



 Kaleida Health

Orthopaedic joint ventures

A stylized illustration of a human leg, showing the hip, femur, tibia, and foot. The hip and knee joints are highlighted in a darker blue, and the femur and tibia are in a lighter blue, indicating a joint replacement procedure.

TOTAL KNEE REPLACEMENT INSTRUCTIONAL GUIDE

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Welcome

Thank you for choosing the Kaleida Health “Joint Ventures” Program for your total knee replacement surgery.

Our orthopaedic team is proud to serve you and we are all focused on helping you achieve the best possible outcome with quality medical treatment, attentive bedside care, and the latest rehabilitation therapies.

Each patient progresses differently, so your program will be designed to meet your specific needs. We want you to achieve a full recovery so you can get back to your life as quickly as possible, but this can only be accomplished if everyone works together. The skill and dedication of your physicians, nurse practitioners, nurses and therapists are only half of the team. You (the patient) and your family represent the other half of the team and will play a big role in your successful recovery.

We strongly encourage you and your coach to attend the “Joint Ventures” pre-op class to help you both prepare to fully participate in all aspects of care before and after surgery.

We are honored to be your preferred orthopaedic service provider.

Partners In Patient Safety (PIPS)

Empower Yourself During Your Hospital Stay

It's a fact. Patients who are involved in their own care and who ask questions while in the hospital generally tend to do better than those who are not involved. Health care is a team effort, and you are the most important player. By being a partner in patient safety (PIPS), you can make your hospital stay a positive experience for you and your family.

We welcome your questions because you have the right to know about every aspect of your care. Below are important topics related to your safety and hospital stay, as well as suggested questions for each that you can ask to ensure you receive very good care:

Stop The Spread Of Germs

Excuse me, but did you wash your hands before you came into my room?

- Hand washing is the best way to prevent the spread of germs. Do not hesitate to remind our staff to wash their hands and wear gloves before examining you or giving you your medicines.
- Ask friends and relatives who have colds, respiratory symptoms, or other contagious diseases not to visit you in the hospital.
- Ask your nurse for the flu and pneumonia vaccines to help you fight any germs you might have been exposed to.

Identify Yourself

Could you double check my I.D. band to be sure this is for me?

- Check the information on your hospital I.D. band to make sure that your name is correct and that your date of birth is also on your I.D. band.
- Ask staff members to check your I.D. band before any procedures, tests or medications are given to you.
- Wear your hospital I.D. band at all times. If your band comes off, ask someone to get you a new one.

Know Your Medicines

Why do I need this medicine?

- Ask your nurse about the medicines you are taking, what they are, what they look like, what they do, when they are given, what side effects they might have, and how long you'll be taking them.
- Ask if the medicines are safe to take with other medicines or dietary supplements that you may be taking and if there are any food, drink or activities you should avoid while taking the medicines.
- If you do not recognize a medicine, ask the nurse to check that it is for you.

Partners In Patient Safety (PIPS)

- Let your doctor or nurse know if you have any allergies or have had previous reactions to any drugs, foods or latex.
- Please tell your healthcare team about all medicines you are taking, including vitamins, herbal remedies and over-the-counter medicines.

Protect Yourself From Falls

How do I call for help?

Most falls occur when patients try to get out of bed on their own.

- Ask for help when getting out of bed, especially at night and the first time after a procedure or surgery. If possible, call for help before the need to go to the bathroom becomes urgent.
- Ask the nurse how the call-button on your bed works, and let your nurse know if you will have trouble reaching it.
- Make sure the brakes on a wheelchair are locked when you get into and out of it.

Prepare For Home

Is there anything I should know about my medicines or care before I leave?

- Ask what medicines, if any, you'll be taking and when you should have a follow-up visit with your doctor.
- Ask if the nurse has given you all of your written and verbal discharge instructions so you can share them with your primary care doctor.
- Ask for a number to call if you have questions.

Avoid Pressure Ulcers

Can you check my skin, please?

A pressure ulcer, often called a bed sore, usually occurs when your skin or muscles are being pressed between the bones in your body and an outside surface (such as a bed or chair) for too long. You are at-risk for a pressure ulcer if you are bedridden or unable to change your position. While you are in the hospital, your nurse will help you prevent pressure ulcers by:

- Inspecting your skin daily for signs that sores may be forming, especially in areas where they usually develop (tailbone, hips, heels, ankles, elbows, back of the head, etc.).
- Keeping your skin clean and dry.
- Moisturizing your overly dry skin.

Partners In Patient Safety (PIPS) cont'd

- Changing your position in bed or chair every 1 to 2 hours if you are not able to move yourself without help.
- Protecting your bony areas with pillows.
- Keeping your heels off the bed surface with pillows placed under your lower legs.
- Helping you get from bed to the chair or toilet and using protective cream to protect your skin from urine or stool.
- Helping you get a well-balanced diet and plenty of fluids (water, juice, etc.).
- Informing your doctor if signs of skin breakdown are noticed.

When you are admitted to the hospital, please tell your nurse immediately if you have any cuts, scratches, rashes or injuries to your skin – no matter how small.

Control Your Pain

Can I have something for pain?

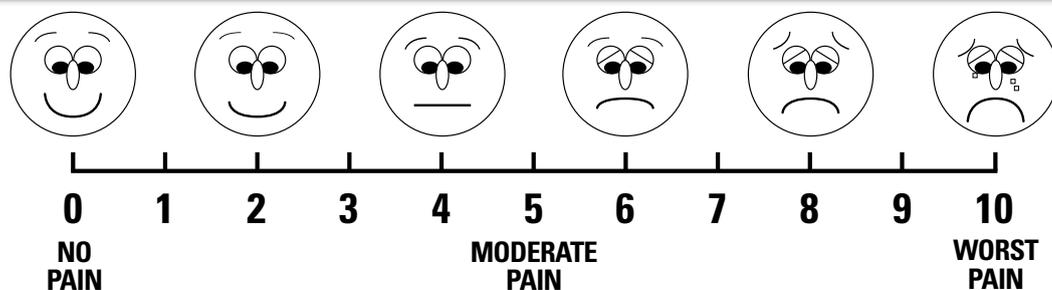
Pain causes stress and often delays the recovery process, so don't be afraid to ask for help when you're hurting.

- Ask the nurse for pain medicine when your pain starts. This will avoid medicine delays that make pain harder to manage.
- Do not assume that pain medicine is included with your other pills.
- Tell the nurse or staff member if the medication does not help.
- Addiction to pain medication is a rare occurrence. If you have concerns, please discuss them with your doctor.

Rate Your Pain

Rate your pain on a scale of 0 to 10, with 0 being no pain and 10 being pain as bad as you can imagine (see scale on the following page). This rating will help determine which pain medicine is needed, or if the pain medicine given was effective. You should discuss your goal for pain relief with your physician/caregiver.

