

# Patient Instructions

## Joint Replacement Surgery



 WESTERN CONNECTICUT HEALTH NETWORK

**NEW MILFORD HOSPITAL**

AFFILIATED WITH DANBURY HOSPITAL

## Welcome to New Milford Hospital



This patient pathway has been designed as an aid to inform you and prepare you for what you can anticipate during your stay with us. Please keep in mind this is only an outline of your surgical plan of care. The information in this pathway may vary to meet your individual needs as determined by your physician.

A joint replacement is an operative procedure performed by your physician to relieve pain due to arthritis.

Any questions you may have regarding these guidelines or any aspect of your care should be directed to a health care provider.

The estimated number of days you might be in the hospital is three (3) to four (4). This could vary depending upon your progress.

## Additional Members of Your Joint Replacement Healthcare Team

### Anesthesiologist & Certified Registered Nurse Anesthetist (CRNA)

The Anesthesia Care Team is made up of both an MD and a CRNA who work closely together with your surgeon to ensure your comfort and safety during your peri-operative experience. They will meet with you pre-operatively to review your health history, discuss the best type of anesthesia for you and answer any questions you may have regarding your care. They closely monitor your health status during your surgery and oversee your care in the Post-Anesthesia Care Unit (PACU).

### Hospitalist

The Hospitalist is a licensed medical doctor, trained in internal medicine, whose practice is devoted to the unique needs of hospitalized patients. They work with your private medical doctor, your surgeon and the rest of your health care team to deliver the right care at the right time, and they are able to respond quickly and efficiently to changes in your condition that may require a new medication, test or procedure.

### Physician Assistant

The Physician Assistant (PA) is a health care professional licensed to practice medicine at the direction of your physician. The PA will assist your surgeon in the operating room during your joint replacement as part of the surgical team, and will follow your progress during your hospital stay. You will be seen daily in order to assess your medical condition, monitor your surgical incision, change your dressings, and pull drains if necessary. The PA can adjust your medications, and is able to evaluate any changes in your medical condition. The PA is in constant communication with your orthopedic surgeon.

### Registered Nurse

The Registered Nurse (RN) is an integral member of your health care team, and will be involved in your care throughout your entire stay. Your daily treatment plan is coordinated with the team through the nurse assigned to your care. Your nurse is a valued resource for you and your family, and is the center of communication for the physicians, PAs, therapists, and case managers.

### Certified Nursing Assistant (CNA)

The Certified Nursing Assistant (CNA) will be available to assist you in your everyday activities such as bathing, dressing, setting up meals, and toileting. The CNA works closely with the registered nurse assigned to your care.

### Physical Therapist

A Physical Therapist (PT) will treat you daily to instruct you on proper exercises, transfers in and out of bed and the bathroom, walking, and any precautions associated with your joint replacement. The PT will teach you the proper use of a walker, crutches, or a cane, and will continually assess your need for such devices. Your PT will communicate your progress to the rest of the team in order to determine a discharge plan appropriate to your needs.

### Dietitian

A Registered Dietician (RD) will see you the day after surgery to assist you with meal planning to maximize your post-surgical healing, taking into account any additional medical conditions you may have.

### Social Worker

A social worker will see you and your family to discuss your discharge plans. Discharge options include (1) discharge to home where arrangements can be made for visiting nurses and PT services, or (2) discharge to a rehabilitation facility for nursing care and intensive physical therapy. Your home situation, insurance coverage, and progress with physical therapy are factors which could influence your discharge plan. Please read the enclosed packet titled "Planning for Your Discharge" containing specific discharge information.

## Surgical Case Manager

A nurse liaison responsible for coordinating your preoperative care.

## Before Surgery

### Infection Prevention

- The night before surgery, wash your skin with an antiseptic soap.
- Do not apply body lotions or moisturizers either the night before or the morning of surgery to the operative area that you have washed.
- Do not shave or wax your surgical area or leg 24-48 hours prior to surgery.

### Diet

- You can drink and eat your usual diet until midnight the night before surgery.
- After midnight, you are not to have anything to eat or drink.

### Medications

- Take medications as instructed by your physician until the morning of surgery.
- Some of your medications may need to be stopped prior to your surgery. Detailed instructions will be provided.
- Make a list of your current medications including herbs, supplements, and other over-the-counter medications. Include medication name, dosage, and how often you take them.

### Tests and Procedures

- You will be scheduled for specific blood tests, x-rays and a possible EKG.
- Your physician will discuss options in the use of blood products or medications used to prevent or treat anemia.

