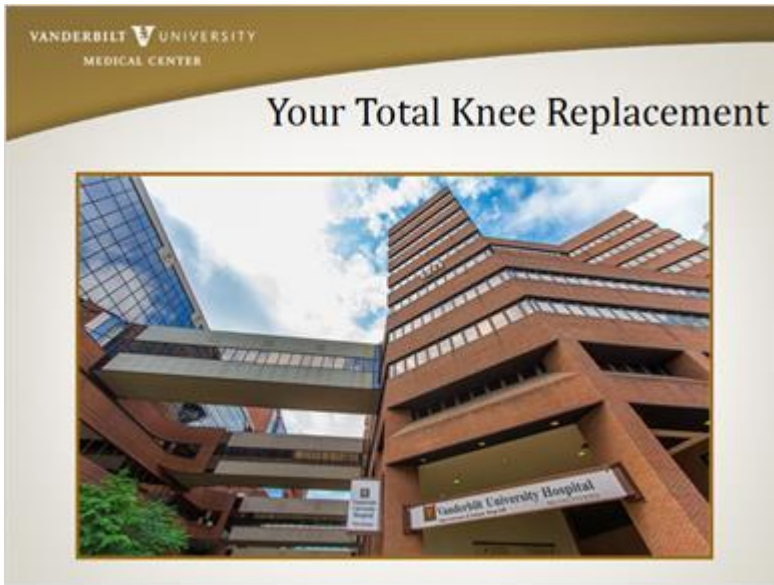


Total Joint Replacement: Knee

1. Welcome

1.1 Welcome to Your Total Knee Replacement



Notes:

Welcome, and thank you for choosing Vanderbilt for your knee replacement surgery. If you have not already attended your Total Joint Replacement class, you will be invited to attend one soon. The information in this guide will help you remember important safety tips and instructions while you are at home. Flip through the sections in this presentation by clicking on the “next” button.

1.2 Your Great Outcome

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Your Great Outcome

Imagine yourself *1 year* from now—
what you would like to be doing?



The image contains two side-by-side photographs. The left photograph shows an elderly couple in a park-like setting with fallen leaves. The woman is wearing a dark sweater and a white hat, and the man is wearing a brown shirt and pants. They are both looking at a large, fluffy dog that is jumping towards them. The right photograph shows a woman in a white tank top and blue pants riding a bicycle. A young girl in a white shirt is sitting on the back of the bicycle, holding onto the woman. They are both smiling and looking at each other.

Notes:

The process of joint replacement takes time, effort, and motivation. Picture yourself a year after your surgery, and think about the results you'd like to achieve. Would you like to be able to ballroom dance again? Play with your grandchildren? Think about what encourages you, write it down, and read it to stay motivated during your recovery.

2. Getting the Best Results

2.1 Having the Best Experience:



Notes:

Anytime we have surgery, there are risks. Here are a few things that we can do together to minimize them and have the best total joint replacement experience. Click on each of the four buttons to learn more about preventing infection, reducing the risk of blood clots, managing pain and avoiding other risks.

3. Preventing Infection

3.1 Preventing Infection



Notes:

Preventing infections before your surgery is just as important as preventing them after your surgery. If you develop an infection, it may cause your surgery to be delayed. The acronym ACT will help you remember what you can do to prevent infections and keep your surgery on track.

3.2 Preventing Infection



Notes:

The first letter stands for AVOID. Avoid anyone that has the flu, a cold or upper respiratory infection, pink eye, chicken pox, or any other contagious disease. Even if they have something as simple as a stomach bug, we ask that you avoid interactions with them to protect yourself. You should also avoid high-energy animals that could scratch you or bite you. Any openings in your skin increase the risk of infection, and could postpone your surgery.

3.3 Preventing Infection



Notes:

The second letter, C, stands for CLEAN. Make sure you are washing your hands and using hand sanitizer often. We will provide you with special rinse-free 2% Chlorhexidine Gluconate wipes. We ask that you use your wipes the night before and the morning of your surgery. You will get these wipes from your nurse. Do not to put on any deodorant, lotions, or perfumes after using your wipes. In addition, change your sheets and wear clean pajamas the night before surgery to keep yourself as clean as possible. Even though many people let their pets sleep in their bed, we ask that you do not allow them to do so the night before your surgery. For your reference, you can print a more detailed copy of the instructions for using these wipes from the resources menu in the top right-hand corner of this presentation. There is also a contact number located in the references section. You can call this number if you lose or do not receive your Chlorhexidine wipes.