Partners In Patient Safety (PIPS) cont'd



Methods of Pain Control

The methods listed below may be used alone or with others. When given pain medicine, ask when to expect pain relief and how long the medicine is expected to last.

Oral: pills or liquids taken by mouth.

Topical: placed on the skin.

Intravenous (IV): fluid passed directly into the vein by way of a tube.

Subcutaneous: injection into fatty tissue below the skin.

Intramuscular: injection into the muscle.

Patch: placed on the skin.

Patient Controlled Analgesia: medicine is given through a tube. This allows the patient to control the amount of pain medicine. Only the patient should press the button that delivers pain medicine.

Epidural Analgesia: a small tube placed into the back. It may be used for stomach, chest, hip, or knee surgeries.

Be Safe – Communicate

It is our goal to provide very good care and service to you and your family. If we have not met your needs, please tell us. Ask to speak with the nurse manager, or a department manager, so we can address the issues that you may have. It is our goal to take care of any issues before you go home. You will also have an opportunity to complete a survey after you go home to tell us what we did well or where we need to improve.

If you would like to speak with someone after you go home, simply call the hospital operator and ask for the Orthopaedic Department either Buffalo General Medical Center at 859-5600 or Millard Fillmore Suburban Hospital at 568-3600.

- Language assistance services are available free of charge for anyone who has a need for an interpreter.
- Tenemos servicios de ayuda en Español, para cualquiera que necesita un intérprete.

Videos are available on many health topics for you to watch for **FREE** on your television's patient education channels. Ask your nurse for details.

Pre-Admission Section

Section I Pre-Admission

Class Objectives

1. *Answer questions you may have about your surgery.*
2. *Prepare you for what to expect during your hospital stay.*
3. *Explain your rehabilitation options after discharge.*
4. *Explain the roles of your multi-disciplinary team: physician, nurse, physical therapist, occupational therapist and discharge planner.*

General Information

The Kaleida Health Orthopaedic Unit at Buffalo General Medical Center is located on the 16th floor. The floor is divided into two units (North and South), and there is a physical therapy gym located on the floor.

- North side rooms1601 – 1621
- North side Nursing Station Phone Number 859-1620
- South side rooms1651 – 1672
- South side Nursing Station Phone Number: 859-1692
- Physical Therapy Gym Phone Number:..... 859-2688
- Occupational Therapy Phone Number: 859-1152

Visiting Hours: 11:30 a.m. – 8:30 p.m.

The Kaleida Health Orthopaedic Unit at Millard Fillmore Suburban Hospital is located on the 2nd floor.

The floor is divided into two hallways, and there is a physical therapy gym located at the end of the unit between the hallways.

Room Numbers: Front hallway 2222-2233
Back hallway2234-2246B

- Nursing Station phone number..... 568-6220

Visiting Hours: 11:30 a.m. – 8:30 p.m.

Children under the age of 14 are not allowed to visit unless the nurse manager gives special permission.

What to Bring to the Hospital

- **This Knee Instruction Book**
- Comfortable walking shoes, no backless shoes or slip-ons
- Chap stick
- Hairbrush
- Gums, hard candy, cough drops, etc.
- Baby wipes
- Picture ID
- Glasses, contacts, denture supplies, hearing aides
- Cell phones are permitted on the 16th floor
- Healthcare proxy, living will or advance directives
- Personal hygiene products, toothbrush, toothpaste, deodorant, mouthwash, lotion, shaving cream, disposable razors, body wash, brush and comb.

What Not to bring to the hospital

- Valuables, such as credit cards, wallets, money, jewelry
- Personal medications, unless specifically advised to do so
- Electrical equipment like: fans, hair dryers, curling or flat iron.

Important To Remember

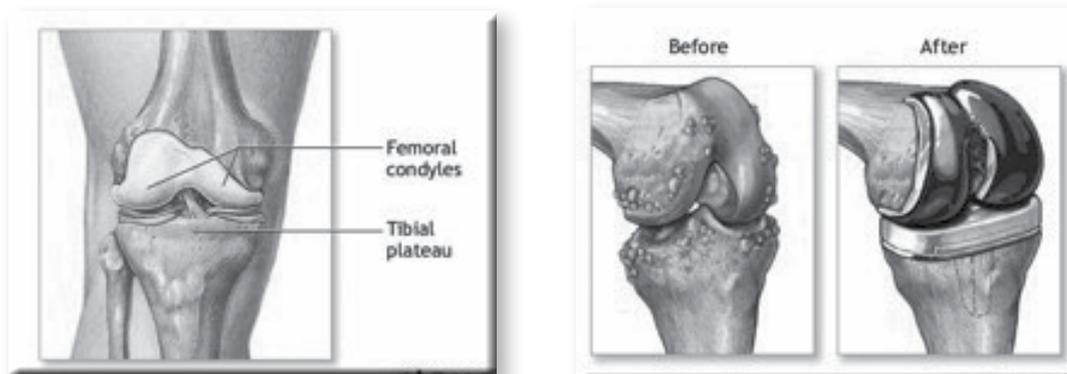
You are not allowed to eat or drink anything after midnight the night before surgery.

Check with your medical care provider if any medications are to be taken the morning of surgery with a small sip of water.

Total Knee Replacement

A total knee replacement surgery (arthroplasty) is done to replace a badly damaged knee joint with artificial (man made) parts.

The artificial joint is usually made up of metal or a combination of metal and plastic.



Total knee replacement surgery provides improvements in pain, functional status and overall quality of life.

Total Knee Replacement Goals:

- Decreased knee pain
- Improved knee motion
- Greater knee strength

Medication Form

Pharmacy Name/Phone: _____

Allergies: _____

Please complete the list below:

All medications prescribed by a physician

| Name | Dose | Time of Day | Reason/diagnosis |
|------|------|-------------|------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| 12. | | | |

Please list all Over the Counter medications – examples: aspirin, Motrin, Metamucil, laxatives.

| Name | Dose | Time of Day | Reason/diagnosis |
|------|------|-------------|------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |

Please list all herbal supplements and vitamins:

| Name | Dose | Time of Day | Reason/diagnosis |
|------|------|-------------|------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |

Medications and Vitamins

Tell your doctor about any medications, vitamins, supplements or herbal remedies you are taking.

Certain medications, vitamins and supplements can cause your blood to become thin or interfere with its ability to clot (stop bleeding), and some herbal supplements may cause a negative reaction to anesthesia.

