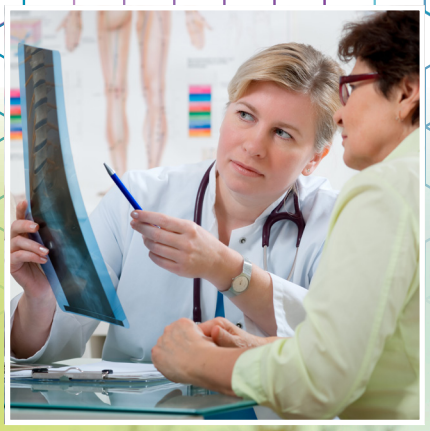
UPMC LIFE CHANGING MEDICINE



Your Guidebook for Lumbar Spine Surgery

UPMCPinnacle.com

Lumbar Spine Surgery Guidebook

Surgery Date: _____ at _____

(the hospital will call one business day prior to surgery with your arrival time)

Procedure: _____

History & Physical: _____ at _____ a.m./p.m. with _____

at _____

Pre-Admission Testing: No appointment required. Walk In from 8 a.m. to 4:30 p.m. at any UPMC outpatient lab. Fasting is not required for this testing.

Spine Class: _____ at _____ a.m./p.m. located at _____

Primary Care Appointment: _____ at _____ a.m./p.m. with _____

Cardiology Appointment: _____ at _____ a.m./p.m. with _____

Postoperative Appointment: _____ at _____ a.m./p.m. with _____

at the _____ office

Table of Contents

SECTION 4: YOUR SURGICAL EXPERIENCE

SECTION 5: YOUR HOSPITAL STAY AND ACTIVITY

SECTION 6: INPATIENT PHYSICAL AND OCCUPATIONAL THERAPY

SECTION 7: HOME CARE GUIDELINES

SECTION 8: PRINCIPLES OF POSTURE AND BODY MECHANICS

SECTION 9: BODY MECHANICS — GENERAL RULES

APPENDIX:

Welcome

Welcome to UPMC Pinnacle! We are honored to be your health care provider. In choosing our hospital you have opted for a facility that:

- Has served central Pennsylvania and the surrounding communities for more than 100 years
- Features a unique, comprehensive spine surgery program developed by a collaborative team. This team is comprised of you, physicians, nurses, and other professionals trained in the care of patients undergoing spine surgery
- Follows a patient-focused clinical pathway

A comprehensive planned course of treatment has been developed just for patients undergoing lumbar spine surgery. Patients play a key role in ensuring a successful recovery. You will be involved in your treatment each step of the program. This lumbar spine surgery guidebook provides information to maximize a safe and successful surgical experience.

The goals of surgery are to:

- Relieve pain
- Improve physical function
- Restore independence
- Return to an active lifestyle

OUR MISSION

To serve our community by providing outstanding patient care and to shape tomorrow's health system through clinical and technological innovation, research, and education.

OUR VALUES

To drive and create the culture that we embrace. They shape the experience that our employees and our patients or customers will have. Life changing medicine is not only about good medicine, it is also about how we deliver that medicine.

Quality & Safety We create a safe environment where quality is our guiding principle.

Dignity & Respect We treat all individuals with dignity and respect.

Caring & Listening We listen to and care for our patients, our health plan members, our fellow employees, our physicians, and our community.

Responsibility & Integrity We perform our work with the highest levels of responsibility and integrity.

Excellence & Innovation We think creatively and build excellence into everything that we do.

Getting to Know Your Health Care Team

You are now a member of an important team that includes your family, your doctors, nurses, and other health care professionals. Together, we will work toward one common goal: improving the quality of your life through increased mobility.

When you turn to the first chapter of this guidebook, you take the first step in your journey. There are many things that have to be done before your surgery. With your active participation, positive attitude, and our intervention, your journey should be smooth. And most importantly, we are here to guide you every step of the way.

You may come in contact with members of the health care team, including:

Neurosurgeon or Orthopaedic Surgeon: The doctor who performs your surgery and decides when you are ready to leave the hospital.

Anesthesiologist: The doctor who is responsible for anesthesia during surgery and monitors your vital signs during and after your surgery. They are also responsible for pain control in the recovery room.

Registered Nurses: Nurses are responsible for your care when you are in the hospital. There are nurses in the pre-op area, operating room, and on the nursing unit. You will talk to a pre-admission nurse the day before your surgery.

Nurse Care Coordinator: Nurse care coordinators provide you with support and education before your admission to the hospital, during your recovery from surgery, and following discharge to home. Throughout your treatment they will act as a liaison between you and your health care team.

Outcomes Management Team: The outcomes management team is comprised of social workers and nurse case managers who help with your transition care needs upon discharge from the hospital.

Physical Therapist: While in the hospital your physical therapist will work with you to make sure you can walk safe distances and do stairs. They will teach you the exercises to do at home to regain strength and motion in your new joint.

Occupational Therapist: Your occupational therapist will teach you how to perform activities of daily living, such as dressing and bathing.

Licensed Practical Nurse (LPN): The LPN helps you with your daily health care needs by providing care and giving you medications. The LPN works under the supervision of an RN.

Patient Care Assistant (PCA): The PCA assists the nurse in providing quality care to every patient. The PCAs obtain vital signs and blood sugar, and help patients to complete their activities of daily living (bathing, eating, and helping you to the bathroom).

Dietary Host: They deliver the food trays to your room and take your order for your next meal.

Patient Transporter: Transporters may take you to the physical therapy gym and to/from tests if ordered.

Phlebotomist: A person who draws your blood when blood tests are ordered by your doctor.

Housekeeper: Your room will be cleaned daily by the housekeeping staff.

Hospital Chaplain: The hospital chaplain is trained to meet your spiritual needs, and those of your family, regardless of religious denomination.

Hospital Staff Pharmacist: The staff pharmacist prepares medicines and provides advice and information to medical staff and nursing on the medications' use. The pharmacist is available to answer any medication-related questions you or your family may have.

Section 1: General Information

ROLE OF THE NURSE CARE COORDINATOR

The nurse care coordinator will:

- Act as a liaison between you and your health care team throughout your treatment.
- Answer any of your questions, and if they cannot answer them they will find the appropriate person to answer them for you.
- Schedule your pre-operative education.
- Provide your information to the Outcomes Management team to coordinate your transition to home.
- Contact you to ensure that you are recovering appropriately after you are discharged home.

FEATURES OF THE UPMC PINNACLE PROGRAM INCLUDE:

- Nurses and therapists who specialize in the care of spine surgery patients
- Emphasis on individual care
- Family and friends participating in the recovery process
- A nurse care coordinator who facilitates communication throughout the continuum of care
- Private rooms

PRE-OPERATIVE EDUCATION

Your surgeon recommends that you receive pre-operative education before your surgery. This education reviews how to get ready to come into the hospital, what to expect at the hospital, and how to take care of yourself at home. You can complete this requirement by attending a class, or by viewing a video or weblink.

Classes are offered at several different locations for your convenience.

If not scheduled by your surgeon's office, a nurse care coordinator will contact you to schedule your pre-operative education.