3.4 Preventing Infection

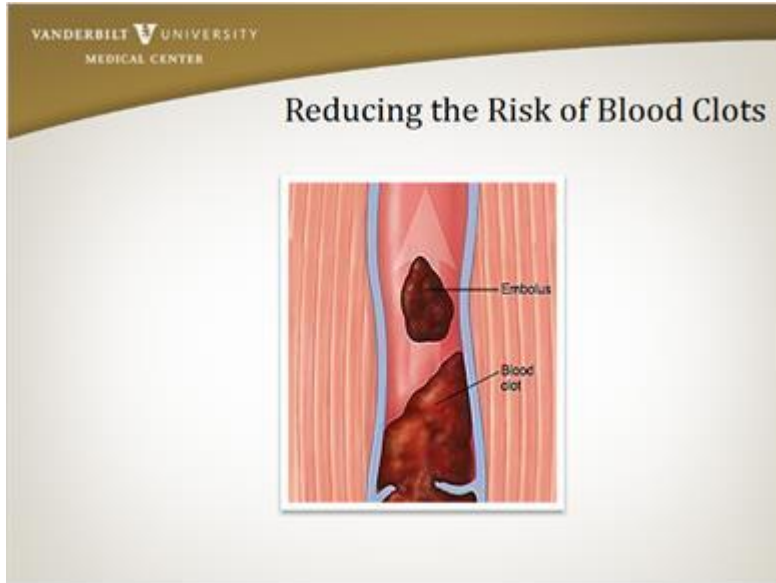


Notes:

Finally, the third letter stands for TELL. Make sure you are communicating with us about anything from urinary tract infections, the flu, a fever, a stomach bug, if you get bitten by something that creates a sore, if you get poison ivy, have a boil, etc. If you have any health concerns after your surgery is scheduled, please call us. Contact information can be found by clicking the RESOURCES button in the top right-hand corner of this presentation.

4. Reducing the Risk of Blood Clots

4.1 Reducing the Risk of



Notes:

Blood clots are another possible side effect of having surgery. The combination of reduced physical activity and some medications can cause your blood to start to pool and could form a clot. If a blood clot breaks free, it could travel to your lungs, heart, or brain and cause a life threatening situation. This is not meant to frighten you, but we want you to be aware of how important it is to prevent blood clots. There are a few simple activities that can significantly reduce the chance of forming a blood clot. Taking blood thinning medication or getting up and walking around throughout the day are some of the easiest and safest things we will ask you to do.

4.2 Reducing the Risk of


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Reducing the Risk of Blood Clots

Here's what will help:

- Elevate limb when resting
- Wear your TED hose, if prescribed
- Reduce travel
- Take blood thinning medication
- Get moving!


Note: If you live more than an hour from the hospital, stop every 45 minutes to get out of the car and walk around. Also, you shouldn't fly for at least 3 months after your surgery.



Notes:

Let's review what else you can do to reduce the risk of forming a blood clot. While you are in bed or resting in a chair, you can elevate your leg, which will also help alleviate swelling and pain. You may be given compression stockings, also called TED hose, to wear for periods of time during the day. Wear them according to your surgeon's instructions. You should also limit your travel time, because sitting for long periods of time increases your risk of forming a blood clot. If you live more than an hour away from the hospital, you should stop every 45 minutes and walk around before getting back into the car. Do not fly, or travel long distances by car, for at least three months after your surgery. Make sure you consider this as you are planning your surgery date. As always, take your blood thinning medications as instructed by your doctor and work the Vanderbilt's physical therapists to start walking as soon as possible. They aren't crazy! They know you just had surgery, but taking short walks is one of the best ways for you to support the healing process. It is also critical to recognize the symptoms of a complication caused by a blood clot. Let's look at some scenarios and the actions you should take if you experience these symptoms.

4.3 Reducing the Risk of



Reducing the Risk of Blood Clots

Scenario #1:


It is three weeks after your surgery, and your leg is less swollen than it was last night. After you do your physical therapy, your leg is more swollen, so you elevate it and use ice packs. The swelling goes down and your leg is sore, but not painful. Your calf muscle does not feel tight or give you any discomfort when you touch it.

Notes:

In this scenario, it is three weeks after your surgery and your leg is less swollen than it was last night. After you do your physical therapy, your leg is more swollen, so you elevate it and use ice packs. The swelling goes down and your leg is sore, but not painful. Your calf muscle does not feel tight or give you any discomfort when you touch it.

This is normal! Keep doing what you are doing to make yourself comfortable.

4.4 Reducing the Risk of



Reducing the Risk of Blood Clots


Scenario #2:
It is three weeks after your surgery, and your leg is swollen, it feels achy, and your calf muscle is tight. You elevate your leg and use ice packs, but your leg is still swollen and hurts when you squeeze your calf.

Notes:

In this scenario, it is three weeks after your surgery, and your leg is swollen, it feels achy, and your calf muscle is tight. You elevate your leg and use ice packs, but your leg is still swollen and hurts when you squeeze your calf.

You should call us! We can help you figure out what will help you to be more comfortable. Even if this happens at two in the morning, you can call and ask to speak with the Total Joint Resident on call. They will ask you a few questions and help you decide what to do. Our number is located in the resources for this presentation.