The following herbal supplements must be stopped 10 days prior to surgery:

- Multivitamin
 - Vitamin E
 - St. John's Wart
 - Omega 3 Fatty Acids
 - Glucosamine and chondroitin
 - Ginseng
 - Ginkgo
 - Garlic tablets
 - Echinacea
 - Flaxseed
 - Green tea
 - Coenzyme Q 10
- If you are taking a blood thinner prescribed by your doctor, please ask the doctor when you should stop taking that medication prior to surgery.
 - If you are taking an aspirin daily as a preventative medication, your surgeon requests that you to stop taking the aspirin 5-14 days prior to surgery.
 - All aspirin-containing medications and all NSAIDS (Non Steroidal Anti-Inflammatory Drugs) should be stopped 5-14 days prior to surgery, as directed by your surgeon.
 - Please discuss what medications to take for pain prior to your surgery with your primary care doctor.
 - Please avoid energy drinks with herbal supplements, as well as enhanced bottled waters and high energy sodas, before your surgery. ALWAYS READ INGREDIENT LABELS if you are not sure.

Suggested Medications to Avoid Before Surgery

The following medication list may be helpful to determine which of your medications, if any, need to be stopped before your surgery. This is not a complete list, so be sure to check with your primary care doctor if you have questions.

| | | |
|-----------------------|-------------------|----------------------|
| Advil | Coumadin/warfarin | Monacet with codeine |
| Aleve | Darvon compound | Mobic |
| Alka seltzer | Duragesic | Motrin |
| Anacin | Ecotrin | Nalfon |
| Anaprox | Empirin | Naprosyn |
| Asaid | Equiagesic | Norgesic |
| Arthrotec | Excedrin | Orudis |
| Ascription | Feldene | Percodan |
| Aspirin | Fiorinal | Persantine |
| Aspirin suppositories | Ibuprofen | Plavix |
| Bufferin | Indocin | Ponstel |
| Butalbital | Midol | Ticlid |
| Coenzyme Q 10 | Voltaren | Zomac |



Medications in the Hospital

The nurses on the unit will dispense all medications that your doctor prescribes. Do not bring any medications from home unless directed to do so. The hospital will supply all medications. The only exceptions are for any rescue breathing inhalers (ex: albuterol, proventil, advair, etc.)

Occasionally, the hospital may not carry a specific medication you were on at home. If this is the case, we will ask you to have a family/friend bring in that particular medication.

If you have any allergy medications, the pharmacist and physician will order an alternative drug

Medications You May Be on After Surgery

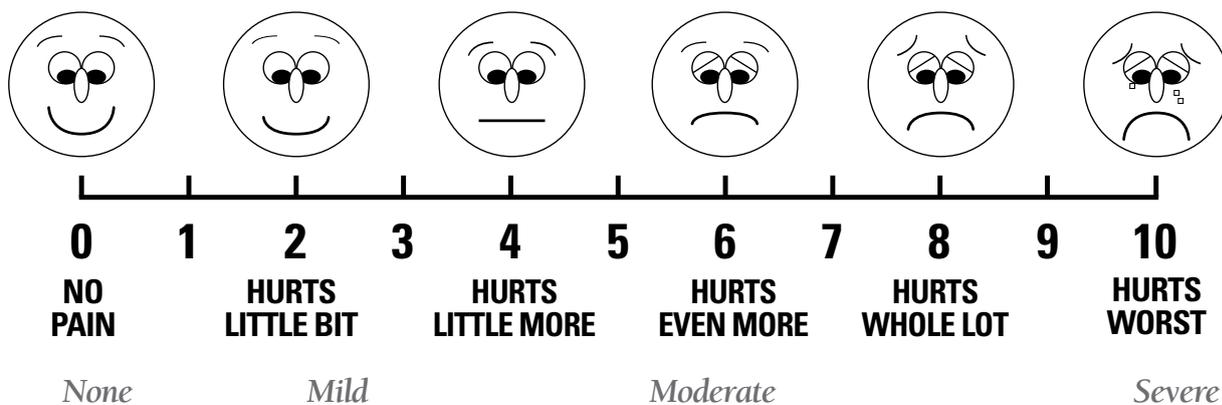
| | |
|--|---|
| Ancef | IV antibiotic to prevent infection |
| Protonix or pepcid | Gastric intestinal prophylaxis |
| Lovenox, heparin, or arixtra | Injectable anticoagulants, (blood thinners) |
| Coumadin, or aspirin | Oral anticoagulants |
| Senacot, peri-colace | Stool softeners to prevent constipation |
| Ducolax suppositories, milk of magnesia, fleets enema | Constipation |
| Reglan or zofran | Nausea medication |
| Tylenol | Fever or headache |
| Throat lozenges | Throat discomfort |
| Dilaudid (hydromorphone) morphine | IV medication for pain control |
| Lortab, Percocet, oxycontin, oxycodone | Oral pain medications |
| Vistaril | Pain |
| Toradol | IV anti-inflammatory to decrease swelling |
| Benadryl | IV or oral medication for itching or sleep |
| Ferrous sulfate | Iron supplement |

Pain Management Program

In the past, people thought severe pain after surgery was something they just had to put up with. Today, with current pain control methods, that is no longer true.

At Kaleida Health, pain is evaluated on a numeric scale. While everyone experiences pain differently, the descriptions below will help you communicate where your level of pain is on the scale so your nurse can help you.

You will be asked to rate your pain, using the scale below. You may also be asked if the pain is acute (new) or chronic (old and familiar).



0 = no pain

2 = discomfort or mild pain

5 = pain that interrupts your ability to relax and rest

7 = pain that wakes you up from a sound sleep

10 = excruciating pain

0 – 4 is generally considered the reasonable range for post operative pain

What is a Patient Controlled Analgesia (PCA)?

Patient Controlled Analgesia (PCA) is a unique pain control system that allows you to participate in your own pain management.

A pump near your bedside will be programmed by the nurse to deliver an intermittent dose of pain medication through your IV. It is called "patient controlled" because if pain medication is needed, YOU can press a button to deliver the medicine.

Precautions have been built into the PCA, so you do not have to worry about an overdose of pain medication. The pump will not release pain medication if the maximum dose allowed has already been delivered for the appropriate time period. If the total allowed dose has been delivered and you still have pain, tell your nurse so the nurse can contact your doctor to make the necessary adjustments to the pump.

Your nurse will check with you regularly to see if you have adequate pain relief with minimal side effects.

You will have a control with a button to press, to deliver a dose of pain medication.

*** Not all surgeons use the PCA pump ** **

This button should only be pressed by the patient.



Pre-operative Exercises

Start Exercises One Week before Surgery.

Exercises:

- Repeat each exercise 10 times, 2-3 times per day.
- Perform the following exercises slowly, as outlined.
- Complete exercises while lying down or reclined with legs straight.
- Perform on both legs.
- Remember to take slow, deep breaths as you do each exercise. This will help circulation and provide oxygen to your muscle tissue.