### Consultations

- You will meet with one of the surgical case managers to review your specific pre-operative instructions including post-op safety and comfort. Post-operative exercise and any specific equipment required for home use will also be discussed. Appointments are available Mon-Fri between 8AM and 4PM. Surgical Case Management phone number is 860-210-7473.
- You will have an examination by your medical doctor 3 to 4 weeks prior to your scheduled surgery.
- You may have a consultation with a New Milford Hospital anesthesiologist prior to your surgery.
- You may be asked to see a specialist pre-operatively depending on your medical evaluation.

### Discharge Planning

- Think about your needs after leaving the hospital. Can you manage your care at home?
- Discuss your options with your family/caregivers.
- Consider visiting some Short-Term Rehab facilities ahead of time. You can often pre-book at your facility of choice, depending upon your insurance coverage.
- Call the Social Work Department to arrange for post-hospital discharge care.
- Social Work Department phone number is 860-210-7442.

## Morning of Surgery

### Activity

- You will report to the One Day Surgery Center on the 2nd floor of the hospital about 2 hours before the start of your surgery.
- The Surgical Case Managers will notify you of the time to arrive.
- Bring comfortable tie or velcro shoes and a walking aide if you have been using one at home.
- We ask you to leave valuables at home. Do not wear jewelry, nail polish, makeup, or contact lenses to the hospital. You may wear your hearing aid. Please do not glue in dentures as they might be removed prior to surgery.

### Diet

- You may not have anything to eat or drink after midnight the night before surgery.

### Medications

- You may be instructed by your physician or One Day Surgery nurse to take certain medications with a sip of water. Do not take any other medications.
- Be sure to bring an accurate list of your current medications to the hospital.
- Inform the nurse of any new medications you have recently started taking.

### Treatment

- An intravenous (IV) line will be started by your nurse to maintain your fluid intake during and after surgery.

### Infection Prevention

- IV antibiotics are used to prevent any possible post-surgical infection and are administered according to specific guidelines.
- You will have your operative limb prepared with an antiseptic soap.
- It has been found that control of blood glucose levels is helpful in the prevention of post-surgical infection. Finger-stick glucose tests may be used throughout your hospital stay. Medications will be ordered accordingly.

### Tests and Procedures

- Additional lab tests may be required before surgery.

### Consultations

- You will be interviewed and evaluated by an anesthesiologist prior to surgery. He/she will review your health history and discuss the best type of anesthesia for you. You will be asked to sign a consent form for anesthesia.
- A spinal anesthetic is usually used; some patients may require general anesthesia. Regardless, you will be awake upon entering the operating room.
- You will see your surgeon prior to your surgery. You and your surgeon together will mark your surgical site.
- You will be asked to sign a consent form for your surgery and possible blood transfusion.

### Patient and Family Teaching – Preventing Adverse Events

- The doctors and staff of New Milford Hospital take your safety very seriously. Throughout the admission process (and your entire hospital stay) you will be asked to confirm your identity and your understanding of your surgical procedure multiple times. If you have any concerns about your safety, please bring it to the attention of your physician or nurse immediately!

- We welcome family members to wait in our surgical waiting area while you are in surgery. When your surgery is completed, the surgeon will come or call the waiting area to speak to your family/significant other. If your family chooses to wait elsewhere, the doctor will call them at that location after surgery. The secretary will take phone numbers for this purpose upon your arrival.
- Your surgical team will be available to answer questions.

## During Surgery/Immediate Recovery Phase

Spinal anesthesia with sedation for a light sleep is most often used for joint replacement surgery. Patients feel better after surgery and have less side effects such as nausea/vomiting, grogginess, blurred vision and sore throats. No pain is felt immediately after surgery. There also seems to be less bleeding after surgery. Surgery takes 1 to 2 hours for a single joint replacement and 3 to 4 hours for a bilateral joint replacement. When surgery is done, you are put on an orthopedic bed with an overhead trapeze and brought into the PACU. Upon arrival to the PACU, you are placed on a cardiac monitor and given oxygen via a mask or nasal prongs. A pulse oximeter is placed on your index finger to measure blood oxygen levels. The oxygen is left on for the first 24 hours after surgery. This is because anesthesia, combined with narcotics or sedatives, can cause respiratory depression. Therefore, you might not breathe as deeply as you should. Additional oxygen is required until the effects of anesthesia and sedation or narcotics wear off. A blood pressure cuff is applied to your upper arm and blood pressures are automatically measured every 15 minutes while you are in the PACU. Warm blankets are applied at this time and your temperature is taken upon arrival. It is very common to feel cool after surgery, due to lower temperatures in the operating room. Also, a frequent side effect as anesthesia wears off is shivering chills. If shivering chills are too uncomfortable, intravenous medication may be ordered by an anesthesiologist to relieve these symptoms.

