



Your Guide to Spine Surgery

Preparing and Recovering

Your Name

Name of Surgeon

Type Of Surgery

Surgery Date



Manchester Memorial Hospital
71 Haynes Street | Manchester, Connecticut 06040
860.646.1222 | echn.org

Welcome to Eastern Connecticut Health Network

Preparing for surgery can be overwhelming. You may be receiving a lot of information.

Our goal is to reduce your stress as you prepare for your surgery, minimize your pain, and encourage early mobility. We will partner with you to reduce complications associated with surgery. This will require us to work together and participate in the healing process. Please know that Eastern Connecticut Health Network's spine surgery team is here to help you throughout your care.

This booklet is designed to assist you with understanding your surgery and your role in your surgical outcomes. There are three main parts of your surgery:

- Preoperative (before your surgery)
- Intraoperative (during your surgery)
- Postoperative (after your surgery)

In addition, this book includes details about:

- Getting ready for surgery
- What to expect on the day of surgery and while you are recovering in the hospital
- Planning for recovery and going home after surgery
- What to expect once you are home

It is important to remember that every patient is different. Your care team consisting of your surgeon, physician assistants, nurses, patient care aides, anesthesiologists, nurse anesthetists, surgical technicians, and care coordinators will tailor your surgical program to meet your needs.

Please try to read this booklet as soon as you are able to, and bring it with you to all of your appointments and hospitalizations. Keep track of your questions and be sure to ask your surgical team when you see them, or call us at 860-646-6474. It is important for you, your family and your friends to understand what to anticipate so that everyone can fully participate in your recovery.

We thank you for choosing ECHN for your surgery. We are committed to providing you a safe and excellent experience.

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Understanding Spinal Surgery

Your Spine Surgery

Spine surgery has excellent outcomes for improving quality of life, allowing greater independence, and reducing pain.

Your recovery will include the following:

- You will have pain after spine surgery as the tissues heal and muscles regain strength.
- This surgical pain should get better day by day and eventually go away in a few weeks or months.
- You will be discharged as soon as our team determines you are ready, which may be within one day.

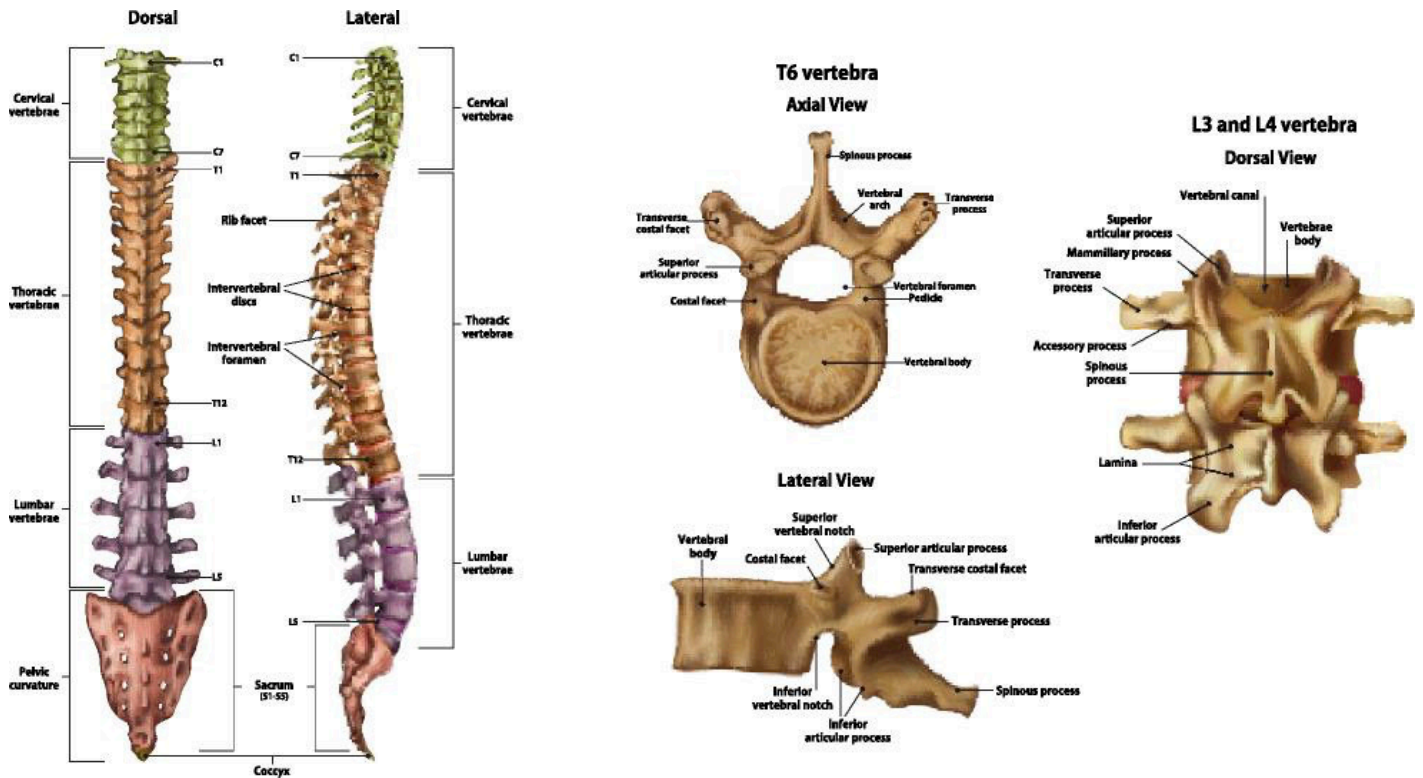
Over time, you may be able to resume some of the activities you once enjoyed such as going on long walks, dancing, golfing, gardening, and riding a bicycle.

