Post Anesthesia Care Unit (PACU)

After surgery you will be moved from the Operating Room directly to a special recovery room, called the Post Anesthesia Care Unit (PACU).

- The PACU staff will continue to monitor you as you gradually wake up. You will remain in this area until your vital signs are stable. Usually about 2 hours.

- When you wake up you will have a blood pressure cuff on your arm, oxygen tube in your nose, and a pulse oximeter (used to detect your oxygen level) on your finger.

- If needed you will receive pain medication and/or medicine for nausea.

- If you have had a hip replacement an x-ray will be taken of your new joint.

- Your surgeon will speak with your family/friends in the surgical waiting area after the surgery is complete.

- Your family and friends will be notified, usually by the receptionist in the waiting area, when you have been transferred to your hospital room. Remind your friends/family that you will need to rest on the day of surgery.

Journal entries and questions about the PACU stay:

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After Surgery

Managing Your Discomfort

Managing your pain is important to your recovery. Our goal is to manage your pain so that you are able to rest comfortably, move easier when it is time to get in and out of bed, and to participate in physical therapy. To keep you as comfortable as possible our healthcare team will work closely with you. In order for your pain to be treated effectively, it is important for you to:

- Be sure to tell the nurse completing your medical history about what medications have or have not worked for you in the past.

- Remember it is ok to have some pain. We want to work with you to determine what level of pain is acceptable for you.

- Asking your nurse for pain medication on a timely basis is important for your comfort. Ask for medication when you begin to feel discomfort. You will be asked on a scale from 1-10 to rate your pain. If you wait until you are at an 8 rating it is difficult to relieve your pain quickly. Asking for medication at a 4-5 rating will bring you comfort sooner. Our goal is to keep you comfortable!

<table>
<thead>
<tr>
<th>0</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very happy, no hurt</td>
<td>Hurts just a little bit</td>
<td>Hurts a little more</td>
<td>Hurts even more</td>
<td>Hurts a whole lot</td>
<td>Hurts as much as you can imagine (don’t have to be crying to feel this much pain)</td>
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</tbody>
</table>
• As you work with your doctor and nurses let them know if the pain relief measures are adequate.

• If you are nauseated, tell your nurse. This is a common side-effect that can be treated with medication.

For additional pain relief, cold therapy is often applied. An ice pack, cold therapy units are examples of what may be used. These will help to reduce swelling and relieve pain. Once the bulky dressing is removed from the operative site, ice may be applied for 20-30 minutes at a time to relieve pain.

You can make your own Ice Pack by following these directions:

1 part rubbing alcohol (70% isoprophyl alcohol)

3 parts tap water

Mix together in and double bag of zipper lock baggies

To make it more slushy, add alcohol. To make it more firm add water.

Be sure to put a towel next to your skin. Never apply the ice pack directly to the skin

With pain controlled and you are fairly comfortable you will be better able to participate in your own recovery.

Journal entries and questions regarding Managing your discomfort after surgery:

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Preventing Complications

Complications can occur following any surgery. Below are some of the most common complications that can occur. Every precaution is taken to prevent these from happening, however they can occur.

Blood Clots (Thrombophlebitis)

Your decreased movement following surgery and normal swelling put you at risk for developing a blood clot formation in your legs.

Your surgeon may prescribe medication to prevent blood clots. Some of the most common used medications for this are: Coumadin, Lovenox, and Xarelto. You need to follow your surgeon’s instructions carefully. In addition lab work will be done if necessary to monitor your blood clotting levels.

Deep Vein Thrombosis (DVT) is a blood clot that forms in a vein deep in the body. Blood clots occur when blood thickens and clumps together. Most deep vein clots occur in the lower leg or thigh. A blood clot in a deep vein can break off and travel through the bloodstream to the lungs, heart, or the brain.

**Signs and Symptoms to be aware of:**

- Increased pain in your calf, ankle and/or foot
- Swelling or tightness of the calf, ankle, and/or foot
- Tenderness or redness above or below your knee
- Erythema or discoloration of the skin
- Tissue warm and firm to touch
- When you pull your toe toward your shin this causes discomfort in the upper calf

***If you experience any of these symptoms you need to let your surgeon know immediately. If you are from out of state notify your Primary Care Provider immediately.

Pulmonary Embolus

A pulmonary embolus is when a blood clot breaks away from the vein and travels to the lungs. This is an emergency and you need to call 911.

Signs of a Pulmonary Embolus
○ Sudden chest pain or coughing
○ Sudden difficult and/or rapid breathing
○ Shortness of breath
○ Sweating
○ Confusion

**Prevention of Pulmonary Embolus**

○ Prevent blood clots in the legs
○ Recognize a blood clot in the leg and call your physician immediately

We will work with you to prevent this from happening:

- **Anticoagulant therapy**: You will be receiving Aspirin by mouth to thin your blood starting the day of surgery.