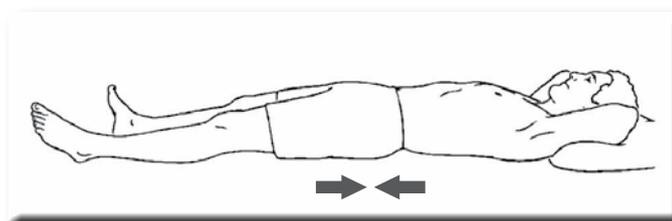
1. Ankle Pumps/circles:

- Slowly pull ankle up, hold five seconds.
- Slowly push ankle down, hold five seconds.
- Slowly turn your ankles in a circular motion, reverse direction.



2. Gluteal Sets:

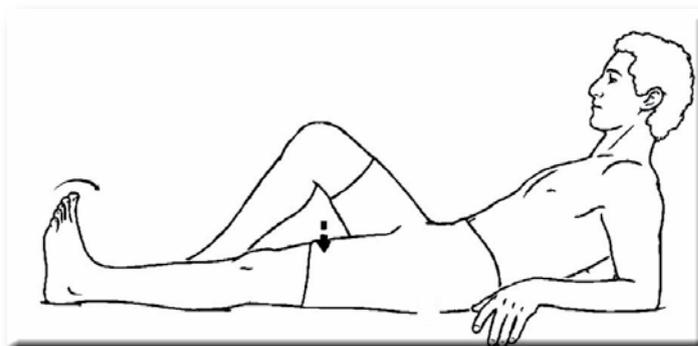
- Slowly squeeze your buttocks together.
- Hold for five seconds and relax.



Pre-operative Exercises cont'd

3. Quad Sets:

- With legs straight tighten the thigh muscle by pushing knee down into the bed.
- Hold for five seconds.



4. Long Arc Quads;

- While seated in a firm, straight back chair, straighten your leg and try to hold it for 10 seconds.
- Slowly bend to return.

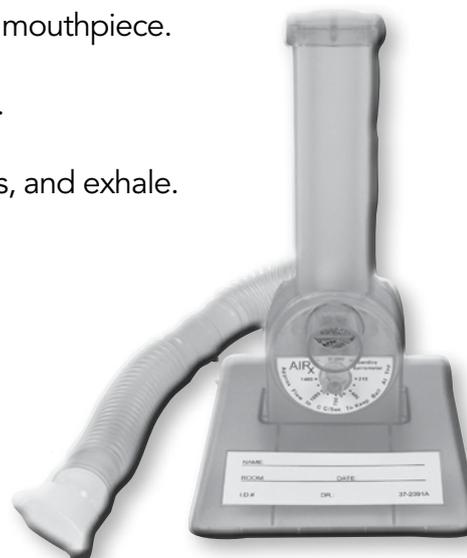


Deep Breathing

Deep Breathing is important to do the following exercises to prevent the accumulation of congestion in your lungs.

1. *Incentive Spirometer* (breathing exercise device made up of a clear cylinder with a ball inside it and a flexible tube with a mouthpiece for you to blow into):

- Hold or stand the cylinder in an upright position so the ball is on the bottom.
- Exhale normally, then place your lips tightly around the mouthpiece.
- Inhale slowly to raise the ball in the chamber to the top.
- Remove lips from the mouthpiece, hold for 3-5 seconds, and exhale.
- Repeat the exercise 10 times, every hour.



2. *Diaphragmatic Breathing:*

- Place a hand on either side of your lower rib cage.
- Slowly take a deep breath in through your nose. You should feel your ribs pushing into your hands.
- Hold 3-5 seconds, exhale through your mouth.

3. *Coughing:* An important method of clearing your lungs.

- Take a deep breath in.
- Cough from your abdomen as you breathe out.
- If this causes discomfort, try hugging a pillow against your abdomen to lessen pain.

These activities are all very important to minimize the risks of pneumonia and blood clots after surgery. They will also help get your body better prepared for surgery, which will ultimately help your recovery process.

The above exercises should be done after your surgery, as well.

Nutrition

Nutrition is important in the preparation for, and recovery from, your surgery. Eating a well-balanced diet and increasing your fluid intake will help with the healing process.

- We recommended that you increase daily fiber and fluids to maintain regular bowel movements. You may take over-the-counter laxatives and /or stool softeners (if needed) to stay regular both before and after surgery.
- Drink 6-8 full glasses of water each day for 3 days prior to surgery. This will get your body well hydrated for surgery and will help flush out the anesthetic agents.
- Limit your daily caffeine intake for one week prior to surgery, since caffeine is a natural diuretic (water pill).
- Alcohol consumption should be decreased. Please discuss alcohol consumption with your primary care doctor.
- Remember the importance of a well balanced diet.



The Discharge Planning Process

All patients should prepare for their discharge prior to hospitalization.

Patients are admitted to the hospital on the day of surgery. You will have a brief hospital stay, usually 3 nights, depending on each patient's progress.

Kaleida Health uses **criteria-based scoring** to help establish the best discharge plan for you. Scoring is determined by the answers to six questions, and it is completed by your surgeons' office before being sent to your Kaleida Health healthcare team. Based on your score, we can help guide you and your family toward which plan would be the best plan for you at your pre-op class. **The final decision is yours to make.** We can only provide assistance with the decision-making process.

Depending on your care needs, you have up to three options:

- *Admission to a Sub-Acute Rehabilitation Facility:* A facility where you will stay for 3-7 days of medical supervision, physical therapy, occupational therapy, and assistance with bathing, dressing and meals.
- *Discharge to Home with Home Health Services:* A homecare agency of your choice will come to your home and provide in-home therapy services. The VNA of WNY, is the homecare subsidiary for Kaleida Health, and is the largest and oldest homecare agency in Western New York. The VNA of WNY is committed to meeting the needs of the Joint Venture Program.
- *Discharge to Home with Outpatient Physical Therapy:* You are doing well enough that you do not meet the criteria for in-home therapy and can begin outpatient physical therapy after your hospital discharge.

The discharge planner will meet with you the day after your surgery to review your discharge plan and assist in contacting the facility or homecare agency of your choice. You will be given a list of sub-acute rehabilitation facilities, as well as homecare agencies, if you have not already chosen one.

We strongly encourage you and your family to plan where you will go after discharge from Kaleida Health prior to your hospitalization. Being prepared will eliminate unnecessary stress and ensure you choose the best option for you.