While in the PACU, you are assessed from head to toe every 1/2 hour to 1 hour. We will check your alertness, listen to your lungs, listen for bowel sounds, and check your IV site for any possible redness or swelling. We will check your dressing for staining and check the wound drain if one is in place. We check for presence of pulses in your feet to determine that vascular status or circulation has not been impaired by surgery. An x-ray is taken of your new hip(s) and or knee(s) while in the PACU to confirm the position of the new prosthesis. You may receive a femoral nerve block before your spinal wears off. Your surgeon and your anesthesiologist will determine whether you will have a Patient Controlled Analgesia pump (PCA) post-operatively.

Occasionally, blood is drawn to determine your red blood count and hemoglobin level. If your blood count is low or if your blood pressure consistently remains low, blood will be ordered to infuse in the PACU. Autologous blood (your own donated blood) is given first if available. Autologous blood may also be started by an anesthesiologist in the O.R.

If an auto transfusion type drain is used, the blood that it collects from your surgical site is recycled and given back to you via special filtered IV tubing which connects to the IV in your arm or hand. There can be a considerable amount of bleeding during joint replacement surgery and for up to 8 hours after surgery. Total joint revisions (joints being replaced for the second time) tend to bleed even more. This is normal and expected. Re-infusion of autologous blood and/or blood collected from re-infusion drains are methods to maximize your blood volume and help prevent decreased blood pressure and/or shock. They also help reduce the length of stay in the PACU. Occasionally, banked blood needs to be given.

If general anesthesia has been used, you will most likely feel pain as you are waking up in the PACU. Some side effects of general anesthesia may include grogginess, sore throat, dry mouth, nausea and vomiting and shivering. If

you are prone to motion sickness, or have had problems with nausea/vomiting after previous surgery, inform the anesthesiologist when he/she interviews you. He/she will want to give the certain drugs to alleviate this problem. You may have your blood glucose level tested with a finger stick and if needed may receive insulin.

If spinal anesthesia has been used, you will be awake but a little drowsy upon arrival to the PACU. There will be no pain. Your legs may be completely numb with the inability to move or you may be able to move slightly and have partial feelings in them. We will check your sensation level and your ability to move your legs every 1/2 hour. Numbness may begin just below the navel. When full sensation has returned and you are able to bend up your knee, you may be transferred to your room. However, once your feeling begins to return, post-op pain also begins. You will have pain after surgery but it is incisional pain, not bone pain. This pain gradually decreases with time as healing occurs. Pain medication will be given in the PACU if needed. Once your vital signs remain stable, sensation and movement have returned to your lower extremities and your x-ray has been taken, you will be transferred to your room.

Mechanical foot pumps will be applied to your feet to help prevent blood clots.

There is no visiting permitted in the Post-anesthesia Care Unit. You may have visitors once you arrive in your room.

## Post-Operatively

You will be brought to the post-operative unit in your bed. The PACU nurse will give a report to your post-operative nurse. You will be awake, but may still be drowsy.

On arrival to the unit, you will be oriented to your room. You will have your blood pressure, temperature, and pulse taken. Another head to toe assessment will be performed, including a check of your dressing(s), any drains, IV sites, and circulation, motion, and sensation of your legs. Your abdomen will be evaluated for the presence/absence of bowel sounds. This will help determine when you may begin to eat or drink. You may not eat or drink if bowel sounds are not present as nausea and/or vomiting is likely to occur. Once your bowel sounds begin to return, you will start with ice chips, and slowly advance your diet to normal, usually by morning. A dietician is available to discuss your nutrition needs.

### Dressing/Drains

If you have an auto-transfusion drain coming from your joint replacement site, the drainage collected may be re-infused to you via your intravenous and special filters in the canister. This process lasts several hours. The auto transfusion drain will then be disconnected by your nurse, and converted to a small drain. The drain will be removed by the surgical staff, usually within 24-48 hours. After the drain is removed, you may have some drainage from the drain site. This will be covered with a small dressing until drainage stops, usually in 3-4 days.

You will have a dressing on your incision site(s) immediately post-op. The first morning after surgery, the dressing will be removed, and the staples/sutures will likely be left exposed to air. There may be some drainage from the incision site-this is normal. The staples/sutures are removed after 14 days for hip replacements, and 14-21 days for knee replacements. They can be removed at the rehab facility, by the visiting nurse, or at your surgeon's office.

## Intravenous & Fluids

There will be an intravenous (IV) line in your arm. This will be attached to fluids until at least the first day after surgery. Once you are drinking sufficient quantities of fluid, the IV fluid will be disconnected. The IV catheter will likely remain in your arm until prior to discharge. This provides access for medications, and blood transfusions, if required.

## Bloodwork

Labwork will be drawn very early each morning for at least 2 days after surgery. If your blood count is low, you may be transfused with either your pre-donated blood or banked blood. This will be discussed with you, if necessary, prior to any transfusion.