Class Preparation:

- Please bring your own refreshments
- Review and bring this guidebook to class
- Bring a friend or family member who will be helping at home after surgery
- Bring a pen to take notes

FUNCTIONAL OUTCOMES

Patient-reported outcomes (PROs), also called patient-reported functional outcomes, are recognized as critical tools to improve care management by enabling clinical providers to, in real-time, assess the results of their treatments for the purpose of continuous quality improvement (CQI). You may be asked to complete a short questionnaire in the surgeon's office, via email or telephone at several intervals throughout your care.

EMPOWER YOURSELF

Patients who are involved in their own care and ask questions generally do better than those who are not involved. Health care is a team effort, and you are the most important team member. By being actively involved, you will have a positive experience.

We welcome your questions because you have the right to know about every aspect of your care.

USING THE GUIDEBOOK

The purpose of this guidebook is to prepare and educate you about what to expect. For best results following your lumbar spine surgery, you should follow these guidelines.

This guidebook focuses on what you need to do before, during, and throughout the recovery process. It can assist you every step of the way.

Please remember this is a guide. Your physician, nurse, or therapist may add or change any of the recommendations to meet your individual needs. Their recommendations take priority. However, ask questions if you are unsure of any information. It may be beneficial to keep your guidebook handy during your recovery stage.

Section 2: Preoperative Guidelines

Preoperative Guidelines: A Timeline to Prepare for Your Upcoming Surgery

A majority of our patients discharge home within one to three days after surgery. You need to plan ahead so you can transition home safely. There are things you can do before your surgery to get ready.

SIX WEEKS BEFORE SURGERY (OR AS SOON AS SCHEDULED)

- Schedule preoperative education
- Decide who will help you at home
  - You need to decide who will help you when you return home. You will be able to get up and down, walk, and do stairs but you will need help with your daily routine. We recommend that someone be with you for the first few days, especially at night. The best place to recover after surgery is at home. It is important you participate in your discharge plan. If you have any concerns about going home, a social worker or nurse case manager will help you plan a safe discharge.
- Preoperative Exercise Program (Prehab)
  - Exercise is key to your recovery. It is recommended that you begin a preoperative exercise program to promote strength and conditioning before surgery. You should perform your exercises two to three times a day for 10 to 15 minutes at a time.

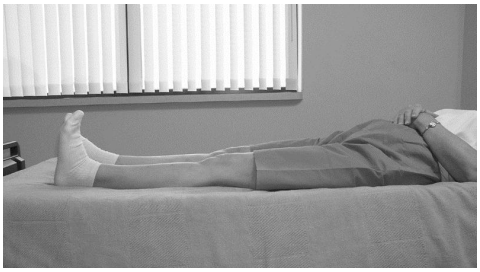
PREOPERATIVE EXERCISE PROGRAM

Just as exercise is important in the rehabilitation process following spine surgery, it is imperative that you participate in a preoperative exercise program as well. Exercising before surgery can help you build up the necessary strength and endurance for a more optimal recovery from spine surgery. The exercises found below help to strengthen and condition your muscles in preparation for surgery and the post-rehabilitation phase. To enhance your recovery from this surgery, try to incorporate these exercises, as well as some aerobic exercise (walking, water aerobics, and recumbent bicycle) into your daily routine. Our past patients have mentioned just how helpful it was to take the time to strengthen the muscles in their arms and legs prior to coming in for surgery.

NOTE: *All of these exercises should be pain-free. If any exercise causes pain, you should consult your physician before continuing the program.*

1. Chair Push–up
Sit in Chair. Use arms to push body up from chair. Keep elbows slightly bent and feet on the floor. Return to the chair slowly. Focus using your arms instead of your legs.

Sets: 1-2
Reps: 10
Hold: 3 - 5 sec.
Frequency: 1-2x day



2. Quad Sets
Lie flat on back with one leg straight. Tighten quadriceps muscles (muscles on front of thigh), pressing back of knee into mat, and hold as indicated. Repeat with other leg.

Do not hold breath.

Sets: 1
Reps: 20
Hold: 5 - 10 sec.
Frequency: 2x day

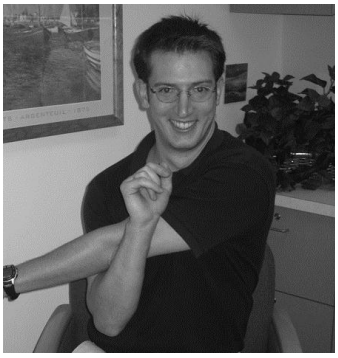
3. Abdominal Sets (tummy tucks)
Lie flat on back with knees bent. Tighten your stomach (abdominal) muscles by drawing your belly button towards your spine. You should feel your abdominal muscles tighten across the front. Hold that position and continue to breathe comfortably. If you can't breathe comfortably, then you are trying to tighten the muscles too much. As you practice this exercise, you will learn how to engage your abdominal muscles without affecting your ability to breathe.

Sets: 1
Reps: 20
Hold: 5 - 10 sec.
Frequency: 2x day

NOTE: *This exercise is just the beginning a lifelong challenge of being able to keep your abdominal muscles tightened. The strengthened muscles provide continuous support for your spine.*

4. Heel Slides (slide heel up and down)
Lie flat on back. Slide heel toward your bottom. Keep your opposite knee bent to support your back. Repeat with other leg.

Sets: 1
Reps: 20
Frequency: 2x day



5. Horizontal Shoulder Stretch
Place one arm across your chest with your opposite hand on the elbow, pull your arm across your chest. The stretch is felt in the back of the arm, shoulder, and neck.

Sets: 1
Reps: 5
Hold: 30 sec
Frequency: 2x day

FOUR WEEKS BEFORE SURGERY

Obtain Medical Clearance

When you were scheduled for surgery you may have received instructions from your surgeon regarding appointments needed to clear you for surgery. The surgeon's office will tell you whether this clearance will involve a visit to your primary care physician and/or a specialist such as a cardiologist. Spine surgery is an elective procedure. To optimize your recovery and avoid complications after surgery, it is important that you are in the best physical health possible. That means getting exercise, quitting smoking, and maintaining a healthy diet prior to your surgery.

Time to Plan Ahead to Ease the Transition Back Home

To ease the transition back home after surgery, planning should take place well before you come in to the hospital. Evaluate your daily home routine and determine what you can do now to make your home safer and easier to manage. Here are some suggestions:

- Plan to have someone at home with you for the first few days after surgery.
- With spine surgery we do not want you to bend, lift, or twist! Ask for help with daily chores such as laundry, housework, yard work, garbage removal, and shopping.
- Place frequently used items in your home within easy reach. Items in lower cabinets should be raised to waist level, as you will not be able to bend over to reach things in low cabinets.
- Arrange for someone to care for your pet; this includes walking them. It is not safe to hold a pet on a leash after surgery as you could accidentally fall.
- Prepare easy meals such as casseroles, frozen entrees, and ready-to-eat dinners ahead of time.
- Remove clutter from walkways that may cause you to trip or slip, such as throw rugs or electric cords.
- Place nightlights in bedrooms, hallways, and bathrooms you may need to access at night.
- Wear nonskid footwear to help prevent slipping.
- Consider installing a railing to help you walk up and down steps safely if your stairway does not have one.

THREE WEEKS BEFORE SURGERY

Pre-Admission Testing

After your surgery has been scheduled, plan to have your pre-admission testing completed. Your testing needs to be completed 15 to 20 days prior to your surgery. Your testing will include lab work, an EKG and possibly a chest x-ray. Remember to bring all forms with you to the hospital on the day of your testing.