Information About Your Spinal Condition

Low back pain affects 80% of Americans at some point- both men and women equally. More than 15 million people suffer from recurring or long-lasting back pain. In fact, after headaches and the common cold, low back pain accounts for the most physical pain and lost work time. There are numerous causes for low back pain, including:

- Muscle Spasms
- Arthritis
- Herniated Discs
- Deformities
- Infection
- Fractures
- Degenerative Disc Disease
- Stenosis

Your Spine



Anatomy of the Spine

To understand why you need spinal surgery and how to protect your back before and after surgery, you need to learn about your spine and how it functions.

A healthy spine performs two major functions:

- It protects the spinal cord which carries nerves to/from various parts of the body.
- It supports the body while allowing it to move, bend, sit, twist, turn, and lift—all freely and in comfort.

The spinal column is made up of 33 bones. They are connected to each other by discs made of cartilage. Each disc has a soft center (nucleus) surrounded by tough fibrous outer rings. They absorb pressure and allow the vertebrae to move.

Your Spine

The spinal column is made up of the cervical region (7 vertebrae), the thoracic region (12 vertebrae), the lumbar region (5 vertebrae), the sacral region (5 vertebrae), and the coccygeal region (4 vertebrae). When these three curves are in their normal alignment, your body is in a balanced position. Your weight is distributed evenly through the vertebrae and discs so you are less vulnerable to strain and injury.

Discs

A balanced spine is simply “good posture”. To maintain this balanced position you need to support your spine with strong, flexible muscles. Well-conditioned muscles are especially important for your lower back, which supports the weight of your entire upper body. This puts it under constant, concentrated stress regardless of your activities.

Discs are between two vertebrae. With or without well-conditioned back muscles, injury, arthritis or the natural aging process can cause the discs or vertebrae to press on the spinal nerves, causing symptoms such as pain, stiffness, tingling and numbness.

Degenerative Disc Disease

As a disc degenerates and flattens, vertebrae slip back and forth. This irritates the joints and creates or worsens stenosis (narrowing of the spinal canal), irritating the nerve.

Your Spine

Bulging Disc

As a disc degenerates, it loses its ability to bounce back. The nucleus and outer rings of the disc bulge into the nerve, irritating it and causing pain.

Ruptured or Herniated Disc

Pressure causes the outer rings of the disc to rupture and the soft nucleus to squeeze through. This compresses and irritates the spinal nerve root.

Arthritis

Aging, worn vertebrae and discs allow bone spurs to form. This causes or worsens stenosis and irritates the nearby nerve.

Discectomy

For people with disc problems, the surgeon forms a “window” in a portion of the outer ring of the disc. Then the surgeon removes a portion of the disc nucleus, releasing the pressure on the nerve.

