressing: This antibacterial skin closure device consists of a mesh and skin adhesive (glue) that your surgical team placed on the incision at the completion of surgery. Instead of sutures or staples, the Prineo® has been used to hold the wound edges together as the wound begins to heal over the first 7 to 14 days. The Prineo® dressing can either be (1) used as the only external dressing or (2) used underneath another dressing such as a 4X4 gauze or PICO® dressing. Do not remove the Prineo® dressing unless requested to do so by your care team. Typically, the mesh will begin to peel away from the skin by itself around 4 to 6 weeks after surgery. As the mesh separates from the skin after 4 weeks, you may trim the detached portions of the mesh with scissors and simply allow the mesh to gradually peel the rest of the way off the skin over time. See showering instructions below.

ON-Q® Pain Pump

ON-Q® Pain Relief System: Please refer to the instructions provided regarding the operation of the ON-Q® pain pump. This pump automatically and continuously delivers a non-narcotic local anesthetic to the surgical site for approximately 3 to 3 ½ days. The purpose is to provide targeted pain relief to your knee during the days immediately following your surgery. While the pain pump will not completely eliminate your pain, patients have reported up to 69% lower pain scores when the pump is placed during surgery. Your surgical team has set the controller on the pump to flow at 6 ml/hr. If you notice that your knee pain is increasing during the first 24 or 48 hours after surgery, you are permitted to temporarily turn the flow rate up to 8 ml/hr for 2 to 3 hours until the pain has improved. After your pain has improved, turn the flow rate back down to the 6 ml/hr baseline flow rate.

The pump ball will normally seem very tight and full during the first 24 hours. After 24 hours of infusion, enough medication should be emptied from the pump that you should start to see wrinkling in the outer cover of the balloon. The outer cover will appear larger as the inner pump ball gets smaller. Always check the white clamp on the tubing to make sure that it is not crimped along the line. If 24 hours have passed and you don't notice wrinkles in the outer cover of the balloon, please call the ON-Q® 24-hour Product Support Hotline at 1.800.444.2728 and have the nurse on call paged.

After 3 to 3 ½ days, you will know that your pump is empty when (1) the inner balloon is not in the shape of a ball anymore (the shape will resemble an apple core) and (2) the balloon feels almost weightless. When the pump is completely empty, you should remove the plastic catheter which is taped to the upper outer portion of the knee. To remove the ON-Q® plastic pump tubing from the knee, (1) wash your hands with soap and water for 20 seconds, (2) remove the tape and Velcro which secures the tubing to the skin, (3) hold the tube close to your skin, and (4) gently pull the tube. It should come out easily. When the tube is completely out of your skin, you should see a black tip on the end of the tube. Discard the pump and

tubing. You may clean the catheter site on your skin with alcohol. Commonly, you will notice some bleeding from the site where the catheter was removed from the skin. If so, place a 4X4 gauze and tape for 24 hours. Use an Ace wrap as necessary to apply pressure for a few hours. Call your surgeon's office if the bleeding or drainage does not stop within 24 hours.

Showering

May begin showering in 72 hours. Consider taking a shower once the ON-Q® pain pump has been removed from the knee joint. See "Wound and Dressing Care" instructions. Do not submerge your knee in a tub or pool for 4 weeks.

Sequential Compression Devices (PlasmaFlow®)

The purpose of the PlasmaFlow® "calf pumps" is to aid in the prevention of blood clots by helping to stimulate blood flow in the legs. Use the PlasmaFlow devices on both lower legs for as many hours during the day and night as possible (remove to shower). Use these devices for 2 weeks, then discontinue.

You will have to recharge the devices periodically. Once fully charged, these battery-powered devices will work for 7 to 9 hours before they need to be recharged. You may wear the devices during recharging. Additional instructions are available at manamed.net

We also recommend wearing thigh-high TED stockings on both legs for 21 days postoperatively. You may remove these for showers and skin care; however, wear them as many hours as possible during day and night.

Cold Therapy

You may use a cold therapy device on your knee on a regular basis. Please follow the manufacturer's recommendations.