TWO WEEKS BEFORE SURGERY

- Begin showering daily with an antibacterial soap such as Dial or Safeguard
- Do not shave or wax the operative area

THREE DAYS BEFORE SURGERY

SKIN CLEANSING PRIOR TO LUMBAR SPINE SURGERY

The bacteria that are normally found on your body can sometimes cause an infection in your incision after surgery. There are certain things you can do to decrease your risk of having an infection in your incision.

Use Chlorhexidine (CHG) soap to shower each evening for three days prior to the day of your surgery. If your surgeon directed you to use the scrub differently, please follow their instructions. If you are allergic to Chlorhexidine or have extremely sensitive skin, you can use an antibacterial soap to shower (Dial or Safeguard, for example).

Chlorhexidine soap will help remove bacteria that you cannot see on your skin that could enter your incision and cause an infection.

Because bacteria also live in your mouth, it is important that you brush and floss your teeth regularly prior to your surgery. Use of an antiseptic mouthwash also helps decrease the amount of bacteria in your mouth (Listerine, etc.).

WHAT IS CHLORHEXIDINE ANTIMICROBIAL SKIN CLEANSER?

- It is a liquid soap that is stronger than regular soap.
- It is also called Hibiclens or Dyna-Hex.
- You may get it from your pharmacy or surgeon's office when you schedule your procedure.
- It is important that you use this soap to shower **each evening for three days** prior to the day of your surgery.
- Do not use it above your chin (do not wash your face or hair with this soap) or use it directly on your genitals.

EACH TIME YOU TAKE A SHOWER WITH THE CHLORHEXIDINE SOAP, PLEASE DO THE FOLLOWING USING A FRESHLY LAUNDERED WASHCLOTH:

1. Wash your whole body in the shower with an antibacterial soap (such as Dial or Safeguard). You may also wash your hair with your normal shampoo. Rinse off and do not use that wash cloth again.
2. Use 1/3 of a 4 oz. bottle of Chlorhexidine soap on a clean wet washcloth that was provided in the package with the soap.
3. Wash your back where you will be having surgery for three minutes.
4. Scrub in circular motions. Be sure to get in all skin folds.
5. Continue washing your whole body, from your chin to your toes, ending with the groin area.
6. Turn the water off while scrubbing or move away from the shower spray to avoid rinsing the soap off.
7. Once you have completed the scrub, rinse the soap off your body completely.
8. After your shower is complete, pat yourself dry with a freshly washed towel. DO NOT apply any powder, deodorants or lotions the evening before your surgery. Dress with freshly washed clothing or pajamas after each shower.
9. Put clean bed linens only on the evening of the first shower with the Chlorhexidine soap.

THIS PROCESS SHOULD BE FOLLOWED EACH EVENING FOR THE THREE DAYS PRIOR TO THE DAY OF YOUR SURGERY.

- Some common side effects of cleaning the skin with Chlorhexidine soap include itchiness, redness, and irritation of the skin. These side effects are not considered to be serious, as they usually disappear quickly. However, if the skin irritation persists or gets worse, call your doctor.
- **DO NOT USE in eyes, ears, mouth, or genital area!**
- If you develop a skin reaction, stop using immediately. If the reaction is severe, call your doctor. If Chlorhexidine, Hibiclens or Dyna-Hex is accidentally swallowed, contact the Poison Control Center immediately 1-800-221-1222 (Central PA). Keep out of the reach of children.

ONE BUSINESS DAY PRIOR TO SURGERY

The business day prior to your surgery a member of the pre-admission department will call you to provide your surgery time, arrival time to the hospital, and final instructions.

THE NIGHT BEFORE SURGERY

- You may have a light meal the evening prior to your surgery.
- Shower as directed and brush your teeth. No makeup, deodorant, powders, or lotion.
- Do not smoke after midnight prior to your surgery.
- No eating or drinking after midnight unless specifically instructed by the perianesthesia department.
- Your surgeon may have given you two beverages that look like juice boxes. This drink is similar to Gatorade, and you will be instructed when to drink this prior to surgery.

Section 3: Preventing a Surgical Site Infection

WASH YOUR HANDS

When should you clean your hands?

- Before preparing or eating food
- Before touching your eyes, nose, or mouth
- Before and after changing wound dressings or bandages
- After using the restroom
- After blowing your nose, coughing, or sneezing
- After touching hospital surfaces such as bed rails, walkers, bedside tables, doorknobs, remote controls, or the phone

HOW SHOULD YOU CLEAN YOUR HANDS?

With an alcohol-based hand sanitizer:

- Put product on hands and rub hands together
- Cover all surfaces until hands feel dry
- This should take around 20 seconds

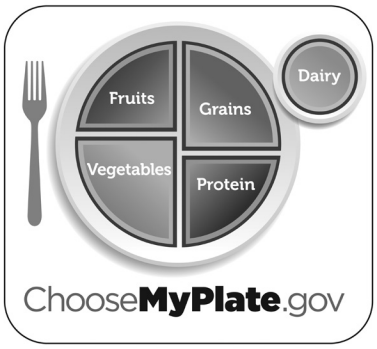
With soap and water:

- Wet your hands with warm water. Use liquid soap if possible. Apply a nickel-sized amount of soap to your hands.
- Rub your hands together until the soap forms a lather, and then rub all over the top of your hands, in between your fingers, and the area around and under the fingernails.
- Continue rubbing your hands for at least 15 seconds. Need a timer? Imagine singing the “Happy Birthday” song twice.
- Rinse your hands well under running water.
- Dry your hands using a paper towel if possible. Then use your paper towel to turn off the faucet and to open the door if needed.

DIET AND NUTRITION

Good nutrition is an important factor in healing. Eating well and maintaining a healthy weight also helps eliminate unwanted stress to your joints and may reduce the risk of heart disease, high blood pressure, diabetes and cancer. To achieve good nutrition, we recommend a balanced diet of a variety of foods each day from the food plate below. Limit your intake of fatty, sugary foods. Make half of your plate fruits and vegetables.

A well balanced diet with a variety of foods will ensure your body receives the nutrients it needs for healing. A diet that may be lacking in nutrients will slow the healing process and delay your recovery. Foods you eat should be nutritious; cut back on junk food and foods that provide empty calories. Before surgery consider preparing healthy foods to be frozen and reheated. You may have a decreased appetite after surgery; a nutrition supplement drink such as Carnation Instant Breakfast, Ensure, or Boost can help you meet your nutrition needs to promote healing.



Use the food plate as a guide to healthy eating every day!
Choose **6 or more servings** from grains, beans and starchy vegetables
Choose **3-5 servings** of vegetables
Choose **2-4 servings** of fruits
Choose **2-3 servings** of milk or dairy
Choose **2-3 servings** of meat
Limit your intake of fats, sweets and alcohol

CARBOHYDRATE BEVERAGE BEFORE SURGERY

Some surgeons may provide their patients with two drinks that look like juice boxes that you are to have before your surgery. This drink is similar to Gatorade and contains carbohydrates. Studies have shown that these clear liquid carbohydrates may help aid in your recovery after surgery.

Instructions when to drink the beverage will be given to you by the pre-admission nurse on the phone call before your surgery. Please note: Patients do NOT have to drink this beverage to have a successful surgery.