- You will have special wraps placed on your feet or legs. The wraps are attached to a compression device and help circulate blood in your legs. They should be worn at all times while you are in bed. If they are removed for care or therapy and not reapplied, your care coach should push the call button for assistance to get it reapplied.

- **Leg Exercises**: You will be asked to do simple exercises soon after surgery. To help prevent circulation problems, these exercises, such as ankle pumps, quad sets and gluteal sets, will be very helpful. The staff will initially help you with these exercises. Then we encourage you to do each exercise 10 times each waking hour.

- **Getting you moving**: We will get you up and moving as soon as possible after your surgery. You will be encouraged to dangle your legs and/or stand up on the evening of surgery.

- **Meal times**: It is best to sit up in the chair while eating your meals. This will assist in digestion and early movement.

**Infection**

Infection following a joint replacement surgery can be very serious. Infection can spread into the artificial joint from another infected area of your body, for example: the bacteria enters the blood stream during dental procedures, urinary tract or skin infections. Even though this occurs less than one percent of the time, the bacteria can move into the new joint replacement area and cause an infection.
Warning Signs of a possible infection are:

- Persistent fever (higher than 100.5) degrees orally
- Shaking chills
- Increasing redness, tenderness or swelling of the surgical joint
- Drainage from the surgical incision (note if there is an odor), may be cloudy
- Increasing pain with both activity and at rest

If you develop any of these symptoms you should notify your surgeon immediately. If you are from out of state you should notify your Primary Care Provider (PCP).

Journal entry and questions about DVT's, infection or pulmonary Embolus:

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Preventing Infection

Preventing is our priority and you need to do your part.

Tell your surgeon about any medical problems/conditions you have. Allergies, diabetes or obesity may affect your surgery and treatment.

- **Hand Hygiene:** Every patient’s room has a wall mounted hand gel sanitizer. Please ask everyone who enters your room, family, friends, and hospital staff, to use it before they come into your room.

- **Antibiotics:** Prophylactic antibiotics are administered before you have surgery and are continued for 24 hours.

- **You should eat a healthy diet and drink lots of fluids**

- **Take your temperature every day at least once until you have your post-op appointment.**

- **Quit smoking.**

- **Do not shave the surgery site. This may irritate the skin, thus making it easier to develop an infection.**

- **Be sure to keep your bed linens clean and changed every few days or more often if needed**

- **Keep your pets away from your incision**

**What is your Surgical Team doing to Prevent Infection:**

- Before and after caring for each patient providers clean their hands

- Your surgical team members will wear hair covers, masks, gowns, foot covers and gloves during surgery

- They will administer antibiotics before surgery starts, usually about 60 minutes before the surgery starts and stopped within 24 hours.

- They will clean the skin at the site of surgery with special germ killing soap
Dental Prophylaxis for Total Joint Replacement Patients

We recommend that any dental work that needs to be performed, be performed prior to your surgery. Depending on your dental health, we may schedule you to see your dentist prior to surgery to reduce the chance of infection with you new total joint replacement.

Following joint replacement surgery, we recommend that you wait at least 3 months before you have any dental work – this includes cleaning. However, should you have an immediate problem, such as an infection, or broken, painful tooth, then you should see your dentist or oral surgeon immediately.

Following total joint replacement, we recommend that you always take an antibiotic 1 hour prior to any dental procedure (includes cleaning). We recommend that you follow this for a lifetime. It is our goal to prevent an infection in your total joint replacement.

Check with your doctor for your antibiotic prescription before your dental appointment.

Journal entries and questions regarding complications or Infection/Preventing Infection:
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Pneumonia

Before you go to surgery the nursing staff will provide you with an incentive spirometer and will teach you how to use it. An incentive spirometer is a plastic device that will assist you in taking deep breaths. It is important that you expand the air sacs in your lungs and clear air passages following surgery. This helps prevent post operative fever and pneumonia.

Hold the incentive spirometer in an upright position, exhale normally. Then place your lips tightly around the mouthpiece, take a deep breath (as if you are drinking a thick milkshake), remove the mouthpiece from your lips and exhale normally. We encourage you to use your incentive spirometer every hour when you are awake, repeating it 10 times consecutively. Be sure and breathe normally a couple of times between the deep breaths.
Bowel Function

Your normal bowel activity may be slow to return to after surgery. Anesthesia and/or pain medication contribute to this. Your first meal after surgery will be clear liquids (juice, broth, jello). This will help prevent abdominal bloating. Drinking plenty of fluids is also important in helping to prevent constipation. You may be given a daily stool softener to help prevent constipation. A laxative can be ordered prior to discharge if you require it. If you have not had a bowel movement, be sure to let your nurse know and she will help you determine if a laxative is appropriate. We encourage you to have fiber and bulk in your diet when you are ready to eat solid food. Such things as cereal, fresh fruits, and vegetables are good selections.