Some surgeons perform a microdiscectomy, which may require removal of only a small portion of the lamina (part of the vertebrae).

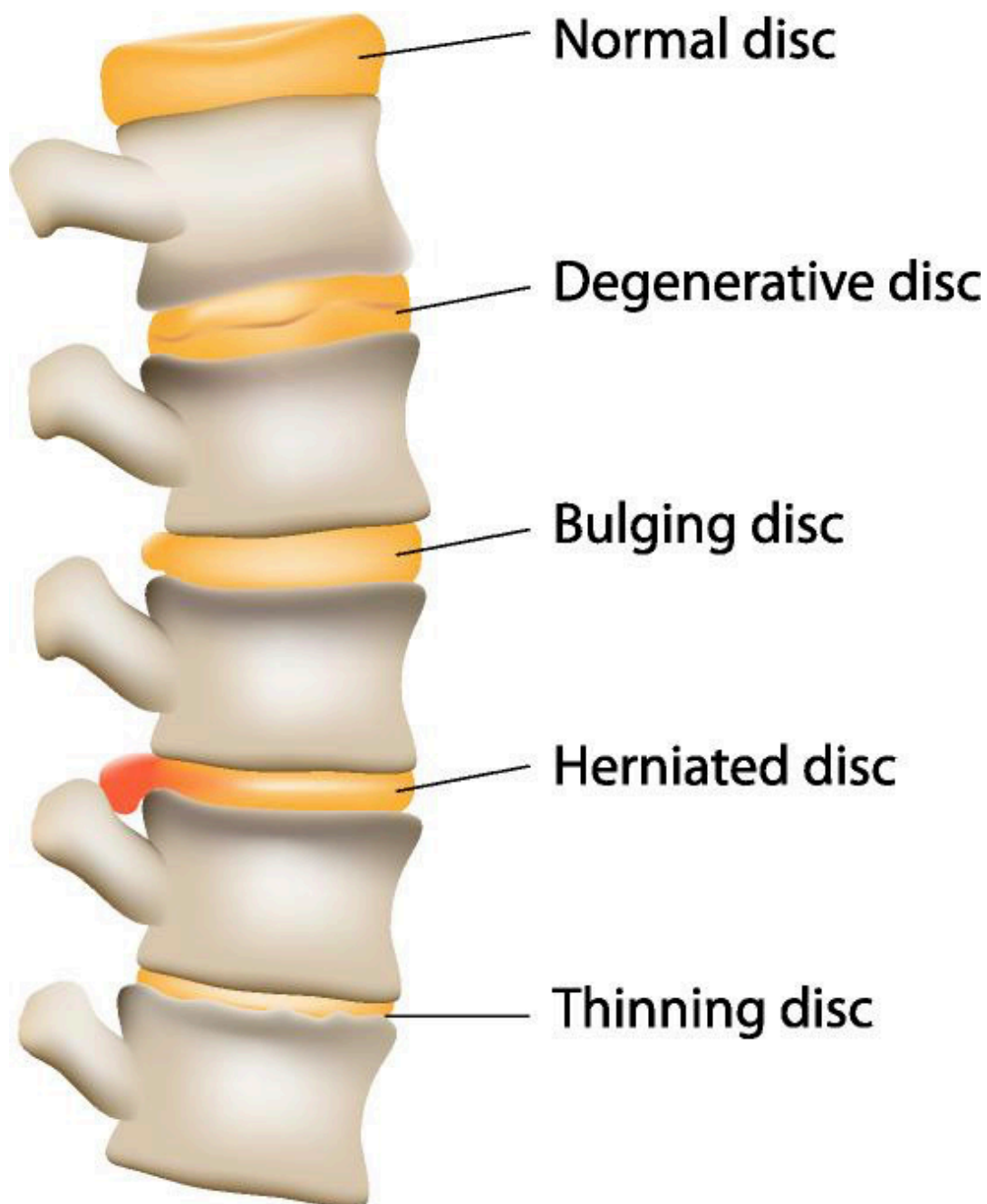
Laminectomy

A laminectomy removes the entire lamina. Removal of the lamina allows more room for the nerves of the spine and reduces the irritation and inflammation of the spinal nerves. The lamina does not grow back. Instead, scar tissue grows over the bone, replacing the lamina, and protects the spinal nerves.