TOBACCO CESSATION PROGRAM

If you smoke, chew tobacco, or use nicotine in any form you should try to stop. Products containing nicotine have serious adverse effects on your blood vessels. As a result, healing of wounds and bones is significantly impaired which increases your risk of infection. Also, smokers experience a greater degree of pain than non-smokers.

There is a tobacco cessation program available for you at UPMC Pinnacle. This program is titled "Tobacco IQ" and can help you to quit successfully and live a healthier life. You can self refer or be referred by your physician or another member of your health care team. A trained tobacco cessation educator will provide you with an individualized program and counseling sessions to help you quit using tobacco. This is a free service made possible by the PA Department of Health.

The educator can provide information for you on methods available to quit using tobacco. They can also help you find several different community resources to help you quit.

For more information, call UPMC Pinnacle at 717-231-8900 or call 24/7 PA Free Quit Line at 1-800-Quit-Now.

BLOOD SUGAR CONTROL AND HEMOGLOBIN A1C

The stress of surgery or medications can raise your blood sugar. It is important to keep your blood sugar levels close to normal while you are in the hospital. If your blood sugar is too high, you have more of a risk of getting an infection or having a slower recovery. Your blood sugar will be checked on arrival to the pre-operative area the day of surgery.

If you are diabetic, your blood sugars will be checked before each meal and at bedtime while in the hospital. Frequently insulin is given to treat elevated blood sugars. Please preschedule an appointment with your primary care physician or endocrinologist for one week after discharge.

VISIT YOUR DENTIST

Bacteria can easily enter your blood stream through the mouth during dental procedures and cause widespread infection. To minimize this problem:

- If you are having problems with your gums or teeth currently, schedule a dental check-up in the weeks before your surgery.
- Continue to brush and floss your teeth regularly.
- Notify your surgeon if you have any dental procedures before or after your surgery.
- Notify your dentist that you have had lumbar spine surgery because they may want you to take an oral antibiotic prior to your dental appointment.

Section 4: Your Surgical Experience

THE MORNING OF YOUR SURGERY

- Do not eat or drink anything the morning of surgery unless otherwise directed.
- Come to the hospital at your scheduled time.
- Put on fresh clothes. Wear clothes that are loose fitting and can be easily removed.
- Brush and floss your teeth. Upon awakening, you may brush your teeth and rinse with water, but do not swallow the water. Use of antibacterial mouthwash also helps to decrease the amount of bacteria in your mouth (i.e., Listerine).
- Take your daily medications as instructed by your physician or pre-screening nurse with a small sip of water.
- Do not smoke prior to your surgery or procedure.
- All piercings and jewelry (including wedding rings) must be removed.
- Leave jewelry and valuables at home.
- Avoid using perfumes, deodorants, powders, lotions, or shaving creams.
- Do not wear make-up. Nail polish is permitted.

WHAT TO BRING TO THE HOSPITAL

- Advance directives and living will
- Completed medication list
- The only medications you should bring with you to the hospital are rescue inhalers, eye drops, or brand-name-only required medications. Please leave all other medications at home.
- **Your brace if one was provided to you at your surgeon's office**

Please also bring the following items, but leave them in your car until your room is assigned:

- Eyeglasses, contact lenses, prosthesis and dentures. (These must be removed before surgery so please remember to bring protective containers)
- CPAP machine
- Personal hygiene items (toothbrush, deodorant, razor, etc.)
- Shorts, tops, robe, well-fitting slippers, or flat slip-on shoes
- Loose-fitting clothing
- For safety reasons do NOT bring electrical items
- Leave your walker in car that you are going home in
- Please label all items that you bring with you

UPMC Pinnacle does not accept responsibility for the loss or damage to any belongings brought into the hospital except for those that have been deposited in the hospital safe. Patients are urged to leave articles at home that they consider to be of personal value. Belongings that are retained at the bedside are the sole responsibility of the patient. Leave money and credit cards at home.

PROTECTING PATIENTS' HEALTH INFORMATION

The Health Insurance Portability and Accountability Act (HIPAA) includes standards to protect the security and privacy of health information. The HIPAA standards give you more control over how your personal health information is used and shared. However, UPMC Pinnacle understands that you may want some family and friends to receive additional information so we have developed a Personal Identification Number (PIN) system. The PIN system gives you control of who may receive more specific information about your condition and progress. The family and friends that you choose must provide the PIN listed prior to receiving any information. You may wish to tell your family and friends to keep this number confidential. Typically this number is given to you in the pre-op area.

THE PRE-OP AREA

A staff member will escort you into the pre-op area where you will be prepared for surgery. A family member can stay with you during this process. You will be asked to change into a hospital gown, and your clothes will be placed in a plastic bag.

Your nurse may use a swab to reduce bacteria from your nasal passages about an hour before your surgery. If you feel more comfortable doing this yourself, your nurse will assist you. This involves using a swab with a product on it that kills bacteria, putting it into your nostril, and swirling it around. This is done to kill the bacteria in your nose that could increase your risk of infection.

Before your surgery, you will see your surgeon and anesthesiologist. A nurse will start an IV and review your health history and medications. You may need to have a blood specimen sent to the lab, then you will be asked to empty your bladder.

You will also meet the hospital staff who will take care of you throughout the procedure. They will double check your identity, allergies, procedure, and basic health status. If you wear dentures, eyeglasses, or contact lenses, you will be instructed to remove them prior to going to the operating room. You will then be transported to the operating room.

FAMILY WAITING AREA

Once you are transported into the operating room, your family will be instructed to return to the surgical services waiting area. When your surgery has been completed, the physician will come to the waiting area to talk to your family member(s). Remember, it may be four to five hours from the time you leave your family until your surgery and recovery is completed. Once you are ready to move from PACU (Post Anesthesia Care Unit) to your hospital room, your family will be notified of your room number, and they may proceed to the waiting room on the orthopaedic nursing unit.

ANESTHESIA

- The anesthesiologist is responsible for your comfort and well-being during and immediately after your surgical procedure.
- Your anesthesiologist will meet with you prior to surgery. He or she will discuss your anesthetic options – general or spinal anesthesia – along with the risks and benefits associated with the types of anesthesia.
- Inform the anesthesiologist if you have ever had any problems with anesthesia or medications
- Nausea or vomiting may be related to anesthesia or type of surgical procedure. Although less of a problem today because of improved anesthetic agents and techniques, these side effects continue to occur for some patients. Medicines are available to be given for nausea and vomiting if needed.

THE OPERATING ROOM EXPERIENCE

Once in the OR you will see several people, hear unfamiliar noises, and it will be cold. Warm blankets may be applied at this time if you have not already received them. You will be assisted from the stretcher on to the OR table. Monitoring devices will then be applied. The scrub nurse (sterile nurse) will introduce her/himself and will again ask what surgery you are having today. This is a safety measure.

RECOVERY ROOM

After surgery, you will be taken to the post-anesthesia care unit (PACU) where you will remain until you are stable, and a room is available for you on the nursing unit. Please inform your family that the length of time in the recovery room will vary depending on your progress.

You will be watched closely by specially trained nurses. During this period, you may be given extra oxygen and your breathing and heart functions will be closely observed.

Your pain level will be assessed and medication will be given to obtain an acceptable level of comfort. An anesthesiologist is available to provide care as needed for your safe recovery.

Your family member(s) will be contacted when you are ready to be transported to your room.