Section II
Hospital Course

Hourly Rounding

Our goal is to provide very good care for every patient, every day by every employee. One of the ways we strive to reach that goal is hourly patient rounding, so you will be visited by someone from your healthcare team:

**Every hour from 6 a.m. – 10 p.m. and
Every 2 hours from 10 p.m. – 6 a.m.**

During hourly rounding, we will be:

- Checking on you and your well-being to address any personal needs
- Monitoring your pain
- Helping you change positions for comfort
- Assisting with trips to the bathroom

Your caregivers will also make sure you have access to:

- Telephone and bedside table
- Water and other beverages
- Personal items (glasses, hearing aide, etc.)
- Call light for assistance
- Urinal and/or bedpan

You may receive a survey once you are home to share your thoughts about how we cared for you. We hope you experienced very good care by our team and will note that on the survey before you return it.

If you do not feel you are receiving very good care by our staff, please share your concerns with us while you are here so we can take care of them immediately.

Day of Surgery

What to Expect:

- You and your coach will go directly to the Same-Day Surgery Admission Unit where the admitting staff will complete the admission process.
- You will change into a hospital gown. All clothes and personal items will be put into a labeled bag for your coach to take.
- Please remove eye make-up, contact lenses, nail polish and all jewelry, including body piercings.
- The nursing staff will review your final preparations before surgery. When you are ready for surgery, you will be transported to the operating room holding area on the third floor.
- During the surgery, your coach may stay in the surgical waiting area.
- In the operating room holding area, you will be introduced to your surgical team:
 1. An intravenous infusion (IV) will be started. Your IV line is a tube that is inserted into your vein so we can give you fluids, medications, antibiotics and blood transfusions (if needed). Your IV line will be needed for approximately 24 – 48 hours after your surgery.
 2. Special white support stockings (TEDS) will be put on your legs. They support and promote blood circulation in your legs during and after the surgery.
 3. The anesthesiologist will discuss the anesthesia and pain management method appropriate for you.

Your Anesthesiologist and Anesthesia

What is an anesthesiologist?

An anesthesiologist is a doctor who is specially trained to administer pain-killing gas or injections during operations and other procedures. The anesthesiologist also watches over your breathing, heart rate and reactions to anesthesia during the operation, after your operation and can assist with acute pain control.

You will meet your anesthesiologist before surgery to discuss the best anesthetic options for you, which will be based on an evaluation of your specific needs.

Anesthesia is the medicine that your anesthesiologist uses to make you comfortable during surgery. Types of anesthesia include:

Spinal Anesthesia

Numbing medication is delivered through an injection in your back. You will be awake during surgery but numb below the waist. Feeling returns in about two hours after surgery.

Epidural Anesthesia

Numbing medication is delivered through a tiny tube inserted into your back. The tube is left in place to give you more numbing medicine later, if needed. You are awake during surgery but numb below the waist.

Feeling returns to your legs when the medicine wears off, after the tube is removed (up to 12 hours).

General Anesthesia

A mask that covers your nose and mouth or a tube inserted into your mouth and throat is used to deliver the anesthesia. The tube is called an endotracheal tube or "ET tube." You are asleep before the tube is inserted and it is usually removed before you wake up. You will be completely asleep during surgery.

Nerve block

Anesthesia is injected directly into a nerve through the groin. It is used to block sensation of an extremity (arm or leg).

Initial Recovery After surgery in the Post Anesthesia Care Unit (PACU)

After surgery, you will need careful monitoring while you recover from anesthesia and gradually awaken. You will be moved directly from the operating room to a recovery room, which we call PACU, while your anesthesia wears off.

Beginning your Pain Management Program

You may begin to feel postoperative pain in the PACU. This is normal. Your doctor will order medications to manage your pain while in the PACU, where you will remain until your recovery is stabilized. The anesthesiologist will determine when you are ready to be transferred to your hospital room.

Visitation while in the PACU

Visitation while in the PACU is limited in order to promote privacy for all patients, decrease the risk of infection, and to enhance the healing process. However, parents/guardians of patients under the age of 18 and patients with special needs (language barrier) will be allowed in the PACU on a controlled basis.

When your surgery is complete, either the surgeon or a member of the surgical team will come to the surgical waiting room to talk to your family/coach. Together they will go to a private area where they will learn about your status and be encouraged to ask questions.

Things to Know

Call button:

A device you can use when you need something.

Blood Tests:

You will have blood taken for tests. The blood can be taken from a vein in your hand, arm or from the bend in your elbow. Your blood will be tested to see how your body is handling your surgery. You may need to have blood drawn more than once during your hospital stay.

Blood Transfusion:

You may need a blood transfusion if your blood count is low. This is called anemia. Your physician will discuss the risks and benefits of a blood transfusion with you.

Pulse Oximeter:

This is a machine that tells us how much oxygen is in your blood. A clip with a long cord will be placed on your fingertip. Wearing the clip allows your body to send this information to the pulse oximeter. It is completely painless.

Vital Signs:

This includes taking your temperature, blood pressure, pulse (counting your heartbeat), respirations (counting your breaths), and pain level.

Foley Catheter:

A Foley catheter is a thin, sterile tube inserted into your bladder to drain urine. It is held in place with a balloon at the end, which is filled with sterile water, to keep it from sliding out. The urine drains from the catheter into a sterile bag that will be emptied by your nursing team. The catheter is usually inserted after you are sedated. Below are some helpful tips to be aware of after a catheter is inserted:

- The catheter may make you feel like you have to urinate, but relaxing will allow the catheter to drain the urine for you. When the catheter is taken out, you can urinate on your own.
- Don't pull on the catheter because it will hurt and can make you bleed.
- Don't bend the catheter because the urine will not be able to drain.
- Don't lift the bag of urine above the bladder. If you do this, the urine will flow back into your bladder. This may cause an infection.

Intake/Output:

Your caregivers may need to know the amount of fluid you are getting. They may also need to know how much you are urinating. Caregivers call this "I & O."

Things to Know cont'd

Pressure stockings: (TEDS)

These tight elastic stockings help prevent blood clots.

Foot Pumps:

These are boots we put on your feet. They are connected to an air pump machine that simulates walking to help improve your circulation.

Continuous Passive Motion (CPM):

This is a mechanical device that bends (flexes) and straightens (extends) your knee based on programmed information about your personal needs. Each day the amount of the bend will increase, as determined by your pain tolerance and the surgeon's orders. This machine helps speed recovery, decrease pain after surgery, and reduce scar tissue formation. It will be set up for you to use when you are in bed during the evening while you sleep. Six (6) hours a day is recommended.

Polar or Ice Packs:

Ice bags may be ordered and placed around your surgical site. This helps to reduce inflammation (swelling) and decrease pain.

Hemovac or blood conservation system:

This is a drain inserted during surgery next to your incision to help unnecessary fluids from collecting in your joint. It is usually removed the first day after surgery.