## Positioning

Your legs will be elevated to promote circulation, decrease swelling, and prevent blood clots. Your post-operative team will teach you correct positioning and activity for the type of surgery you have had.

## Your Comfort

You will need to ask for pain medication. It does not come automatically. The discomfort you may experience after surgery is much different than what you are experiencing now. Currently, your pain is a result of two bones rubbing together as your joint has deteriorated from arthritis. After surgery, the discomfort is from your incision and the muscles underneath. This gets better as each day goes by. Pain medicine can be delivered by IV or by mouth.

## Medications

You will resume your usual medications as ordered by your doctor. Your nurse will give them to you. Any new medications initiated during your hospital stay will also be given to you by your nurse. You will be provided with information regarding medications that are new to you.

## Consultations

The physical therapist will evaluate your mobility and equipment needs and work with you to reach your functional goals. Your medical doctor or hospitalist will be contacted to follow your progress post-operatively.

## Post-Operative Exercises

### Motion

Moving your arms and legs while lying in bed is extremely important to improve circulation. Being immobile can lead to a variety of complications, including blood clots and pressure sores. You may (and should) move your feet and ankles, wave your arms, and bend your knees. This will not harm your surgery. You will be encouraged to perform ankle pumps by moving your ankles up and down as if using a gas pedal. This should be done as often as possible.

### Prevention of Blood Clots

Blood clots can be a complication following any joint replacement. We have many ways of preventing blood clots, the most important being motion, particularly walking. That is why you must get out of bed (**with assistance**) as soon as possible. Once you have walked as far as you can, you will be allowed to sit for a short period of time before you will be asked to walk again, this time, back to your bed. Sitting for long periods of time can lead to the formation of blood clots as well.

Immediately after surgery, mechanical foot pumps will be placed on both of your feet to prevent your blood from pooling in your leg veins. They will be on your feet whenever you are in bed. Also, the foot of your bed will be elevated to promote blood return and to prevent swelling.

There are medications available to prevent blood clots as well. You will receive either enteric coated aspirin by mouth twice a day, or a medicine called Lovenox twice a day by injection into the abdomen. Both of these medications will be continued after discharge. If you are on Lovenox, you will be instructed on administering the injection to yourself. Which medication you receive is determined by many factors, including your type of surgery, previous medical history, and surgeon preference.

## Breathing

Lying in bed, anesthetic agents, and narcotic pain medication can change your normal breathing patterns so that you do not fully expand your lungs. This can lead to respiratory complications, such as pneumonia. In order to prevent such problems, you will be encouraged to perform deep breathing exercises by using a device called **an incentive spirometer**. Using your incentive spirometer after surgery will help keep your lungs clear. Not performing these exercises regularly often leads to fever and decreased oxygen levels.

### To use the incentive spirometer:

- Hold the incentive spirometer in the upright position.
- Breathe out normally.
- Then place your lips tightly around the mouthpiece.
- **Breathe IN slowly**, and as deeply as possible, raising the yellow piston toward the top of the column.
- Hold your breath as long as possible, at least 5 seconds.
- Blow out your breath and rest for a few seconds.
- Repeat steps 1-5 above at least 10 times an hour while awake.
- If you awaken during the night, perform several repetitions before returning to sleep.

## Lightheadedness

Don't be alarmed if you feel faint or lightheaded when you get out of bed. This is why it is so important to have assistance the first few times you do get out of bed. Lightheadedness after joint replacement surgery is normal due to surgical blood loss, medications, and simply lying in bed. You must communicate with the nurse and/or therapist if you feel faint. Often it will pass, and out of bed activity can continue. If not, you may return to bed and try walking again later. Additionally, you may need more IV fluids and/or a blood transfusion if symptoms do not resolve.

## Before Discharge

### Activity

You will be able to walk with an assistive device before you leave the hospital.

### Diet

You will be eating your usual diet before you are discharged.

### Medications

Your nurse will review your medications and prescriptions before you leave the hospital.

## Patient and Family Teaching

Both you and your family will have an understanding of your activities and discharge instructions.

## Discharge Planning

The social worker will review with you the discharge plans that you have already made. Anticipate discharge 3 to 4 days following your surgery.

## General Precautions

- There are special instructions associated with each joint replacement. These will continually be reviewed with you during your stay. They will be written out in your discharge instruction brochure. A copy of the brochure can be found in your packet.
- You will need to let your medical doctor and your dentist know that you have had a joint replacement.
- On rare occasions, you may trigger the metal detector at airports. You may obtain a card from your doctor if you plan on flying.

## Conclusion

The orthopedic staff at New Milford Hospital works as a team with you, your doctor, and your family so that you may return to independence as quickly and smoothly as possible. We hope this information has helped you prepare for your upcoming surgery.