Section 5: Your Hospital Stay and Activity

VISITOR GUIDELINES

We have listened carefully to our patients and their visitors, and created a consistent visitor policy that supports our aim to provide optimal health and an exceptional experience for our patients. This process contributes greatly to the safety of our patients, their loved ones, and our staff, as well as promotes rest and recovery for patients.

Visiting hours at UPMC Pinnacle are from 9 a.m. to 9 p.m.

- Parents are responsible for the control and behavior of their children.
- Visitors may be requested to leave at any time at the discretion of the medical, nursing or security staff.
- Children under 12 must be accompanied by an adult.
- Overnight guests are not permitted unless extenuating circumstances exist and prior approval has been granted by the nurse manager.

How many visitors can I have at the same time?

UPMC Pinnacle limits the number of people visiting a patient at the same time during daytime visiting hours, 9 a.m. to 9 p.m. Extraordinary circumstances are taken into consideration on a case-by-case basis.

- Adult private rooms – four visitors at a time
- ICU, ER – two visitors a time
- Exceptions or additional restrictions depend on a patient's condition and location.

While we encourage family and friends to visit, please remember that rest is an important part of the healing process.

VISITOR CODE OF CONDUCT

- Observe all restrictions posted on patients' doors.
- Limit the number of visitors in each room to two in semi-private rooms and four in private rooms, and be aware of the noise level.
- Keep the volume of the television and any electronic devices at a level that will not disturb other patients or visitors.
- Cell phone conversations should not be disruptive to patients or visitors.
- Obtain permission from the nurse manager when you need to stay overnight with a patient or in a waiting room. (Generally, waiting rooms are not used for overnight stays.)
- Respect a patient's right to privacy. Federal law requires that hospitals comply with strict laws to protect patients' privacy. Staff can only provide condition updates to patients' designated representatives.
- Do not visit if you are sick or have an illness that could be transmitted to a patient.
- Supervise children at all times. Visitation for children under the age of 12 is limited on general medical units unless special circumstances exist.
- Be courteous to both patients and hospital staff. Respect other people, their property, and hospital property.
- Wear shoes and a shirt at all times (no exceptions).

PET VISITATION/SERVICE ANIMAL

- Pet visitation occurs in very limited circumstances and is permitted only with prior approval and adherence to strict guidelines.
- Service animals are permitted per the requirements of the US Code of Federal Regulations 36.202 and the Americans with Disabilities Act of 1990.

YOUR HOSPITAL STAY

You will be taken to your hospital room on either a bed or a stretcher. When you arrive on the nursing unit you may feel groggy and sleepy. The nurses will frequently check your blood pressure, pulse, respirations, and temperature. Nurses will monitor your dressing and incision throughout your hospital stay. If your vital signs are normal and your pain is controlled, physical therapy or the nursing staff will get you out of bed on the day of your surgery.

Communication

A call button is a device that you will be given to alert the staff that you need assistance.

The nursing staff will be checking on you about every hour to ensure your pain is managed, to offer you toileting, and to ensure you are in an appropriate, comfortable position (they will not wake you up unless it is absolutely necessary).

The nursing staff will also use a dry erase white board to communicate with you and your caregivers.

It is our goal to provide superior care and excellent service to you and your family. If we have not exceeded your expectations, please tell us. Ask to speak to your charge nurse or nurse manager so we can address the issues you have. It is our goal to take care of any issues before you go home.

STOP THE SPREAD OF GERMS

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

HOSPITAL RECOVERY/ACTIVITY OVERVIEW

Intravenous Fluids and Antibiotics

You will be receiving intravenous (IV) fluids until you are able to tolerate a diet, at which time your IV will be capped. Antibiotics will be given through the IV as ordered. The IV catheter will be removed right before you leave the hospital.

Oxygen

After surgery you may receive oxygen through a tube (nasal cannula) under your nose. Periodically, a monitor will be placed on your finger to measure the amount of oxygen in your blood.

Pulse Oximeter

This is a device that may be placed typically on a finger to monitor the amount of oxygen in your blood.

Sleep Apnea

All patients are screened by the pre-admission nurse on their pre-op phone call for being at risk for sleep apnea. If a patient is screened positive, they will be monitored by a continuous pulse oximeter after surgery. Patients with known sleep apnea and who currently use a CPAP machine at home should bring their CPAP machine to the hospital.

Coughing and Deep Breathing Exercises

After surgery it is very important to take regular deep breaths to keep the small air sacs in your lungs open. It is important to cough to loosen any secretions that may settle in your lungs. You should take 10 to 15 deep breaths and cough each hour that you are awake.

To cough, take a deep breath in and cough forcefully from your abdomen.

To deep breathe, inhale as deeply as you can and hold while counting to 10. Now exhale all the air. Repeat this exercise five times.

If the respiratory therapist feels you need additional assistance with deep breathing, they may give you a small plastic device called an incentive spirometer (ISB). The spirometer helps you fully expand your lungs. You will be asked to breathe in your spirometer about 10 times every hour that you are awake. You will also be asked to continue to use the ISB for one week after discharge.

Dressings

A dressing will be placed over your incision after surgery. Your surgeon will determine when and if the dressing underneath will be changed. Instructions on your incisional care will be provided to you prior to your discharge.

Drainage Tubes

You may have a foley catheter inserted during surgery to empty your bladder. The urine drains into a bag. The foley catheter will be removed the morning after surgery, or as soon as deemed appropriate. You may also have a surgical drainage tube inserted. This tube prevents blood or other fluid from accumulating in the body. It will most likely be removed before discharge.

Diet
Immediately after surgery, you will receive a liquid diet consisting of broth and gelatin. As you tolerate the liquid, your diet will progress to a normal diet. If your throat is sore, ice pops and clear liquids may be best to use for the first few days. Milk products may cause more mucus making it more difficult to swallow. A soft diet may make it easier to swallow for a few days.

Ankle Pumps
Immediately after surgery, you will be encouraged to do ankle pumps every hour. This is done by moving your feet up and down and wiggling your toes. Ankle pumps help increase the circulation in your lower legs.

SCDs
Sequential compression devices (SCDs) will be ordered to prevent blood clots from occurring after surgery. SCDs are plastic sleeves that are applied to your lower legs. These sleeves are attached to a machine, which alternate inflation to help pump the blood back to your heart.

Blood Transfusions
There is some blood loss associated with lumbar spine surgery. Your blood count will be checked after surgery to ensure you are maintaining adequate levels.

Ice
Ice may be placed around your surgical site. The ice decreases swelling and pain. It should remain on your incision for at least 20 minutes an hour while you are awake and especially after doing exercises. Do not apply ice directly to the skin; use a towel to protect the skin.

Walking
Walking is the best exercise after spine surgery! You will be out of bed and walking the day of your surgery. If you can't walk far, you will get up to the chair. With each walk, the distance you walk will be increased. You will learn how to walk to the bathroom, in the hallway, and climb stairs. Additionally you should be out of bed for all meals.

Falls Identifiers
After spine surgery, you may experience difficulty and your balance can be affected. Therefore, spine surgery patients may need walking assistance when in the hospital. Your safety is important to us!

Protect Yourself from Falls
Most falls occur when patients try to get out of bed without help. **Always ask for assistance from hospital staff before getting up on your own.**

If possible, call for help before the need to use the bathroom becomes urgent.