Fusion

For people with instability, the surgeon places a bone graft between two or more vertebrae to grow or fuse them together. The bone for the bone graft may be taken from the bones of your pelvis at the time of surgery or from another source. These bones act as the cement that fuses the vertebrae together. Occasionally wire, rods, screws, or plates are used in addition to bone.

Your Spine





Preparing for Surgery

Before Surgery

How and when will your surgery be scheduled?

Your surgeon will schedule your surgery with you and the hospital. On the working day prior to your surgery, you will receive a phone call notifying you of your hospital arrival time and your surgery time.

A member of our hospital team will contact you a few weeks prior to your surgery to schedule a phone call with a Registered Nurse. During this phone call, the nurse will talk with you regarding your medications, health history and current lifestyle. Any need for additional resources may be determined at this time.

On the day of surgery, you will meet with your anesthesia providers. This meeting can include:

- Review of your medical history
- Review of past surgeries and anesthesia
- Review of your anesthesia plan and pain relief for your surgery
- Review of your medications
- Review of your blood work, if applicable

Insurance Authorization

Our hospital precertification team will be contacting your insurance company to secure authorization for your surgery and admission. **You are expected to pay any deductible or copayment prior to or on the day of surgery.**

Advance Directive

An advance directive can be used to name a health care agent; this is someone you trust to make health care decisions for you. It can be used to say what your preferences are about treatments that may be used to sustain your life. Advance directives are optional. If you have an advance directive, bring a copy to the hospital if you want it to apply to the upcoming visit/admission. An advance directive can be removed or revised at any time by the patient.

Before Surgery

Preparing for Surgery

The length of your hospital stay will depend on the complexity of your surgery. Most patients will leave the hospital one to three days following their surgery. When you return home, you may need family or friends to assist you. It is best to prepare yourself and your home for when you do go home.

Make plans for shopping, yard or house work if necessary. Although you will be able to use stairs and walking is a must, think about any chores that you may need assistance with upon return to your home.

Pre-surgery health planning:

1. Healthy Eating: Eat healthy food before surgery so that your recovery is faster. A balanced diet with fruits, vegetables, and protein will help your body heal faster, regain strength and energy more quickly and improve your ability to fight infection.
 - Eat a variety of vegetables and fruits-they should make up at least half of your plate
 - Choose plant-based sources of protein, such as beans
 - Choose whole grains instead of white bread or white flour
 - Choose heart-healthy fats high in Omega-3 fatty acids. Use olive oil for butter, and eat fish such as tuna, salmon and sardines
 - Limit sodium intake and season with fresh herbs and spices
 - Decrease your intake of processed foods and refined sugars
2. Stay Active: Get as much exercise as possible before your surgery. Improved outcomes after surgery are directly influenced by how fit you are and your level of physical activity before surgery. You want to be as strong as possible before surgery because you can lose strength and energy after surgery. Walking is an excellent way to get fit and maintain your health. Keep track of your steps and find opportunities to increase your steps, for example, use stairs and walk from the furthest point in a parking lot.
3. Smoking Cessation: Stop or decrease your smoking at least four weeks prior to surgery. Your family physician can assist with this process.
4. Alcohol Use: Limit your alcohol consumption. Alcohol is known to increase your risk of complications during and after surgery. Make sure you let your surgeon know if you drink alcohol.
5. Recreational Drugs: Do not use recreational drugs at least 10 days prior to your surgery. Tell your team if you have used any recreational drugs within 10 days before surgery.

Before Surgery

6. Stay Hydrated: It is important that you stay hydrated. Beginning three days before your surgery, try to drink at least six (6) eight ounce glasses of water a day unless you are given different instructions by your surgical provider.

7. Lung Care: Practice deep breathing, which promotes healthy lungs. Healthy lungs can speed up your recovery time and decrease your risk of pneumonia after surgery. To reduce your risk, you will be given a breathing tool called an incentive spirometer and instructions for how to use it. Use your incentive spirometer 10 times an hour while you are awake.

8. Stay Informed: A stress free environment before you have surgery assists with the entire process. Get answers to all of your questions.