4.5 Reducing the Risk of



Reducing the Risk of Blood Clots

Scenario #3:
You suddenly feel like you might pass out. Your chest is tight, you are coughing and sweating, and you have some chest pain or shortness of breath.

Notes:

In this last scenario, you suddenly feel like you might pass out. Your chest is tight, you are coughing and sweating, and you have some chest pain or shortness of breath. This could be the sign of an emergency situation. You should call 911 or have someone take you to a local emergency room.

5. Managing Pain

5.1 Managing Pain



Pain: What you should expect



We are here to help! Tell your nurses if:

- You need your leg elevated
- You need ice packs
- Your pain is high on the pain scale
- You feel nauseous or are experiencing any other side effects from your pain medication

Notes:


While you are in the hospital, your nurses are there to help you stay as comfortable as possible. They can help you elevate your leg or provide ice packs to reduce swelling. Let your nurses know if you are ever experiencing high levels of pain or discomfort. They can offer you pain medication as long as it does not exceed the amount recommended by your surgeon. Also, let your nurses know if you experience nausea or other side effects from the pain medication. You will receive a prescription to use at home as needed; you can ask your nurses any questions you might have about this medication, and they can help you find the answers.

5.2 Managing Pain

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Pain: What you should expect

Pain Levels

| | | | |
|--|--|--|---|
|  0 very happy, no pain |  1-2 hurts just a little bit |  7-8 hurts a whole lot |  9-10 hurts as much as possible |
|--|--|--|---|

6 Weeks 4 Weeks 2 Weeks

Notes:

You will feel pain during the first two weeks after surgery. After those two weeks, however, your pain will begin to lessen, so you should reduce the amount of prescription pain medication you take accordingly. By your 6 week post-op appointment, most patients no longer need to take their prescription pain medicine.

5.3 Managing Pain

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Managing Pain

Reduce Your Pain:

- Get moving!
- Elevate limb when resting
- Apply ice packs
- Take pain medications



Notes:

Once you are discharged from the hospital, there are a few things you can do to manage your pain. The more quickly you can get back on your feet, the faster you can recover. Moving not only helps prevent blood clots, but it also makes you stronger and more flexible. Although exercising may feel uncomfortable at first, it can help reduce swelling, improve healing, and lower your pain over time. While you are resting, you can always keep your leg elevated and use ice packs for 20 minutes every few hours. Remember not to lay the ice pack directly on your bare skin. You should not apply heat to your surgical site, because this will open your blood vessels and cause more swelling. Finally, you can take your prescription pain medication if you need it.

5.4 Managing Pain

The slide is titled "Managing Pain" and features the Vanderbilt University Medical Center logo in the top left. It contains a "Tylenol and Prescription Medication Log" form with fields for "Name of Prescription:", "Prescription Dosage:", and "Times per Day:". Below these fields is a table with four columns: "Date", "Time", "Tylenol or Prescription", and "Dose". To the right of the form is an image of a Tylenol Extra Strength box with the text "Less than 3000mg per day!" below it.

Notes:

You can take extra strength Tylenol between doses of your prescription pain medication, if you need it. You should not take Tylenol at the same time. Ask your doctor or pharmacist if your prescription contains Tylenol. Do not take more than 3000 milligrams of Tylenol per day. To help you keep track of your medications, use the medication log found in the resources for this presentation. There are sections of the log for you to track when you take your prescription, when you take Tylenol, and how many milligrams of Tylenol you are taking each day.

6. Avoiding Other Risks

6.1 Avoiding Other Risks

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Avoiding Other Risks

Constipation Remedies:

- Get moving to get going!
- Taper off prescription pain medication
- Drink at LEAST 2 liters of water per day
- Fiber, fiber, fiber!



Notes:

Unfortunately, pain medications can cause constipation. The best thing for fighting constipation is movement! Not only will this reduce your risk for blood clots and help manage your pain, it can also help ease the effects of pain medication on your digestive system. You should be also be drinking at least two liters of water per day. Eating fibrous foods and taking fiber supplements are other easy ways to keep yourself comfortable.

6.2 Avoiding Other Risks


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Avoiding Other Risks

Vanderbilt Preoperative Evaluation Center (VPEC)

They will provide you with directions for your specific medications.
Make sure you understand them!

See page 11 in your Total Joint Replacement book for more information.



Notes:

In order to minimize the risks of surgery, we will want to know about other medical conditions you might have. Clearances from your primary care provide, specialists that you see and your dentist are needed. We will also perform pre-op tests at our Preoperative Evaluation Center, or VPEC. Bring a list of any current medications to your VPEC appointment - you do not have to bring the actual medications with you. If any of the medications on that list change between the time of your VPEC appointment and the day of your surgery, please bring an updated list with you to the hospital.