Make sure the brakes on a wheelchair are locked before getting in to it.

Back Brace
A back brace may be recommended for you to wear during the post-operative period so that motion is limited at the surgical site. Wear the brace as instructed by your surgeon. Your surgeon can give you the best idea of your personal time frame. If a brace is ordered, it is typically worn when out of bed. It is recommended to wear a piece of clothing between you and the brace.

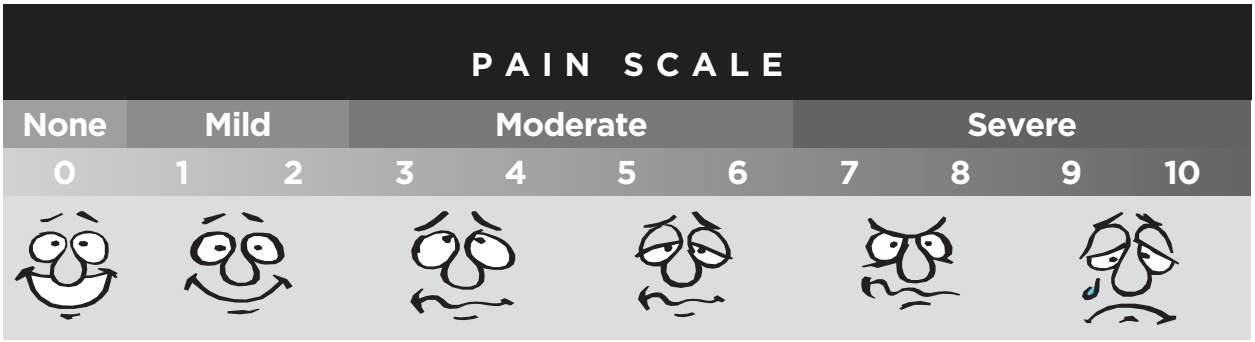
PAIN MEDICATIONS AND PAIN CONTROL

It is important for us to help manage your pain. You will experience pain after your surgery. Our goal is to decrease your pain, not completely eliminate it.

Pain management is not an exact science, and you will have pain after surgery. In the pre-op area you will be asked:

- Do you have pain now?
- Is it related to your scheduled surgery?
- What do you do for this pain currently (medications, ice/heat, positioning/elevation)?
- Where do you place your pain?
- Using the 0-10 pain scale, what level do you consider tolerable/goal?

After your surgery, we will rely heavily on your assessment of your pain, and work with you to relieve it. Rate your pain on a scale of 0 to 10, with 0 being no pain and 10 being pain as bad as you can imagine (see scale below). This rating will help determine which pain medicine is needed, or if the pain medicine given was effective. You will discuss your goal for pain relief with your physician/caregiver.



It is normal to have pain after surgery. This does not mean that the surgery was unsuccessful or your recovery will be slow. Along with your pain medicine, it is important to walk, change positions frequently, and apply ice to help to decrease your pain.

Generally, your pain medication is written to be given on an "as needed" basis. Dosing is based on your reported level of pain. It is important for you to notify your treatment team when you are having pain so we can work on making you more comfortable.

MULTIMODAL PAIN CONTROL

Multimodal pain control means you will receive two or more medications that relieve pain. When these medications are used together, they are more effective at pain control and decrease the need for opioid medications, which assists with your recovery.

Medications that may be given in combination are acetaminophen (Tylenol), muscle relaxants (Valium, Flexeril), and opioid medications (oxycodone, percocet, hydrocodone, and Norco). Your pain medication will be started immediately after your surgery and you will receive a prescription to take it at home.

Along with pain medications, it is important to walk, change positions often, and apply ice to help decrease pain.

KNOW YOUR MEDICINES

While in the hospital it is very important to know and understand the medications that you are taking.

- Ask your nurse about the medicines you are taking; what they are, what they do, how often they are given, what side effects they might have, and how long you'll be taking them.
- Ask if the medicines are safe to take with other medicines or dietary supplements that you may be taking and if there are any foods, drinks, or activities you should avoid while taking the medicines.
- If you do not recognize a medicine, inform your nurse.
- Let your doctor or nurse know if you have any allergies or previous reactions to any medications, foods, or latex.
- Please tell your health care team about all medicines that you are taking including vitamins, herbal remedies, and over-the-counter medicines.
- You should ask for your pain medication 30 minutes before exercising.

Section 6: Inpatient Physical and Occupational Therapy

Physical Therapy (PT) works on walking, stairs, exercises, mobility, and building your endurance. Occupational Therapy (OT) addresses your activities of daily living (ADLs) which include getting in and out of bed, getting dressed, getting on and off the toilet, in and out of the shower, and car transfers.

Your initial therapy evaluation will occur in your hospital room. A physical or occupational therapist will educate and assist you with getting out of bed, into a chair, and moving as tolerated. After that initial evaluation, you will go to the PT gym for the remainder of your therapy sessions. You will be seen by PT and OT daily.

BLTs

After spine surgery you will need to maintain proper body mechanics. The acronym to help you remember your spine precautions is BLT (not the sandwich.)

No Bending

- Keep head straight and facing forward. Do not tilt the head side to side, forward or backwards
- Practice optimal body mechanics by keeping your chest up, shoulders back and abdominal muscles tight. This helps maintain a neutral spine position and reduce stress on the spine

No Lifting

- Do not lift more than five pounds for one to two months after surgery or as directed by your surgeon
- To lift an object keep chest upright, bend at the knees and hips and hold the object close to the body

No Twisting

- Keep ears and shoulders pointing in the same direction
- To look behind you or to either side, you must turn your entire body. Do not just turn your head

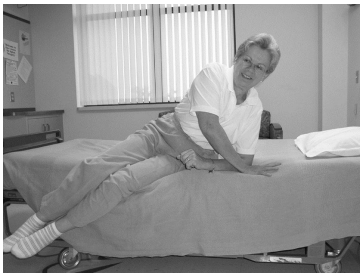
BED MOBILITY

Getting Out of Bed

The nursing staff and therapy team will show you how to get out of bed using the log roll technique. To move in and out of bed, you must "log roll" to prevent bending or twisting of your spine. Start by bending your knees up while lying on your back. Now roll onto your side keeping your hips, shoulders, and ears moving together to avoid twisting (i.e., roll like a log).

As you slide your feet off the bed, use your arms to push up into a sitting position. Scoot your hips forward until your feet are on the floor and you feel stable.

Using your arms to help scoot typically helps minimize your surgical pain. Scoot far enough forward so your feet are flat on the floor (heels included) to support your lower back.



Returning Back to Bed:

Reverse the technique for returning to bed. Back up to the bed until you feel the bed at the back of your legs. Reach for the bed with your hands as you lower to a sitting position on the bed. Scoot your hips back on the bed. The further back you scoot, the easier it will be for you to lay down on your side. As you lean down on your arm, bring your feet up onto the bed until you are lying down on your side. Then, roll onto your back keeping your shoulders, hips, and ears in alignment.

TRANSFERS

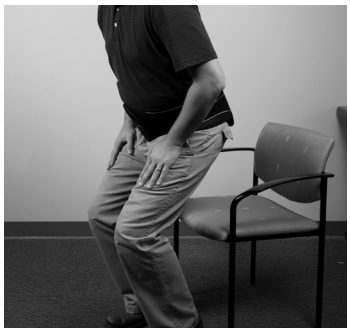
Into a Chair

Back up to the chair until you feel it touch the back of your legs. With your hands, reach behind you to grasp the armrests of the chair. Using your arms and legs, begin to squat and lower yourself into the chair.