Other pre-surgery planning tips:

- Remove any trip hazards from your home, for example scatter rugs
- Think of things that you use every day that are stored higher than your waist and consider relocating these items for easy access
- Fill routine prescriptions
- Make sure you have good fitting, non-skid slippers or shoes to wear
- If you are the caregiver of a loved one or pets, make arrangements for their care

Medication Instructions:

- Stop taking aspirin, ibuprofen (including Motrin or Advil) and naproxen (including Aleve) 7 days before surgery, unless your surgeon gives you different instructions
- Stop taking vitamin supplements and/or herbal supplements 3 days before surgery, unless your surgeon gives you different instructions
- If you take prescription pain medications routinely, please tell your surgeon
- If you take medication-assisted treatment, for example Suboxone, please tell your surgeon
- If you take blood thinners or medication for diabetes, please tell your surgeon. Your surgeon will also want you to contact the prescribers of these medications for special instructions

One Day Before Surgery

Eating and Drinking:

- Do not eat solid foods after midnight the day before your surgery
- You can drink clear liquids up to 2 hours prior to your scheduled surgery time
- Carbohydrate drink: Prior to leaving home **but no closer than 2 hours before your surgery time**, drink 12 ounces of apple juice or white grape juice. If you are diabetic, do not drink a carbohydrate drink

Clear Liquid Diet

Not Allowed		
• Milk or cream	• Tomato juice	• Cream soups or any soup other than broth
• Milkshakes	• Orange juice	
	• Grapefruit juice	

Allowed		
• Water	• Sodas, teas, coffee (no cream)	• Italian ices
• Clear broth: beef or chicken	• Gelatin (without fruit)	• Juices without pulp: apple, white grape juice
• Gatorade	• Popsicles (without fruit or cream)	
• Lemonade or Kool-Aid		

Skin Preparation Before Surgery

General Information

- Follow your surgeon's bathing instructions for Hibiclens (chlorhexidine) the day before and the morning of surgery



The Day of Surgery

The Day of Surgery

Taking Your Medications Before Surgery

Make sure you know what medications you should take the morning of surgery.

You will receive a call the day before your surgery to review your regular list of medications and confirm the time you need to come to the hospital. If anything is confusing, ask questions.

Before You Leave Home

- Follow Hibiclens shower instructions
- Remove makeup, jewelry and all ear and body piercings
- Drink the Carbohydrate liquid (if not diabetic). See *page 8*

NOTE: FOLLOW EATING INSTRUCTIONS. IF YOU EAT SOLID FOOD OR DRINK NON-CLEAR FLUIDS, YOUR SURGERY WILL BE CANCELED.

What Do I Wear?

Wear loose, comfortable clothing.

What Do I Bring?

Leave all valuables at home or give them to the person(s) accompanying you. We encourage you to only bring essential items the morning of surgery, including:

- Insurance card(s)
- Personal identification card (e.g., driver's license)
- Copy of your advance directive (optional)
- Payment for any deductible or copayment that is due before the operation
- A list of all of your medications, including dosages and how often you take them
- This booklet
- Asthma inhaler, if applicable
- CPAP device, if applicable

The Day of Surgery

Please be aware that there may be some downtime/wait time prior to your surgery. We will do our best to predict how long the operations of the day may take, but unexpected delays are sometimes unavoidable. Therefore, bring a book or something to do while you wait.

Personal Belongings for Your Recovery

Computers, tablets, and cellphones are allowed in the hospital. Internet access is available. Towels and gowns will be provided, but many people like to bring their own freshly laundered bathrobe and toiletries. We will give you all of your medicines needed for your recovery. Leave your medications at home. It is best to have your family or friends bring these personal belongings to you after surgery. Don't pack nonessential, valuable items.

Parking and Check-In

To ensure a smooth registration process, please arrive 1 ½ hours before your scheduled surgery. It is important to allow ample time for parking and walking to the check-in desk. Report to the Manchester Memorial Hospital Ambulatory Services Center entrance on 4 Guard Street. Complimentary valet parking is available.

If you have questions about where to report on the day of surgery, contact the Ambulatory Services Center at 860.646.6474.

Please note that after surgery, when you are in your hospital room, visitors should park in the main Manchester Memorial Hospital parking lot located at 71 Haynes Street. Complimentary valet parking is also available in this location. Visitors should enter the main hospital entrance and get directions to your room from the concierge desk located immediately in the lobby.