Knee Immobilizer:

This is a lightweight Velcro splint worn on the leg that was operated on after surgery to support the knee. It is usually used during the first 24 hours after surgery when you are out of bed if you had a nerve block anesthetic.

Post-Operative Course

We treat each patient as an individual, but we find most patients fit into the plan outlined below after joint replacement surgery:

- You will be moved to a room on the orthopaedic unit from the post anesthesia care unit (PACU) and may be able to start drinking and eating shortly after, depending on your progress.
- Continue to do the anti-thrombotic exercises of ankle pumps/circles, quad sets, and gluteal sets. Complete up to 30 repetitions every 1-2 hours.
- Continue your deep breathing, coughing and use of your incentive spirometer hourly.
- Continue to wear your elastic stockings to keep the blood from pooling in your legs and lessen the chance of blood clots.
- A foot pump device will be strapped onto your feet. These boots are connected to an air pump that causes the boots to tighten and loosen, which pushes blood back up to the heart to help prevent blood clots. This exercise imitates walking.
- You will need to push the button on your pain machine or ask the nurse for pain medication.
- You will be asked to rate your pain regularly using the pain scale.
- A bladder catheter (Foley) may be in place to drain your urine. It is usually removed on the first or second day after surgery.
- Knee drainage tube (hemovac) may be in place. It is usually removed by physician on post op day 1.
- You will have a dry dressing and ace bandage on your knee. It is usually changed the second or third day after surgery.
- Your temperature, blood pressure and pulse will be taken upon arrival to your room, and then every four hours for the first 24 hours.
- You should be turning side to side while in bed to avoid pressure sores that develop when you stay in one position for too long.
- Keep heels elevated off the mattress to avoid pressure sores that develop when you stay in one position for too long.
- Polar care or ice may be used to reduce swelling if ordered by your doctor.

Post-Operative Course con'td

- Either the day of surgery or the day after surgery (depending upon arrival to your room and your doctor's orders), you will get out of bed with physical therapy's assistance.
- **Morning blood draws are done at 3 a.m. daily and as ordered by your doctor.** We understand this early time can be an inconvenience for you, but taking blood early allows our labs to get the results into your charts faster. Our goal is to have them ready for your doctor to read before he/she visits you to determine if you are ready to go home or if you need additional tests, medications, etc.
- A discharge planner, along with your healthcare team, will discuss your discharge plan. Depending on your needs, you could go in one of two directions: admission to a SAR (subacute rehab facility) or be discharged to home with therapy services.

Post Surgical Exercise Program

Exercise is very important after total knee surgery. You will need to complete the indicated exercises, three times per day for 7-8 weeks after discharge and then once a day.

Exercises while lying on back:

_____ Ankle Pumps/Circles

- Slowly pump your ankles up and down.
- Slowly turn your ankles in a circular motion.

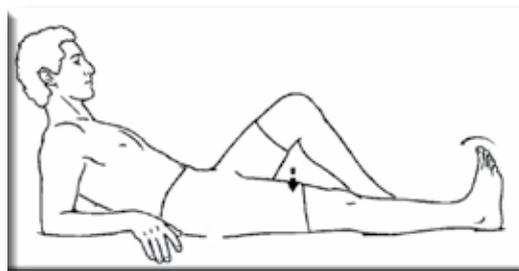
Repeat each exercise _____ times, do _____ sets.



_____ Quad Sets

- With your leg straight, tighten your thigh muscle by pushing your knees down into the bed.
- Hold for five seconds and relax.

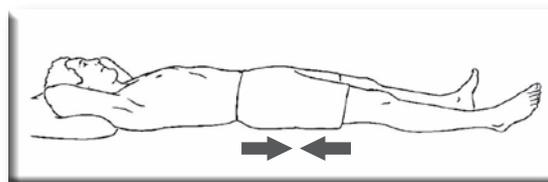
Repeat each exercise _____ times, do _____ sets.



_____ Glut Sets

- With both legs straight, squeeze your buttocks together.
- Hold for five seconds and relax.

Repeat each exercise _____ times, do _____ sets.



_____ Hamstring Sets

- With your legs straight, push your heel down into the bed, without letting your knee bend.
- Hold for five seconds and relax.

Repeat each exercise _____ times, do _____ sets.



Post Surgical Exercise Program cont'd

____ Straight Leg Raises:

- With non-operated leg bent and operated leg straight, point toes toward the ceiling and slowly raise the entire leg off the bed.
- Do not let knee bend while lifting, slowly lower down.



Repeat each exercise _____ times, do _____ sets.

____ Heel Slides:

- Wrap a sheet around the foot of your operated leg.
- Using the sheet for assistance, slowly bend your knee, sliding heel toward buttocks.
- Do not force the knee.
- Hold for five seconds, slowly straighten leg.



Repeat each exercise _____ times, do _____ sets.

____ Short Arc Quads:

(you can make a towel roll by covering a small coffee can or a two liter bottle with a towel.)

- Place towel under operated knee.
- Slowly straighten knee without lifting thigh off roll
- Hold for count of five and slowly lower foot down.



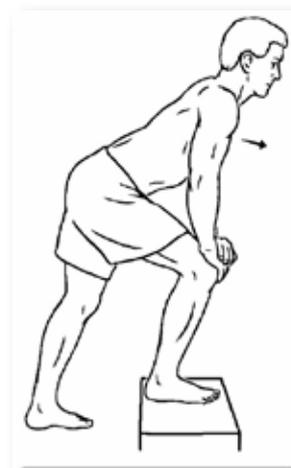
Repeat each exercise _____ times, do _____ sets

Exercises in a standing position:

____ Standing Knee Flexion (on step).

- Place operated leg on step in slight knee flexion, gently lunge forward to increase the amount of knee flexion.
- Hold position for five seconds, and then relax by coming back to your original position of slight knee flexion.

Repeat each exercise _____ times, do _____ sets.



Post Surgical Exercise Program cont'd

Exercises in a Sitting Position:

_____ Hamstring Stretching

- Sitting with your non-operated leg off the bed, and the foot on the floor and the operated leg STRAIGHT on the bed.
- Lean forward, bending the hip, (not at the waist), reach for your toes of the straightened leg.
- Hold for a count of 10 and relax.

Repeat each exercise _____ times, do _____ sets.



_____ Knee Flexion/Extension

- Sitting on a solid chair with good back support, make sure your hips are planted firmly on the chair, and you are not leaning backward.
- Slowly straighten your knee, hold the position for five seconds, and then slowly bend the knee back as far as you can. Again, hold the position for five seconds and relax.

Repeat each exercise _____ times, do _____ sets.



Guidelines for use of Assistive Devices

The appropriate assistive device you will need to walk with will be determined by your therapist. The following is an overview to reinforce what you have been taught.