Special Instructions:

- Tighten your stomach muscles to provide support for the lower spine.
- Your feet should be firmly resting on the floor or a foot stool. Do not let your feet dangle as this will place additional stress on your spine.

Out of a Chair

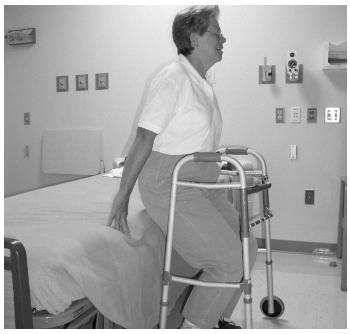


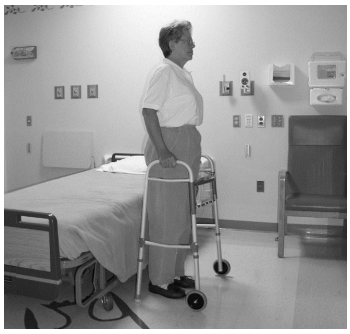
Scoot forward until you are sitting near the edge of the chair. With your hands on your thighs push yourself up into the standing position. Straighten your legs and shift your weight forward over your feet.

Helpful Tips with Sitting

- Do not let your feet dangle when sitting. Have your feet firmly supported to prevent pulling at your back.
- Protect your back by sitting in a chair with a back support. You can use a pillow or a towel as a lumbar roll.

From Bed (if using a walker)



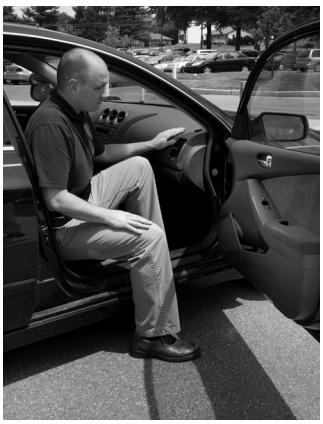


It is important to stand by pushing on the bed with your arms and NOT by pulling on the walker. Place your hands on the bed, and push up to standing. Focus on straightening your legs and shifting your weight forward over your feet. As you start to straighten, bring one hand forward to the walker then the other hand. When sitting back down, be sure to reach for the bed one hand at a time to control your body.

Into the Car

Back up to the car seat until you feel it at the back of your legs. Reach a hand behind you for the back of the seat and the other hand to a secure a spot either on the frame or dashboard. (The door and walker are not secure options. If you need to use them, have someone hold the "unsteady" objects.) Lower yourself slowly to sitting. Scoot your hips back until you are securely on the seat.

Leading with your hips, bring one foot into the car at a time until you are facing forward. Prevent twisting by keeping your shoulders, hips, and ears pointing in the same direction. You may want to recline the seat to increase the ease of lifting your legs. You can keep your seat slightly reclined while riding to support your back from the "bumps" in the road.



Out of the Car

When getting out of the car bring your legs out one at a time. Make sure to lead with your hips and shoulders and do not twist your back. Place one hand on the back of the seat and one hand on the frame or dashboard. Push up to standing. Reach for the walker when you are stable.

Helpful tips with car transfers:

- Have an empty plastic bag on the seat to help you slide in/out.
- Have the seat positioned all the way back so you have maximum leg clearance.
- If you have to have one hand on the walker for leverage, have someone hold the walker down on the front bar for stability.

Your doctor will determine when you can return to driving. You need to have full neurologic function and minimal pain or discomfort before driving. You will also need to discontinue taking medications that may affect your driving skills and safety.

When Walking

Your goal is to advance the distance you walk each day. Try to walk at least 10 minutes out of every hour. For the first few days at home, do multiple short walks throughout the day. Walking is the best exercise after spine surgery.

On/Off a Standard Commode

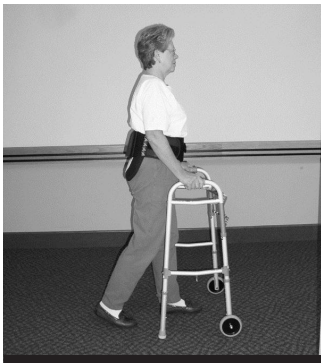
Back up to the commode, like you would a chair. Place both hands on thighs. Keeping your back straight and your head up, squat down to sit on the toilet. To get off of the commode, place hands on thighs and put weight through thighs to achieve a standing position.

On/Off a Commode with Grab Bars

Back up to the commode like you would a chair. Without twisting to look, reach back for the handles of the commode or toilet seat and squat using your arms to help slowly lower you down to a sitting position. Your feet should be flat on the floor for support while you are sitting. Use your arms to lift your body and scoot your hips forward to the edge of the commode seat. With your knees bent and your feet placed underneath you, push up through your legs and arms into a standing position. As you come to stand maintain your support by reaching for the walker one hand at a time.

Using a Walker

When using a walker, it is important to remember a few key rules.



YES

NO

- Push up from the surface you are sitting on (e.g., the bed or chair). Avoid pulling on the walker to come to a standing position. The walker could easily tip backwards and will not offer you optimal support to stand.
- It is easiest to stand up from chairs with armrests and from a bedside commode with armrests. The armrests give you better leverage and control to stand up and sit down safely.
- The walker takes pressure off your back. Push down through the walker with your arms as needed without raising your shoulders or leaning too far forward.
- Keep your feet near the back of the walker frame or rear legs. You don't want to be too close or too far away from the walker. Stay inside the walker.
- Stand up straight when walking. Keep your shoulders back, head up, chest up, and stomach muscles tight.
- If you have wheels on your walker, there is no need to lift the walker – just push the walker forward as you walk.
- Your pace of walking is up to you. Think about increasing your pace and stride to what feels normal to you. Typically taking smaller steps and walking slower does not necessarily make it easier to walk. You may end up expending more energy than necessary. Move at your own pace and at your own comfort level.
- Each day, increase the frequency and distance you walk. Go at your own pace. Frequent walks are very important to help keep you moving and decrease your stiffness and pain. By six weeks, a goal is to walk two to three miles unless otherwise instructed by your physician or therapist.
- Take six to eight walks per day at home. During at least one of the walks, you want to increase the distance as tolerated.

USING STAIRS

Negotiating Consecutive Steps:

- Use a handrail for assistance.
- If one leg feels weaker than the other, go up the steps with your stronger leg first and down the steps with your weaker leg first. "Up with the Good and Down with the Bad."
- If you feel unsteady, take one step at a time. This will make negotiating steps easier and safer for you.
- Concentrate on what you are doing. Do not hurry.
- Have someone assist or "spot" you as you feel necessary or indicated by your therapist. This person should stand behind and slightly to the side of you when going up the steps. When going down the steps, the person should be in front of you.

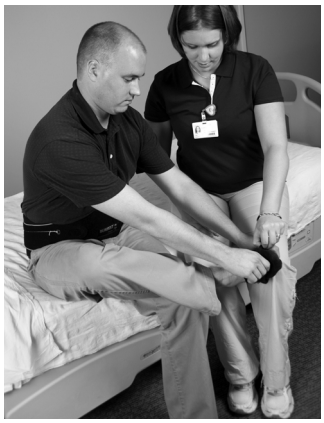
Helpful Stair Tips

- Keep the steps clear of objects or loose items.
- Plan ahead. Right after surgery keep items in areas where you need them so that you can limit stair use.
- Install one or two handrails. Two handrails will increase the ease and safety with steps.