Skin and Nose Care

Continue Nozin® nasal swabs twice daily for 14 days after surgery. This is designed to minimize the risk of "Staph" infection. Your caregiver and other family members in close contact should also use the Nozin® twice daily on the same days that you do. Frequent hand washing is also important.

Medications

Try to have some food on your stomach when taking the pain medications that have been prescribed after surgery.

<u>Regularly scheduled pain medications: These should be taken on a regular schedule, regardless of pain level.</u>

☐ Celebrex 200 mg by mouth twice daily for 30 days

☐ Meloxicam (Mobic) 15 mg by mouth daily for 30 days

☐ Gabapentin (Neurontin) 300 mg by mouth twice daily for 7 days

☐ Gabapentin (Neurontin) 300 mg by mouth twice daily for 14 days

☐ Pregabalin (Lyrica) 75 mg by mouth twice daily for 7 days

☐ Pregabalin (Lyrica) 75 mg by mouth twice daily for 14 days

☐ Tramadol 50 mg by mouth every 6 hours for 5 days, then as needed

☐ Tylenol Arthritis 650 mg by mouth every 6 hours for 5 days, then as needed

☐ Oxycontin 10 mg by mouth every 12 hours for 3 days

☐ Oxycontin 20 mg by mouth every 12 hours for 3 days

"As Needed" pain medications: These can be taken as needed for increased pain. While these medications don't have to be taken on a regular schedule, it is generally better to "stay ahead" of the pain.

☐ Hydrocodone 10/325 mg pills: one by mouth every 4 to 6 hours as needed

☐ Oxycodone 10/325 mg pills: one by mouth every 4 to 6 hours as needed

☐ Oxycodone 5 mg pills: one by mouth every 4 hours as needed

☐ Nucynta 50 to 100 mg every 4 to 6 hours as needed for pain

Regularly scheduled medications for blood clot prevention:

☐ Aspirin 81 mg by mouth twice daily for 30 days

☐ Aspirin 325 mg by mouth twice daily for 30 days

☐ Eliquis 2.5 mg by mouth twice daily for 14 days

☐ Xarelto 10 mg by mouth daily for 14 days

☐ Other _____

Regularly scheduled antibiotics:

☐ Duricef 500 mg by mouth on evening of surgery and next morning

☐ Duricef 500 mg by mouth on evening of surgery and twice daily for 7 days

☐ Clindamycin 300 mg by mouth on evening of surgery and next morning

☐ Other _____

"As needed" nausea medications:

☐ Zofran 4 mg by mouth every 4 to 6 hours as needed for nausea and/or vomiting

☐ Phenergan 12.5 mg by mouth every 4 to 6 hours as needed for nausea and/or vomiting

☐ Phenergan 25 mg by mouth every 4 to 6 hours as needed for nausea and/or vomiting

☐ Scopolamine patch. Continue for 72 hours from time of application

Other medications:

☐ Pantoprazole (Protonix) 40 mg by mouth every morning before breakfast

☐ Omeprazole (Prilosec) 40 mg by mouth every morning before breakfast

☐ Docusate sodium (Colace) 100 mg by mouth twice daily while taking opioids

☐ Polyethylene glycol (Miralax) 17 grams (1 packet) once daily for constipation

Regular (daily) medications: Please refer to "Medication Reconciliation" form.

Physical Therapy: You should be scheduled to see an outpatient physical therapist around 48-72 hours after your surgery. We prefer outpatient therapy (at the therapy gym) over home PT due to the availability of special equipment and expertise. Please contact your surgeon's office if unclear about your outpatient therapy appointment.

Follow-up Appointment: Please keep your follow-up appointment as scheduled. Call your surgeon's office if you are uncertain of appointment date.

In Case of Emergency

Life-threatening emergency: Please call 911.

Other urgent problems: Please call your surgeon's office at (XXX) XXX-XXXX.

Monday to Friday, 8:30 AM to 4:30 PM: Please ask for triage nurse.

Afterhours and weekends: Navigate phone tree and speak to answering service.

For any additional questions for your surgeon, call (XXX) XXX-XXXX

If you should experience any problems that you feel warrant the attention of a physician and you cannot reach your surgeon through his/her office or answering service, please go to an Emergency Room which is closest to you. If you have a life-threatening emergency, call 911.