Walker:

- Allows the greatest support.
- Move the walker forward making sure all 4 points are flat on the floor. Do not reach, keep the walker a comfortable distance away, generally an arms length.
- Take a step with the operated leg first, followed by the non-operated leg.
- Be sure to lean through the walker in order to maintain any weight bearing restriction you may have.

Rolling Walker:

- Same as the walker, but has wheels on the front legs.
- Generally used when there are no weight bearing restrictions to allow for a more fluent walk.
- Push the walker a comfortable distance ahead, without leaning forward. Begin walk, by advancing the operated leg first. As you are comfortable, push the walker and walk with it, like pushing a shopping cart.

Crutches:

- Held under the arms but NOT in the armpits.
- Crutches are kept slightly forward and to the side.
- Move the crutches forward, step with the operated leg first and then the non-operated leg.
- Push through your hands to limit weight and maintain any weight bearing restrictions.

Cane:

- There are several different types of canes; the appropriate type for you will be determined by your therapist.
- Hold the cane, in the hand opposite the operated side.
- Advance the cane, step with the operated leg first. The cane should be moving with the leg opposite of it.

Stairs

Ascending stairs:

1. Using 2 handrails:

- Hold firmly onto the rail
- Step up with the non-operated leg first
- Follow with the operated leg.

2. Using 1 handrail and an assistive device

- Hold onto the rail with the handrail, keep the crutch or cane on the step
- Step up with the non-operated leg first.
- Follow with the operated leg.
- Bring up the crutch or cane.

Descending Stairs:

1. Using 2 handrails:

- Hold firmly onto the rail
- Step down with the operated leg first.
- Follow with the non-operated leg.

2. Using 1 handrail and device.

- Hold onto the rail with one hand and place the crutch or cane down onto the next step.
- Step down with the operated leg first.
- Follow with the non-operated leg.

If you need help with stairs:

- When going up the stairs, the person helping should BE BEHIND, holding onto your hips and helping only as needed to prevent a fall.
- When coming down the stairs, the person helping should stay IN FRONT, usually with one hand on the shoulder and the other on the hip, helping only as needed to prevent a fall.

Car transfers following a Total Knee Replacement

Two door car transfer:

- Sit in front seat.
- Move seat back as far as possible.
- Using your walker or crutches, back up and line yourself up with the car seat.
- Reach back for the seat and slowly sit down, letting your operated leg slide forward.
- Do not hold onto the car door for support.
- Shift your body side to side, if needed, to scoot back onto the seat.
- Gently lift your legs into the car one at a time. Someone may need to help you with the operated leg.
Position it so your foot is flat on the floor.
- Reverse to get out of the car.
- Do not try to step out, you need to turn your body first and then stand up.

Four door car transfer:

- If you prefer to sit in the back seat, follow these steps:
- Using your walker or crutches, back up and line yourself up with the car seat.
- If you had a left knee replacement, get in on the driver's side. For a right knee replacement, get in on the passenger side.
- Reach back for the seat and slowly sit down, letting your leg slide forward.
- Do not hold onto the car door for support.
- Slide back into the car, leaving your operated leg straight up on the seat. The other leg should be on the floor.
- Make sure the door you are leaning on is locked behind you.
- To get out, slide forward until your feet reach the ground and then stand up.

Section III
Discharge Instructions

Discharge Introduction

Congratulations on your discharge from the orthopaedic unit at Kaleida Health! You have just moved on to the next appropriate level of care, **but your journey does not end here!**

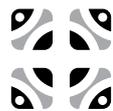
You and your coach should continue your care, which includes therapy as directed by your surgeon and your home exercise program.

We are extremely proud of our Joint Venture Program, and we hope you feel that you received **very good** care from our team. The goal of our program was for you to achieve the best possible outcome by providing the appropriate level of care before and during your recovery period.

*Wishing you all the best,
Your Orthopaedic team at Kaleida Health.*

Occupational Therapy Department Recommendations

- Buffalo General Medical Center 716-859-1152**
- Millard Fillmore Suburban Hospital 716-568-3540**



**Buffalo General
Medical Center**
A Kaleida Health Facility



**Millard Fillmore
Suburban Hospital**
A Kaleida Health Facility

Discharge Instructions for a Total Knee Replacement

Activities:

- Perform the post surgical exercise program taught to you by your physical therapist.
- Do not engage in any activity that will cause stress on your knee joint, e.g.; running or jumping.
- Use stairs only when necessary and not as an exercise.
- Sit in a chair with arms to assist with standing. Do not use your walker for support when going from sitting to standing, as the walker may tip. Avoid soft or low surfaces, such as sofas.
- Do not sit for more than two to three hours at a time.
- Take short, frequent walks.
- You may resume sexual activity.
- Driving is usually permitted after six weeks.
- You may shower. No tub baths until approved by your physician. Keep safety in mind, i.e. rubber mats, shower chair or tub bench, if needed.
- Continue with the weight bearing instructions, as provided by your doctor.

Incision Care:

- Keep your incision clean and dry.
- No soaking in bathtubs, hot tubs, or swimming pools until the incision is healed and it is approved by your doctor.
- No creams, lotions or cocoa butter until the incision is totally healed.

Medications:

- A multivitamin with iron is recommended for six weeks.
- Take your pain medications prior to physical therapy or exercise.
- Please review your individualized discharge medication reconciliation list, and take this list with you to your next doctor's appointment

Discharge Instructions for a Total Knee Replacement cont'd

Diet:

- A well-balanced diet with increased amounts of meat, fish, poultry, eggs and milk is suggested to promote bone healing.

Elimination:

- Be aware that decreased activity, pain medicine and vitamin supplements can cause constipation. If needed, you may use over-the-counter laxatives or stool softeners to help resume your normal bowel routine. Increasing fluids and fiber in your diet may help, too.

Special Instructions:

- Use assistive devices, such as walker or crutches, if prescribed by your surgeon.
- Wear elastic stockings during the day. Put them on in the morning, and take them off at night until full activities are resumed (usually six weeks).
- Wear solid, supportive shoes with rubber soles. No clogs or slip-on shoes.
- Remove any loose rugs in your home that could cause you to trip or fall.
- Drinking alcohol is strongly discouraged, as this may cause uncoordinated movements and may negatively interact with your medications.
- Do not place a pillow under your knee while sleeping or when reclined in a chair for comfort. If you sleep on your side, put a pillow between your knees.
- Do not cross your legs at the knee or ankle in order to maintain healthy circulation.
- If you notice swelling in your leg, you should elevate your leg on a pillow.
- A follow up appointment with your surgeon should be made as soon as possible; usually six weeks after surgery.