7. Caregiver Support

7.1 Caregiver Support

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Better Outcomes at Home

Caregiver Support

Your team of friends and family should be able to help you with:

- Getting home from the hospital
 - Plan to be discharged in the **morning**
- Bathing, getting dressed, and changing your dressings
- Getting you to and from your doctor's appointments and physical therapy
- Grocery shopping, pet care, etc.



Notes:

Joint replacement is a team sport. You have your team at Vanderbilt, so now you should start forming your team at home. Start thinking about friends or family members who can assist you during your recovery. Your home team's first job is to pick you up from the hospital the day you are discharged. This could be the day after your surgery, or two to three days after your surgery. It all depends on when your surgeon feels confident that you are ready to go home. The person picking you up from the hospital should be available all day, and should be driving a car that will be comfortable for you to ride in. We don't want you climbing up into a monster truck or squatting down into a tiny sports car after surgery. For the first two weeks, you might need someone to stay overnight with you and help you with a few different activities. You should feel comfortable with this person, because they may need to help you bathe, get dressed, or change your surgical site dressings. You also need to have someone that can drive you to your doctor's appointments and physical therapy for the first 6 weeks after your surgery. Your surgeon will let you know when you joint replacement has healed enough for you to drive safely. During these 6 weeks, someone will also need to help you with grocery shopping, pet care, and other errands.

8. Preparing for Recovery

8.1 Preparing for Your Recovery

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Preparing for Your Recovery

Before surgery:

- Get a prescription for a rolling walker
- Pick up a commode seat (elevated toilet seat) and tub bench or shower chair
- Other items that might be helpful:
 - Night lights
 - Ice packs
 - Comfortable athletic shoes

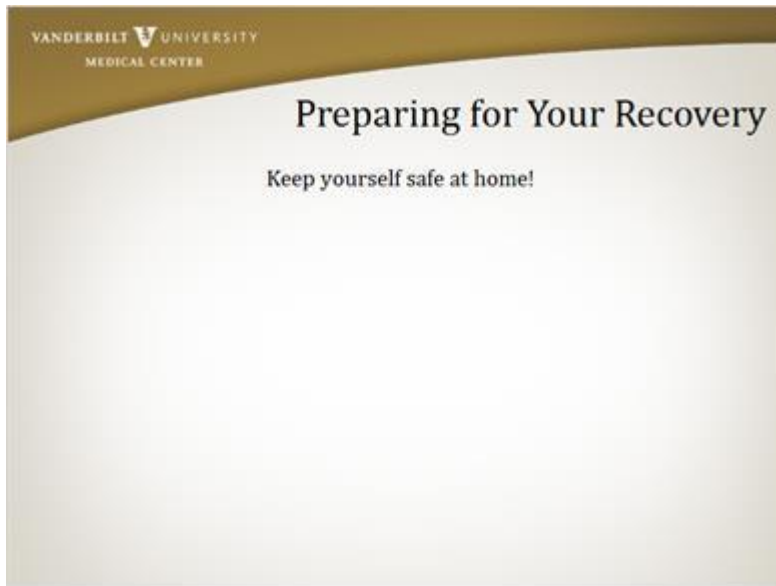


The image contains three small photographs. The first shows a white commode seat mounted on a toilet. The second shows a black metal rolling walker with four wheels and handrails. The third shows a white plastic shower chair with a backrest and armrests, placed in a bathroom.

Notes:

There are a few things you can pick up now to get ready for your surgery. You will need to get a prescription for a walker, and you should also pick up a commode seat for your toilet, as well as a tub bench or shower chair. You do not need to bring your walker with you to the hospital when you have your surgery, but it should be in the vehicle that is coming to pick you up when you are discharged. It would also be helpful to put some non-slip mats in your bathroom to make bathing and showering easier. Night lights, ice packs, and athletic shoes will also make your recovery at home safer.

8.2 Preparing for Your Recovery



Notes:

There is a good chance your home is organized to match the way you live now. After your surgery, it will take time to get back to your current state of mobility. To make your house as safe as possible, you should begin to move your furniture to create large walking paths that are free from clutter so that you can navigate your walker comfortably. If there are items you usually have to reach deep into cupboards or high up on shelves for, move those items down to a lower level so you can reach them once you are discharged after your surgery.