RN SIGNATURE _____ DATE: _____ TIME: _____

RESPONSIBLE PARTY: _____ DATE: _____ TIME:_____

Total Joint Replacement Discharge Medication List

Important note: For your usual (daily) medications, please refer to the “Medication Reconciliation Form" also provided.

Check Per MD Order	Medication Name	What Is It for?	How Many Do I Take?	How Often Do I Take It?	Time of Last Dose Given at Center
	REGULARLY SCHEDULED PAIN MEDICATIONS				
	Celebrex 200 mg	Inflammation	1 tablet	Twice daily for 30 days	
	Meloxicam (Mobic) 15 mg	Inflammation	1 tablet	Once daily for 30 days	
	Gabapentin (Neurontin) 300 mg	Nerve pain	1 tablet	Twice daily for 14 days	
	Prebabalin (Lyrica) 75 mg	Nerve pain	1 tablet	Twice daily for 14 days	
	Tramadol (Ultram) 50 mg	Non-opioid pain control	1 tablet	Every 6 hours around the clock for 5 days then as needed	
	Tylenol Arthritis 650 mg	Non-opioid pain control	1 tablet		
	Oxycontin ER 10 mg (OxyContin)	Long acting pain control	1 tablet	Every 12 hours for 3 days	
	AS NEEDED PAIN MEDICATIONS				
	Oxycodone 5 mg	Breakthrough pain control	1 tablet	Every 4-6 hours as needed	
	Hydrocodone 5/325	Breakthrough pain control	1 tablet	Every 4-6 hours as needed	
	BLOOD CLOT PREVENTION				
	Aspirin 81 mg	Blood clot prevention	1 tablet	Twice daily for 30 days	
	Aspirin 325 mg	Blood clot prevention	1 tablet	Twice daily for 30 days	
	Eliquis 2.5 mg	Blood clot prevention	1 tablet	Twice daily for 14 days	
	Xarelto 10 mg	Blood clot prevention	1 tablet	Once daily for 14 days	
	OTHER MEDICATIONS				
	Pantoprazole (Protonix) 40 mg	Stomach protection	1 tablet	Every morning before breakfast	
	Omeprazole (Prilosec) 40 mg	Stomach protection	1 tablet	Every morning before breakfast	
	Colace 100 mg	Stool softener	1 tablet	Twice daily while taking opioids	
	Duricef 500 mg	Antibiotic	1 tablet	Twice daily for 7 days	
	Other:				

Total Joint Replacement Discharge Medication List

Important note: For your usual (daily) medications, please refer to the “Medication Reconciliation Form" also provided.

Check Per MD Order	Medication Name	What Is It for?	How Many Do I Take?	How Often Do I Take It?	Time of Last Dose Given at Center
	REGULARLY SCHEDULED PAIN MEDICATIONS				
	Celebrex 200 mg	Inflammation	1 tablet	Twice daily for 30 days	
	Meloxicam (Mobic) 15 mg	Inflammation	1 tablet	Once daily for 30 days	
	Gabapentin (Neurontin) 300 mg	Nerve pain	1 tablet	Twice daily for 7 days	
	Gabapentin (Neurontin) 300 mg	Nerve pain	1 tablet	Twice daily for 14 days	
	Prebabalin (Lyrica) 75 mg	Nerve pain	1 tablet	Twice daily for 7 days	
	Prebabalin (Lyrica) 75 mg	Nerve pain	1 tablet	Twice daily for 14 days	
	Tramadol (Ultram) 50 mg	Non-opioid pain control	1 tablet	Every 6 hours around the clock for 5 days then as needed	
	Tylenol Arthritis 650 mg	Non-opioid pain control	1 tablet		
	Oxycontin ER 10 mg (OxyContin)	Long acting pain control	1 tablet	Every 12 hours for 3 days	
	Oxycontin ER 20 mg (OxyContin)	Long acting pain control	1 tablet	Every 12 hours for 3 days	
	Other:				
	AS NEEDED PAIN MEDICATIONS				
	Oxycodone 5 mg	Breakthrough pain control	1 tablet	Every 4-6 hours as needed	
	Oxycodone 10 mg	Breakthrough pain control	1 tablet	Every 4-6 hours as needed	
	Hydrocodone 5/325	Breakthrough pain control	1 tablet	Every 4-6 hours as needed	
	Hydrocodone 10/325	Breakthrough pain control	1 tablet	Every 4-6 hours as needed	
	Nucynta 50 mg	Breakthrough pain control	1 to 2 tablets	Every 4-6 hours as needed	
	Other:				