The Day of Surgery

Your Hospitalization

Once your team is ready, you and one member of your family, if desired, will be brought to the preoperative unit. Here, the nurses and anesthesia providers will check you in and make sure everything is set for your surgery.

What to expect in this unit:

- Verification of your full name and birth date and placement of an identification bracelet
- Placement of an intravenous catheter in your arm
- Administration of medications that will assist you with pain control after surgery and prevent infection
- Meet with your anesthesia providers
- Placement of an arrow by you on your neck or back to confirm surgery location
- Meeting with your surgeon
- A tracking number will be assigned and given to your loved ones so they can track your whereabouts during the surgery and while in recovery
- You will then be taken to surgery. Your family will be taken to the patient/family lounge if they would prefer to stay in the hospital

Operating Room

Surgery usually takes about 3 hours. Upon arrival to the operating room:

- Staff will recheck your name and identification bracelet
- A “Time Out” will be completed by your surgical team to confirm your name, date of birth and location of your surgery
- Vital sign monitors will be applied by your anesthesia provider
- Warm blankets will be applied
- Venous compression sleeves will be placed on your legs

Many patients do not recall being in the operating room because the medications you are given during surgery cause amnesia. You will be connected to monitors where you will be given antibiotics to prevent a wound infection. The anesthesiologist will then put you to sleep with a general anesthetic. Once you are asleep, your surgeon will begin your surgery.

After Surgery

Recovery Room (Post-Anesthesia Care Unit)

After surgery, you will be taken to the Post-Anesthesia Care Unit (PACU), where you will wake up from anesthesia. Most patients remain in the recovery room for about 1 hour.

The surgeon will talk with your family immediately following surgery to provide an update.

Once you are awake and meet certain guidelines, you will be given water or clear juice to drink.

Surgical Unit

From the PACU, you will be sent to the surgical inpatient unit, which is located on the third floor. The receptionist in the family lounge will tell your family your room number. You will be reunited with your family once you are on the unit. This is a good time for your family to bring your belongings you packed at home. A family member or companion can stay with you in the room during visiting hours.

In some cases, you will have a small tube in your bladder. This tube helps us measure how much urine you are making and how well your kidneys are working. You may also be given oxygen. You will have an intravenous catheter in your arm giving you fluid into your vein. You will be allowed to drink immediately. You will be placed on your regular medications, with the exception of some diabetes, blood pressure and blood thinner medications.

The nursing staff will help you out of bed. The staff will check your temperature, pulse and blood pressure regularly when you first come up to the unit.

Our goals are for you to be as mobile as possible, gain nutrition quickly and minimize pain medications, especially opioids. These goals will help you have an easy and safe recovery.



Planning for Recovery and Discharge

In-Hospital Recovery Plan

Team Caring for You After Surgery

In addition to the nursing staff on the unit, the spine surgery team will care for you. This team is led by your surgeon and includes the physician assistant.

Pain Relief After Surgery

Your pain will be assessed regularly on a scale from 0 to 10. Pain assessment is necessary to help guide your pain relief. It is essential that you are able to take deep breaths, cough, and move. Prevention or early treatment of pain is far more effective than trying to treat severe pain. Therefore, we provide a specialized regimen to stay ahead of your pain and use as little narcotics as necessary to relieve any pain you are in. You will also be given acetaminophen and an ibuprofen-like medication to keep your pain under control. You can always ask for additional pain medication if you are not comfortable.

One Day After Surgery

Focus on eating, drinking and walking. After surgery, your recovery plan will be to get out of bed with the nurses' or assistants' help, sit in a chair for meals and start to move about in the hallways. Physical therapists will also evaluate your mobility.

In-Hospital Recovery Plan

In some circumstances, you can also meet with a case manager to assess your discharge needs.

Complications That May Prolong Your Hospital Stay

- **Nausea and vomiting:** It is very common to feel sick to your stomach after surgery. We provide medication to reduce this sensation. However, if you do feel sick, you should reduce the amount of food and drink you are taking in by mouth. Small, frequent meals or drinks are best in this situation. As long as you can drink and keep yourself hydrated, the nausea will likely subside.