Infection:

The most common cause of infection after joint replacement surgery is bacteria entering the blood stream. Bacteria from dental procedures, urinary tract infections, and skin infections can lodge around your artificial joint and cause serious harm.

- You should take antibiotics before dental work or any other surgical procedure that could allow bacteria to enter your blood stream.
- You should not have any dental work for six months after your joint replacement.

Discharge Instructions for a Total Knee Replacement cont'd

Blood Clots:

Follow your surgeon's instructions carefully to reduce the risk of developing a DVT (deep vein thrombosis) or PE (pulmonary emboli), which can occur during the first several weeks of your recovery.

- This usually involves the use of anticoagulation medication and is as simple as taking an enteric coated aspirin (325mg) daily for six weeks. If something different is needed, your doctor will prescribe it.
- Wear the elastic stocking, as directed.
- Perform the home exercises, as instructed.

Warning signs of possible blood clot in your leg (DVT) include:

- Increased pain in your calf or thigh.
- Tenderness or redness above or below the incision area.
- Increased swelling in your calf, ankle or foot.

Warning signs of possible blood clot in your lung (PE) include:

- Sudden increased shortness of breath.
- Sudden onset of chest pain.
- Localized chest pain with coughing.
- Increased heart rate.

DANGER Signs after Joint Replacement Surgery

Reportable signs and symptoms to notify your surgeon:

- Increased joint pain unrelieved by pain medications.
- Oral temperature greater than 101 ° F (38.8° C) for more than 24 hours.
- Redness or drainage from the incision.
- Extreme swelling of the joint.
- Numbness and tingling in the toes on the operated leg.
- Nausea and vomiting.
- Calf pain

If you experience chest pain or shortness of breath, seek IMMEDIATE MEDICAL ATTENTION.

Sex after Joint Replacement Surgery

You may have to make some short-term adjustments in your sex life to protect your new joint replacement. Be patient during the healing process. Make sexual relations with your partner something positive, keep a sense of humor, and learn to laugh if it doesn't work out the way you expected. What does not work today might work right the next time. Healing takes time, so use this opportunity to communicate with your partner, explore new avenues of intimacy and share your wants and needs.

Good sexual relationships must have good communication, especially when sexual activity becomes difficult because of a physical problem. Talking about sex with your partner is very important; it can prevent misunderstandings and hurt feelings.

It is common to have a low desire for sex after surgery. Making sure both parties understand what they can and cannot do eases tensions and can make your time together more enjoyable. If you or your partner has questions or fears, even if you are embarrassed, do not hesitate to talk with your doctor, physical therapist or nurse.

When to resume sex after your joint replacement;

Prior to your joint surgery, pain and stiffness in the hip or knee may have kept you from enjoying sexual activity. In addition, your partner might have avoided sex with you for fear of causing you pain. Now that you have had a joint replacement, your pain and stiffness are better and you may want to start having sex again. You can, but **you need to understand the precautions that you must follow to protect your new joint.**

Each patient recovers from surgery at a different pace. How fast you recover may depend on your age and the physical condition you were in prior to surgery. Many people can resume sexual activity within four to eight weeks after surgery, but we encourage the following:

- Wait until you are ready, both mentally and physically.
- Wait until you understand all the precautions you must take to protect the joint.
- It is strongly recommended that you assume a more passive role when you engage in sex, and that is the **"bottom position."** This is the safest and most comfortable position for you initially. Assuming this position reduces pressure on the knee and protects the skin around the healing incision.
- Placing a few pillows under the affected knee to provide support may help you feel more comfortable.
- **Wait until your doctor says it is OK.**

Sex after Joint Replacement Surgery cont'd

Listen to your body. Don't try too much, too soon.

Some medicines can cause side effects that interfere with sexual pleasure, especially pain meds or cortisones. You may feel decreased sexual desire, vaginal dryness, trouble having an erection and delayed orgasms. If you think your performance or desire is being affected, plan ahead. Try having sex in the morning before your first medicine dose or in the evening before your last dose. If that does not help, speak with your doctor about changing your medicine to reduce the unwanted side effects.

Never Stop Taking Medicine Without Your Doctor's Advice.

Activities of Daily Living

Dressing:

- When leaving the hospital, you should be able to dress and bath lower extremities when sitting on a firm chair.
- Do not cross your legs to put on clothes.
- Bend from the waist to put on socks and shoes.
- Remember you will get a greater bend in the knee as time goes on.
- Lower extremity dressing is a good, functional exercise for your knee.
- Adaptive equipment may be used if you are unable to touch your toes while sitting in a chair or if you have back problems and cannot bend. (This was probably a condition that existed before surgery.)
- If lower extremity dressing skills have not been accomplished during your hospital stay, adaptive equipment will be recommended.
- Remember when putting on pants, dress the operated side first. Reverse this process when undressing.

Toileting:

- You should be able to transfer on and off a standard toilet.
- Your therapist will recommend adaptive equipment if needed, such as a 3-in-1 commode or raised toilet seat. Obtaining a commode can be arranged through the recommendation of your occupational therapist and with the assistance of your discharge planner.

Bathing:

- Patients may need a shower chair with a back for taking a shower at home. Here are the steps for your tub transfer:
 1. Walk up to the tub and turn so the back of your legs touch the tub.
 2. Reach back with your hand and hold onto the back of the shower chair. Your other hand will move to the middle of the center bar of the walker. (One crutch can be used in the hand, if you are not using the walker.)
 3. Kick operated leg forward, and sit down on the shower chair.

Activities of Daily Living cont'd

4. Slowly turn toward the tub, and lift one leg at a time into the tub.
 5. Sit back, relax, and enjoy your shower.
 6. Reverse these steps when exiting the tub.
- If you have full weight bearing capability and stepping in and out of the shower is a method you used with your therapist, follow these instructions:
 1. Place your hands on the wall, about shoulder level high, and lean some of your weight onto your arms.
 2. Lift the knee closest to the tub backwards to a 90 degree angle, keeping your body and upper portion of your leg straight. Step into the tub.
 3. Make sure your foot is in the center of the tub before repeating the process with the other foot.
 4. Reverse these steps when exiting the tub.

How Did We Do?

It is our goal to provide very good care and service to you and your family while you are at Kaleida Health. You may receive a survey once you are home to tell us what we did well and where we need to improve.

We hope you will fill it out and return it because we value your thoughts and feelings.

If we have not met your needs to the degree that you can say we gave you very good care, please tell us before you go home. Ask to speak with the nurse manager, so we can address the issues you may have immediately.

We would be honored if you recommended us to your family and friends.

*Our entire team on the orthopaedic unit wish you the best in your recovery,
and we hope you will consider Kaleida Health for your future
healthcare needs.*



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Suburban Hospital**

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