Total Joint Replacement Discharge Medication List

Check Per MD Order	BLOOD CLOT PREVENTION				Last Dose at Center
	Aspirin 81 mg	Blood clot prevention	1 tablet	Twice daily for 30 days	
	Aspirin 325 mg	Blood clot prevention	1 tablet	Twice daily for 30 days	
	Eliquis 2.5 mg	Blood clot prevention	1 tablet	Twice daily for 14 days	
	Xarelto 10 mg	Blood clot prevention	1 tablet	Once daily for 14 days	
	Other:				
	ANTIBIOTICS				
	Cefadroxil (Duricef) 500 mg	Antibiotic	1 tablet	Evening of surgery and next morning	
	Cefadroxil (Duricef) 500 mg	Antibiotic	1 tablet	Twice daily for 7 days	
	Clindamycin (Cleocin) 300 mg	Antibiotic	1 tablet	Evening of surgery and next morning	
	Other:				
	NAUSEA MEDICATIONS (AS NEEDED)				
	Ondansetron (Zofran) 4 mg	Nausea	1 tablet	Every 4-6 hours as needed	
	Promethazine (Phenergan) 12.5 mg	Nausea	1 tablet	Every 4-6 hours as needed	
	Promethazine (Phenergan) 25 mg	Nausea	1 tablet	Every 4-6 hours as needed	
	Scopolamine patch	Nausea	1 patch	Continue for 72 hours	
	Other:				
	OTHER MEDICATIONS				
	Pantoprazole (Protonix) 40 mg	Stomach protection	1 tablet	Every morning before breakfast	
	Omeprazole (Prilosec) 40 mg	Stomach protection	1 tablet	Every morning before breakfast	
	Docusate sodium (Colace) 100 mg	Stool softener	1 capsule	Twice daily while taking opioids	
	Polyethylene glycol (Miralax) 17 grams	Laxative	1 packet	Once daily for constipation	
	Other:				

Medication Fact Sheet

This Fact Sheet will explain why certain medications were prescribed after your surgery and will help you understand the most common side effects of these medications.

Reason for Medication	Name of Medication Generic (Brand)	Most Common Side Effects	How to Avoid Side Effects
Opioid Pain Relief 	**Examples:** • Oxycodone (Roxicodone) • Hydrocodone (Vicodin) • Hydromorphone (Dilaudid) • Oxycodone/Acetaminophen (Percocet) • Tramadol (Ultram) • Oxycodone ER (Oxycontin)	**May Cause:** • Dizziness • Constipation • Queasiness • Throwing Up • Rash • Confusion • "Loopy feeling" • Dry mouth • Difficulty falling asleep • Headache	**What you can do:** • Drink a lot of water. • Suck on Ice Chips. • Eat something before you take these medications.
Stool Softeners/Laxatives 	**Examples:** • Sennosides (Senokot) • Docusate Sodium (Colace) • Magnesium Hydroxide (Milk of Magnesia) • Polyethylene Glycol (Miralax)	**May Cause:** • Diarrhea • Cramping • Discomfort • Bitter Taste in Mouth	**What you can do:** • Consider FOODs (instead of medications) to help with constipation: prunes, fruit, oatmeal. • For bitter taste – suck on a mint.
Blood Thinners to Prevent Blood Clots 	**Examples:** • Aspirin • Rivaroxaban (Xarelto) • Apixaban (Eliquis) • Enoxaparin (Lovenox) • Warfarin (Coumadin) • Fondaparinux (Arixtra)	**May Cause:** • Bleeding (at operative sight but also potentially nose, teeth and rectum) • Bruising	**What you can do:** • Brush your teeth gently. • Use electric razor to avoid nicks. • Move cautiously to prevent bruising. • Monitor for bleeding when you have a bowel movement.