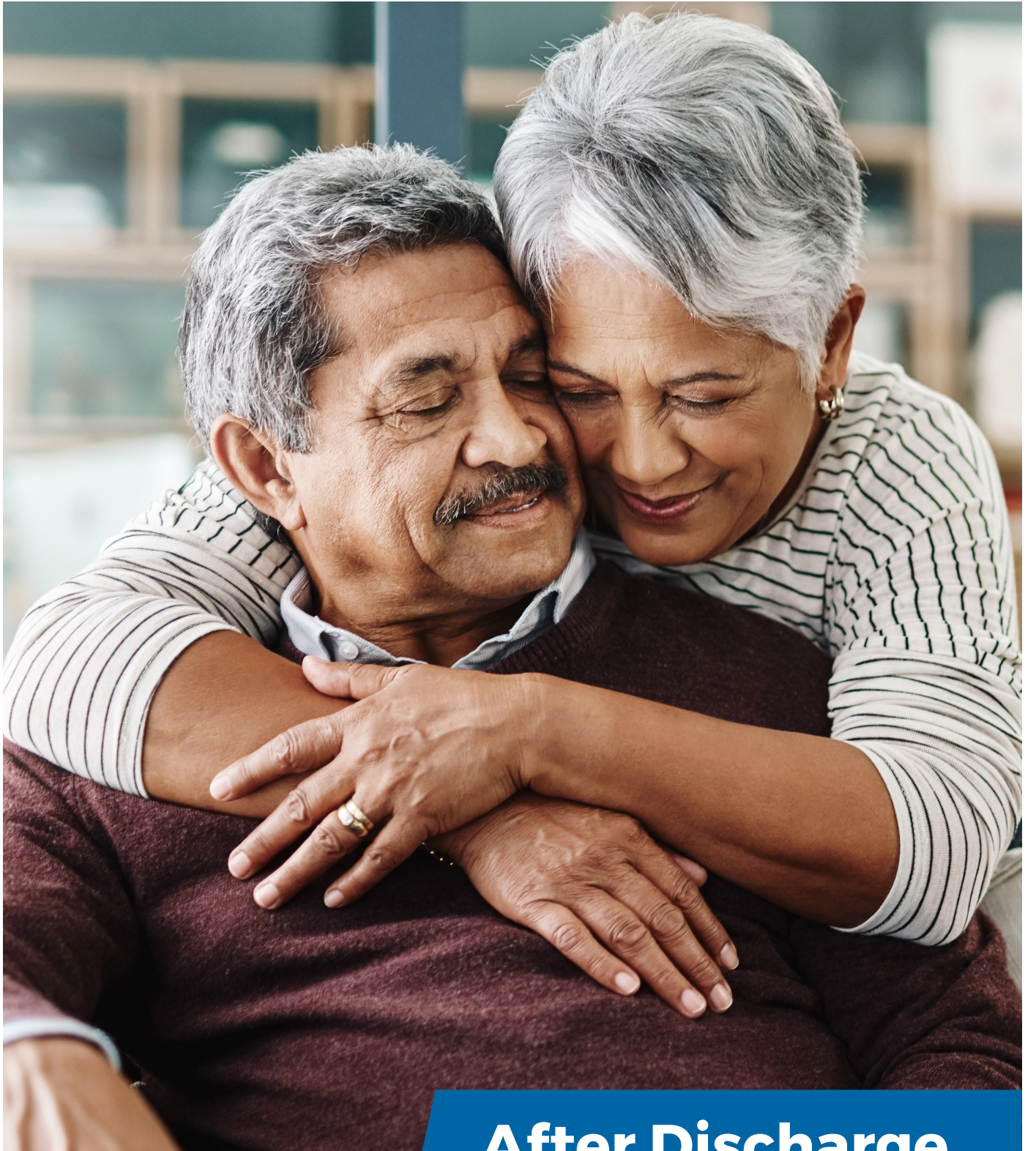
Discharge

Please make arrangements for someone to meet you at the hospital and go home with you. You will not be released without someone present. You cannot drive yourself home.

Please keep in mind that we strive to get patients discharged as quickly as possible, but there may be delays for a variety of reasons.