8.3 Preparing for Your Hospital Stay

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Preparing for Your Hospital Stay

You may bring:

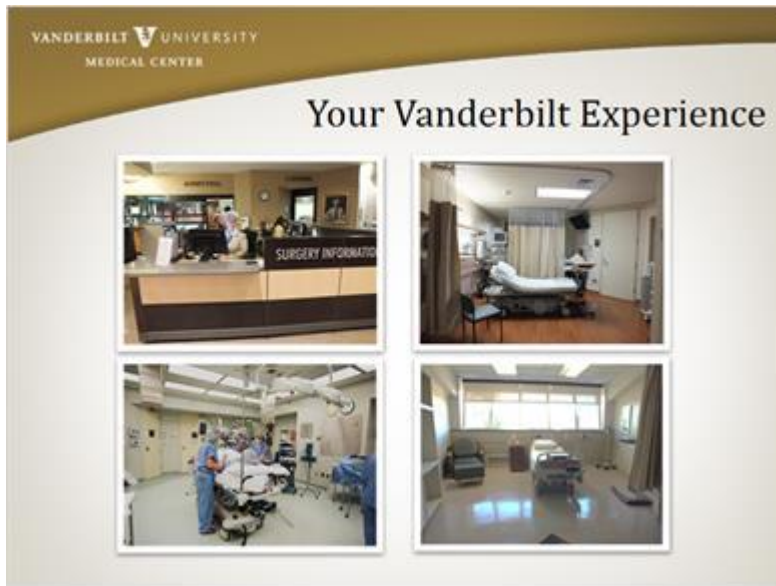
- Comfortable clothes and slip-on shoes
- Pillows (optional, for the ride home)
- Your **list** of medications
- Your insurance card and identification
- Toiletries



Notes:

There are also a few items you should bring to the hospital to make your stay more comfortable. If you are not comfortable in a hospital gown, you can bring some loose-fitting clothes like athletic shorts or a robe. It is also a good idea to bring a pair of slip-on shoes or tennis shoes for walking after your surgery. To make your ride home from the hospital more comfortable, ask a friend or family member to bring pillows for you to sit on. In addition to those comfort items, you should also bring a list of your current medications, your insurance card, and your driver's license or other identification card.

8.4 Your Vanderbilt Experience



Notes:

You can expect a few things from us during the joint replacement process. Someone from Vanderbilt should call you the day before your surgery to confirm your arrival time. If you do not receive this phone call by 4:00 or 4:30, call us so we can find that information for you. Once you arrive for your surgery, you will report to the Surgery Information Desk, and they will get you checked in to the preoperative holding area. Here, you will change into your gown and receive an antibiotic IV. When you are taken to surgery, your family will receive a pager to be notified when it is finished. After surgery, you will be moved to a recovery room, and then to the orthopedic suite, where your family can visit you. Physical therapy will begin working with you that day, if possible, and they will continue to work with you once or twice per day until you are discharged.

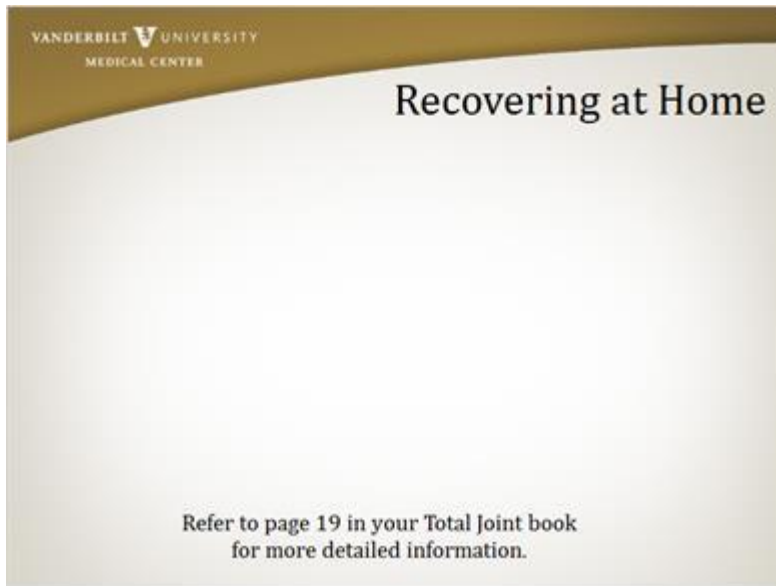
8.5 Call, Don't Fall



Notes:

This video is a light-hearted exaggeration of what could happen if we try to get out of our bed on our own. We don't want this to happen to you! If you are alone in your room, and you need to get out of bed for any reason, call a nurse and ask for someone to come to your room as soon as possible. To make this process easier for everyone, try to let your nurses know while they are in your room if you need to use the restroom, take a walk, or just stretch your legs. This will ensure that you stay safe and comfortable during your recovery at the hospital.

8.6 Recovering at Home



Notes:

Your surgical incision will be covered with a large, rectangular dressing after surgery. If your incision is dry, and you do not have any drainage, you don't have to wear this dressing. Clear, yellow drainage is normal, and bloody drainage is normal. However, if you have to change your dressing three times or more per day, give us a call. If your incision is bleeding, apply pressure to the area for at least 5 minutes. If you ever have drainage that is creamy or green please give us a call. After surgery, patients typically run a fever or 99 to 100 degrees. If this happens to you, take Tylenol and give us a call so we can document it. If your fever exceeds 101.5 degrees, call us immediately.