Rehabilitation Following Surgery

As part of your post-op care you will start participating in Physical and Occupational therapy before leaving the hospital and will continue physical therapy at home or in an outpatient facility. The speed and success of your recovery depends a great deal on your motivation and participation in your therapy program. You are the driving force toward a successful recovery. As your therapy progresses, you will experience less pain and stiffness. We encourage your participation in exercise as it is an important part of your recovery. Our rehabilitation team will work with you to improve your functional abilities.

- Physical Therapist: will help you with appropriate exercises. They will help you use equipment properly, work with you on transferring, walking, and stair climbing.
- Occupational Therapist: will teach you to do tub/car transfers, self care activities and how to use adaptive equipment like sock aids and reachers, for example.

Do not bring your walker with you to the hospital until it time to be discharged. Every patient will have a loaner walker and wheelchair to use while you are in the hospital.

Have your Care Coach bring your walker before you are discharged so that the therapist can assist you in making sure it is adjusted correctly for you.

Remember the speed and success of your recovery depends a great deal on your motivation and participation in your therapy program. You are the driving force toward a successful recovery. As your therapy progresses, you will experience less pain and stiffness. We encourage your participation in exercise as it is an important part of your recovery.

The goals for your therapy are:

- Straighten your knee completely (knee replacement only);
- Bend your knee to 90 degrees or greater (knee replacement only);
• Safely get in and out of bed

• Your therapist and/or physician will help determine you need for a walker, crutches, or a cane. They will help you use the proper equipment safely

• Occupational Therapists will teach you how to dress yourself with minimal assistance.

Things to remember at discharge:

• Everyone will need a walker after discharge and most people benefit from a 3 in 1 commode. OrthoCarolina’s post surgical team will help you with these arrangements.

• There are occasions when you are not able to go directly home. OrthoCarolina will work with you and the insurance company to determine which facility will suit your needs. You will stay at the facility until it is determined that you are safe to return home.

• Your progress and readiness for discharge will be assessed daily. The case manager and/or social worker will discuss the discharge plan with your family and you.

• On the day of discharge, the nurse will review the discharge instructions. You should already have your follow up appointment with the surgeon’s office. If you have any questions after discharge, please contact your Patient Navigator.

• You will receive a follow-up phone call from your Patient Navigator to check up on you after discharge. (Holidays and weekends may cause this to vary slightly.)

• It will be important that you continue the following things after you are discharged and return home:

  Your Physical Therapy       Pain Management
  Cough/deep breathing         Walking

Incision Care

• Check your incision daily for increasing redness, pain, warmth, and/or drainage. These are signs of possible infection.

• Approximately 2 weeks after surgery, if you have staples, they will be removed.

• It is normal to feel some numbness in the skin around your incision.

• Your incision should be kept dry until your surgeon tells you otherwise.

• Until your wound is thoroughly healed and no longer draining, avoid soaking it in water.
Instructions for changing your bandage:

- Your outpatient Physical Therapist will change your bandage. You and your Care Coach will be instructed on how to change the bandage as well. Remember to bring your supplies with you to outpatient Physical Therapist.

- It is important that you wash your hands thoroughly with soap and water or use an alcohol based hand sanitizer before and after your bandage change.

- Do not remove steri-strips or surgical glue that may be helping to hold your incision together. Over time they will come off by themselves as expected.

- Your first bandage change will be the day after surgery. Then, unless instructed otherwise, it should be changed every other day for the next 11 days.

- To change your bandage you will need:
  
  - For the first 3 bandage changes you will use Telfa AMD Antimicrobial Island bandage (white paper package with purple writing). You will notice the bandage is made with a cloth like tape.
  
  - The last 3 bandage changes will be done with a clear Tegaderm bandage (this package has green writing on it).
  
  - Aquacell dressing – do not remove for 7 days. You will be able to shower. If Aquacell has to be removed, physician direction is needed. Starter package to be given.

Driving After Surgery

The ability for someone to resume driving after surgery is seldom a medical question, but more often a legal question. It is the responsibility of all licensed drivers to drive safely at all times no matter what their permanent or temporary impairment may be.

Keep in mind, following surgery, one’s reaction time may be severely compromised, secondary to medication and/or pain. The ability to use all four extremities fully may also be impaired secondary to the surgery.

Again, it is the responsibility of each individual to drive safely no matter what his or her impairment may be.

With knee or shoulder surgery, the mechanics of driving seldom will cause harm to the operative site.

Realistically, most people are able to resume driving an automatic at approximately one week and a straight drive at approximately two weeks. Keep in mind; this varies based on each individual’s driving capabilities.
The responsibility of safe driving is that of the individual regardless of their medical condition.

**What You Can Expect After Surgery**

If you have met all of the PT and OT goals and all tubes have been removed you will most likely be discharged from the hospital on the second or third day, if you are medically stable. Occasionally some patients are discharged the same day! For planning purposes you can expect to be discharged about 11:00 am.

**Journal entries and questions regarding Rehabilitation after surgery:**

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