When you are preparing to go home, you will receive:

- Detailed discharge instructions, with information about your operation and medications
- A follow-up appointment to see your surgeon or provider 1 to 2 weeks after you leave the hospital
- Any medication prescriptions you may need



After Discharge

After Discharge

Call your surgeon if you experience any of the following:

- You have a fever (temperature greater than 100.5° F)
- You are vomiting, bloated or feeling nauseous all of the time
- Redness, swelling, odor, pus or increasing pain from your surgical wound
- For neck surgery – you are having more difficulty swallowing or are having a hard time drawing breaths
- You are developing increased numbness and/or weakness in your arms or legs

IF YOU HAVE A TRUE EMERGENCY, SUCH AS CHEST PAIN, SHORTNESS OF BREATH, OR ANY OTHER SEVERE MEDICAL PROBLEMS, CALL 911 OR GO TO THE CLOSEST EMERGENCY ROOM. HAVE THEM CONTACT YOUR SURGEON ONCE YOU ARE STABLE.

Bowel Function Following Your Surgery

You may experience constipated or loose stools. Make sure to eat nutritious meals, drink plenty of fluids and take regular walks during the first 2 weeks after your operation.

Wound Care

If a wound infection develops, this usually happens 3 to 10 days after surgery.

For the first few weeks following surgery, your wound may be slightly red and uncomfortable. You may shower and let the soapy water wash over your incision. Do not take a tub bath, go into a pool (or other water) or hot tub for 1 month following surgery or until the wound is well-healed. It will take the wound several months to “soften.” It is common to have bumpy areas in the wound and at the ends of the incision.

If you have staples, these should be removed when you are seen by your surgeon at the follow-up appointment. You may have a glue-like material on your incision. **Do not pick at this material.** It will come off over time. It is the surgical glue used in surgery to close your incision. You also have sutures inside that will dissolve over time.

After Discharge

Post-Surgery Diet

Attention to good nutrition after surgery is important for your recovery. If you had no dietary restrictions prior to surgery, you will usually have no special dietary restrictions after the surgery. However, consuming enough protein, calories, vitamins and minerals is necessary to support healing. Some patients find their appetite is less than normal after surgery. In this case, frequent small meals throughout the day may help.

It is normal that certain foods taste different and certain smells may make you nauseous.

Over time, the amount you can comfortably consume will gradually increase. You should try to eat a balanced diet, which includes:

- Foods that are soft, moist, and easy to chew and swallow
- Canned or soft-cooked fruits and vegetables
- Plenty of soft breads, rice, pasta, potatoes and other starchy foods (lower fiber varieties may be tolerated better initially)
- High-protein foods and beverages, such as meats, eggs, milk, cottage cheese or a supplemental nutrition drink like Boost or Ensure
- Plenty of fluids—at least 8 to 10 cups per day. This includes water, fruit juice, Gatorade, teas/coffee and milk

Hobbies/Activities

Walking is encouraged after your surgery. You should plan to undertake regular exercise several times a day and gradually increase during the 4 weeks following your operation until you are back to your normal level of activity. You may climb stairs. Do not lift more than 10 pounds or play contact sports for the first 3 months after your surgery.

Generally, you can return to hobbies and activities soon after your surgery. This will help you recover.

It can take up to 2 to 3 months to fully recover. It is not unusual to be fatigued and require an afternoon nap for up to 6 to 8 weeks following surgery. Your body is using this energy to heal your wounds. Set small goals for yourself, and try to do a little more each day.

After Discharge

Work

It is normal to return to work 4 to 6 weeks following your operation. If your job involves heavy manual work, then you should talk to your surgeon to customize a return-to-work plan. However, you should check with your employer regarding their rules, which may be relevant to your return to work. If you need a return-to-work form for your employer or disability papers, bring them to your surgical follow-up appointment.

Driving

You may drive when you are off narcotics and pain-free enough to react quickly with your braking foot. For most patients, this occurs 2 to 3 weeks after surgery. You should not drive until you are able to turn your head and look over your shoulder at your blind spots.

Important Contact Numbers

Manchester Memorial Hospital

Main Number
Phone: 860.646.1222

Ambulatory Services Center

Monday through Friday, 7:30 a.m.-3:00 p.m.
Phone: 860.646.6474
4 Guard Street
Manchester, CT 06040

3 North Surgical Nursing Unit

Phone: 860.647.4729

Notes

Write down any questions you may want to ask your care team.



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