9. Getting Moving

9.1 Getting Moving

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Getting Moving

Before your surgery:

- Increasing your range of motion
- Increase your strength

During the recovery process:

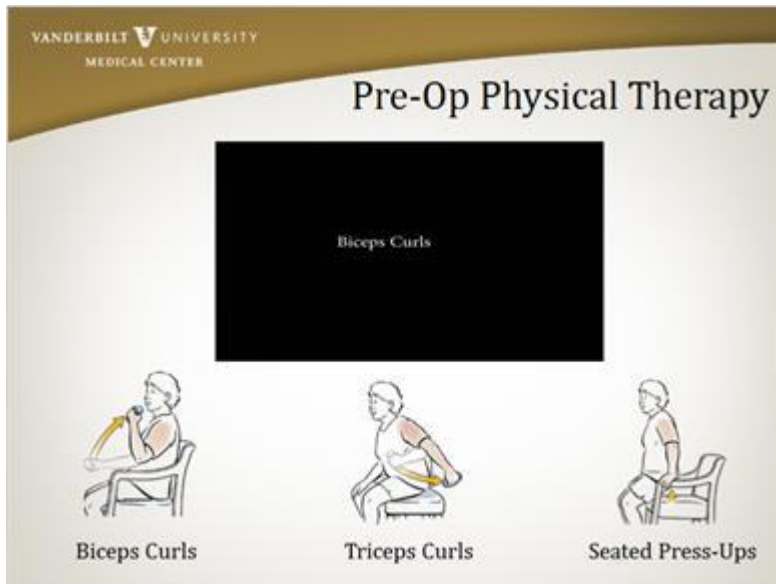
- Keeping up your motivation
- Pain expectations during therapy



Notes:

One of the best ways to prepare for your surgery is to perform various physical therapy exercises to increase your range of motion. Your physical strength is very important to your recovery. In addition to physical strength, your mental health plays a large part in the recovery process by helping you stay motivated. It is important to celebrate small victories during your physical therapy, like graduating from a walker to a cane, and then walking without assistance. The following video clips demonstrate simple exercises that can be done before your surgery.

9.2 Physical Therapy



Notes:

You won't be able to depend on your legs as much as you did before your surgery, so it is important to have enough upper body strength to push, pull, and lift yourself into safe and comfortable positions. Biceps and triceps curls, shown here, can be done with a one or two pound object or by simply tightening the muscles in your arms while making the curling motion shown in the video.

9.3 Physical Therapy



Notes:

Heel slides can be done laying on a bed or sitting in a chair. This movement works on strengthening your hamstrings and your hip muscles. Hamstring curls should be done standing up, however, you can hold onto a countertop or other surface if you need help keeping your balance.

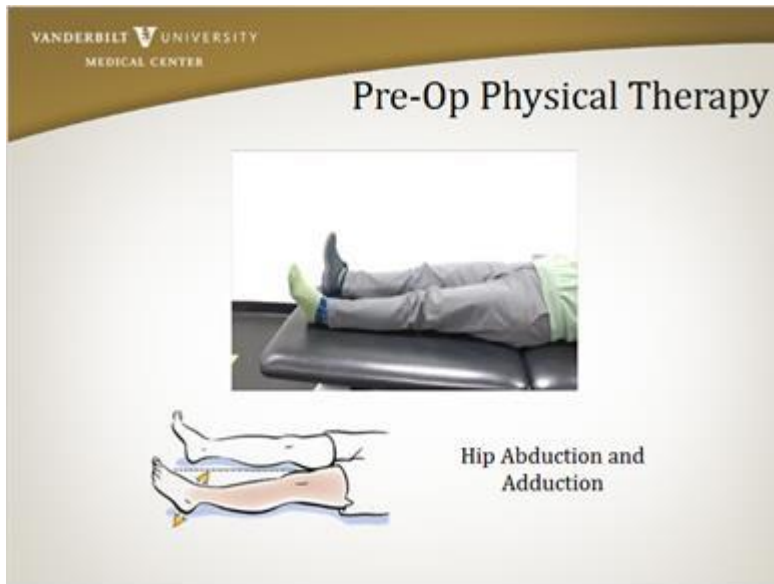
9.4 Physical Therapy



Notes:

Quadriceps sets strengthen the four muscles in your thigh. These muscles will help you walk with more stability after you have gotten you surgery. Sitting with your legs straight out, gently push the back of your knee down toward the surface you are sitting on. Knee extensions are a more exaggerated version of the motion you make when you are getting out of a chair. Put a soft barrier between the back of your knees and the chair, and slowly lift your foot to straighten your leg.

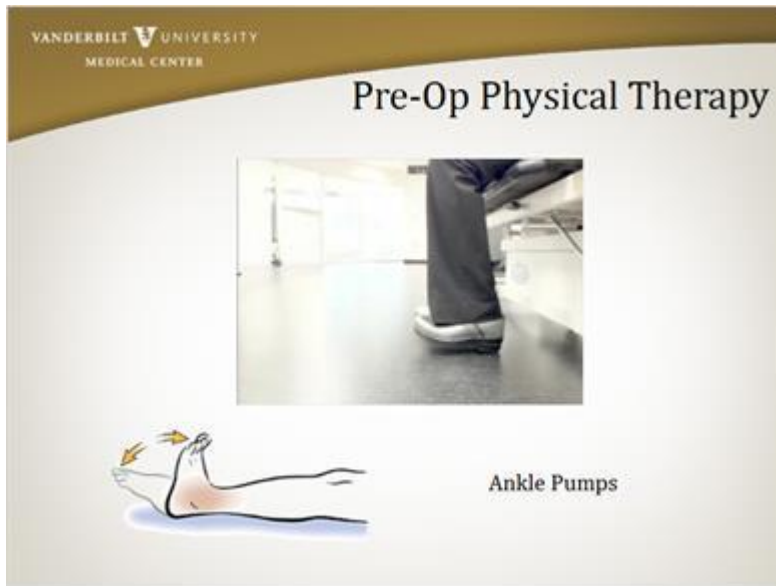
9.5 Physical Therapy



Notes:

Hip abduction and adduction exercises strengthen the muscles around your hip joints. If you are comfortable adding more resistance to this motion by using a belt, a dog leash, or by pushing on the sides of your legs with your hands.

9.6 Physical Therapy



Notes:

Ankle pumps are important because they help keep pressure on your calf muscles and promote circulation through your legs. This will help prevent the formation of blood clots and can also help reduce swelling or manage pain. Ankle pumps can be done whenever you are sitting down, even if you are in the car or at the dinner table.

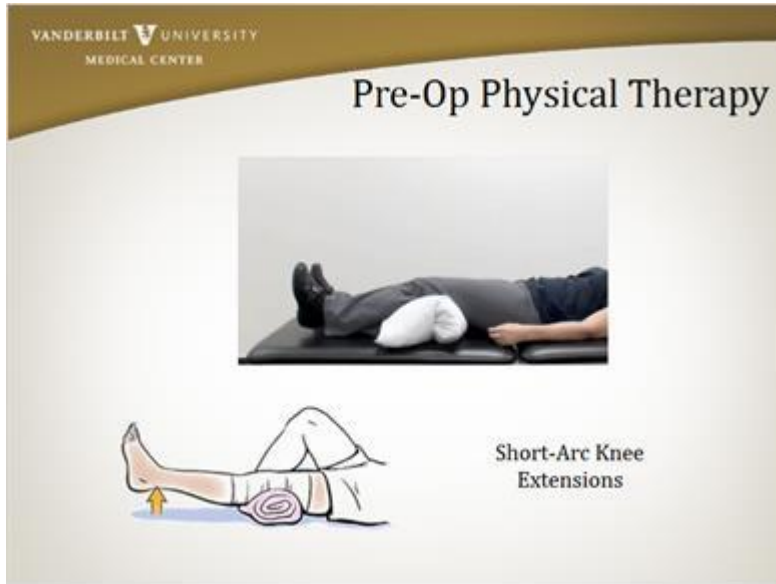
9.7 Physical Therapy



Notes:

Your gluteal muscles are very important to the strength of your lower body. This is a good example of an exercise that you can do when you're resting, for example, while you're watching TV or sitting in the car.

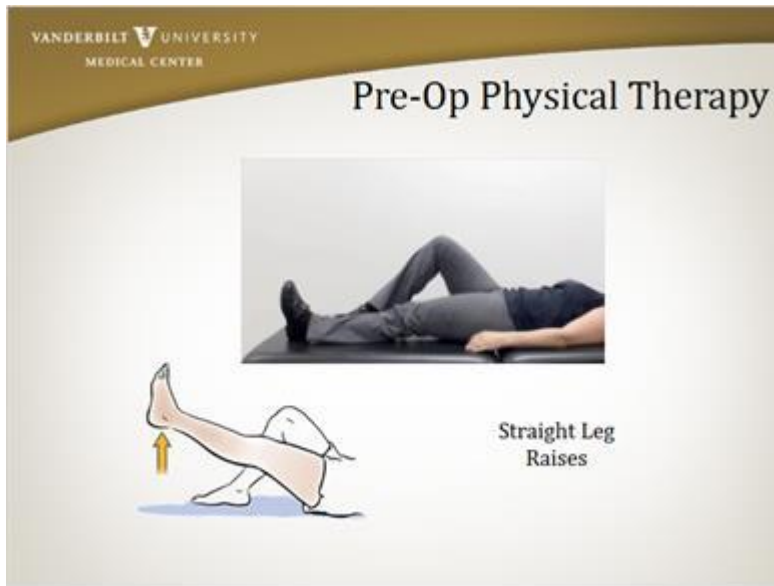
9.8 Physical Therapy



Notes:

Short-arc knee extensions focus on your quadriceps and the muscles surrounding your knee. Place a support of some kind, like a pillow or a rolled up towel, under your knee to create a slight bend, and extend your foot up toward the ceiling.

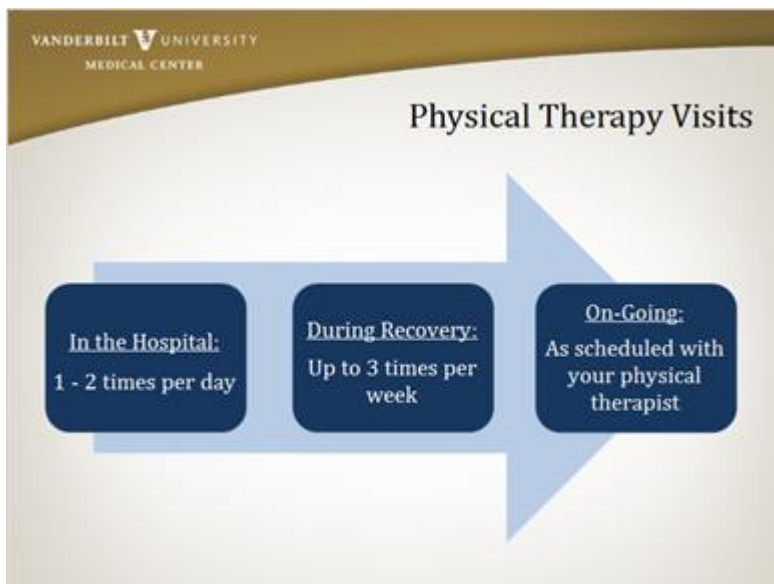
9.9 Physical Therapy



Notes:

Straight leg raises strengthen your quadriceps, hamstrings, and gluteal muscles. Laying flat on your back, slowly lift your leg as high as you can without bending your knee. Then, carefully lower your leg back down to the surface you are laying on.

9.10 Physical Therapy Visits

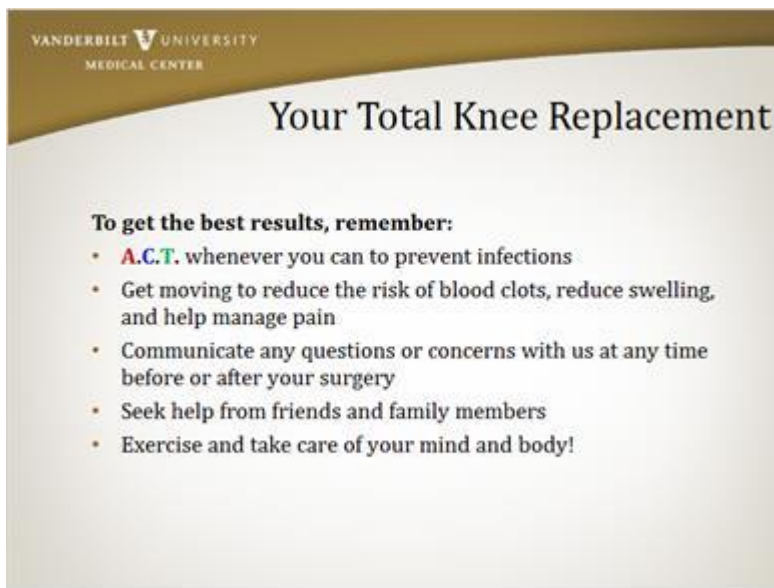


Notes:

The exercises we've reviewed are a great way to condition your body before you have your surgery, and are also a great supplement to the physical therapy you will receive after your surgery. They are simple movements that can be done whenever you are stationary, like watching TV, riding in the car, or sitting at the dinner table. The important thing to remember is that the key to a successful rehabilitation is not your physical therapist or your doctors, it's YOU! Staying positive and motivated during the time after your surgery will help you progress through your rehab quickly.

10. Conclusion

10.1 Your Total Knee Replacement



Notes:

We covered a lot of information in this presentation. Some of the most important things to remember to get the best results from your total joint replacement are: ACT whenever you can to prevent infections; get moving to reduce the risk for blood clots, reduce swelling, and manage pain; communicate with us at any time throughout this process; ask your friends and family members for help; and finally, take care of yourself!

10.2 Your Great Outcome



Notes:

Again, thank you for choosing Vanderbilt for your total joint replacement surgery. We are confident that, by following the tips, precautions, and other instructions covered in this presentation, you will achieve your great outcome.