Negotiating a Curb or One Single Platform Step (if using a walker)

- You can use the rolling walker.
- Move close to the step.
- Place the entire walker over the curb onto the sidewalk. Make sure all four prongs/wheels are on the sidewalk.
- Push down through the walker towards the ground.
- Step up with the stronger leg first, then follow with the other leg.
- Reverse this process for going down the step. Place your walker below the step, then step down leading with the weak leg first.

ACTIVITIES OF DAILY LIVING



Lower Extremity Dressing

Sit on a supportive surface. Cross one leg over the other, supporting your foot on your thigh. Thread clothing over one foot at a time, pulling the underwear, then pants up to your thighs. Keep one hand grip on clothing items and pull garments over hips in standing position. Reverse process to remove your clothing.

Applying / Removing Socks

Sit on a supportive surface. Cross one leg over the other, supporting your foot on your thigh. Slide sock over foot. Do same technique to remove your sock.

BATHING

Back / Lower Extremity Bathing

A long handled sponge can be used to avoid the twisting and bending motions when washing your back, legs, and feet. Do NOT use this sponge to wash over your incision.

Stepping In/Out of the Tub

- If your shower is part of the tub, you should hold onto the front wall of the shower and step in or out sideways versus stepping in forward. This side-step places much less stress and motion on your lower spine.
- If you have a walk-in shower stall, step in as usual making sure not to twist as you turn to face the controls.
- You may want to have a bathtub or shower seat available for the first few days that you shower. You can borrow these types of items or buy them inexpensively. Small tub/shower benches can be purchased at most drug stores or medical supply stores.
- You are not allowed to take a tub bath or swim for at least three weeks and until your doctor clears you to do this.

GENERAL REMINDERS

- ✔ It would be a good idea to have whoever is going to assist you at home be there on the day of discharge so they can receive transfer instructions as well.
- ✔ Do not bring your own equipment (cane, rolling walker). We will provide you with equipment while you are here.
- ✔ Bring your lumbar brace to the hospital if one was provided to you by your surgeon.

Section 7: Home Care Guidelines

When you are medically stable and walking safe household distances and your pain is controlled, you will be ready to transition home.

Prior to going home you will be given:

- Activity, incision and medication instructions from your surgeon (you may want to keep these to share with your primary care physician)
- Your surgeon's phone number and date and time of your first follow-up appointment
- Prescription for pain medicine

TRANSPORTATION

You will need to have a family member or friend transport you home from the hospital the day you are discharged.

The Drive Home

- Move the front passenger seat back as far as possible
- Recline the seat slightly if possible
- If your drive is long, stop to stand up and stretch after 45 minutes to one hour
- You may bring a pillow to sit on for comfort

RECOVERING AT HOME

Most patients undergoing spine surgery want to know when they will be able to return to their normal life. Many factors can contribute to recovery time, but typically patients can return to normal life activities within one to three months. Each day you will be able to resume more and more activities. Keep in mind, however, that recovery is a gradual process, and we all recover at our own pace.

There are some factors that may influence recovery time. One factor that influences recovery is having a positive attitude. Undergoing surgery can be a very stressful event.

It is important to have a support network that will be able to provide physical and emotional support as you recover. Set realistic goals and make note of your achievements no matter how small.

Remember it is okay to adjust your goals as you go through your recovery, but aim to achieve them and seek help from your support network.

Pain management is essential for recovery. Be prepared for hard work and some pain. The use of pain medication as prescribed and walking will aid your recovery. Your strength and mobility will be affected initially but will improve. Follow the direction of your surgeon and comply with the exercise program prescribed.

1. Use of Ice/Heat

- You may use ice for pain control. Applying ice to your incision will decrease discomfort. Do not use ice for more than 20 minutes at a time each hour
- You may apply heat to ease muscle spasms in your shoulders

2. Positioning

- Change your position every 30 to 45 minutes throughout the day.
- Muscle strain and spasm can often be reduced by elevating the arms with pillows. Using this positioning technique along with pain medication will optimize your comfort.

3. Muscle Spasm

- If your doctor has prescribed a muscle relaxer, take this to help relieve muscle spasms
- Gentle stretching may ease muscle spasm
- Gentle massage applied to the muscle spasm may help to reduce discomfort

REMEMBER YOUR BLT'S! Avoid Bending, Lifting, and Twisting (B.L.T.'s)

MEDICATIONS

Pain Medications

Take your prescribed pain medication every six hours as needed (or as directed by your surgeon). Gradually, as more time goes by, you should be able to increase the length of time between pills or decrease the number of pills from two to one. Please do not take any over-the-counter pain relievers that contain aspirin or acetaminophen to manage your pain in addition to your prescription.

If your doctor has prescribed a muscle relaxer, take this to help relieve muscle spasms.

During the first three months after surgery (if you had lumbar fusion), do not take over-the-counter anti-inflammatory medication such as Ibuprofen and Naprosyn (Motrin, Advil, and Aleve) unless specifically directed to do so by your surgeon. This type of medication can interfere with bone healing and thus jeopardize the success of your surgery. If you have prescription anti-inflammatory medication at home, consult your surgeon before taking these.

Laxatives and Stool Softeners

After your surgery, you may experience constipation from the pain medication, decreased mobility, and a change in appetite. You need to take stool softeners to keep the stool soft. Stool softeners should be started one week prior to your surgery. Patients should remain on stool softeners while taking pain medication. They are an over-the-counter medication that can be purchased at your local pharmacy or grocery store. Sometimes the addition of a laxative is needed to help relieve the constipation. Remember to eat a diet high in fiber and drink plenty of fluids. If your constipation is not relieved, please contact your family doctor or surgeon for advice.

BODY CHANGES

- Your appetite will be poor. Drink plenty of fluids to prevent dehydration and constipation. Your appetite will return.
- Your energy level will be decreased for the first month.
- You may have difficulty sleeping at night. This is normal. Don't sleep or nap too much during the day to ensure you get adequate rest at night. This will help you to return to a more normal schedule.

PREVENTING POST-OPERATIVE SURGICAL SITE INFECTIONS

Good personal hygiene habits aid in the prevention of post-operative surgical site infections. These habits include:

- Washing hands with warm water and soap for 15 seconds:
  - After using the toilet
  - Prior to and after working with your incision
  - Prior to food preparation and/or eating
  - After coming in contact with pets
- Washing your body and hair with soap or shampoo often
- Brushing and flossing your teeth and rinsing your mouth with antiseptic mouth wash at least once a day
- Wearing clean clothes. Dirty clothes should be washed with laundry soap before wearing them again
- Changing and laundering bed and bath linens often
- Using a clean washcloth and towel on your incision until completely healed

CARING FOR YOUR INCISION

- Instructions on incision care will be provided prior to discharge
- Always wash your hands prior to working with your dressing. Wash with warm water and soap for at least 15 seconds.
- Change dressing once daily or more often if the dressing is soaked through with drainage
- DO NOT clean the incision, just change the dressing
- You may begin showering on the third day after your surgery, ONLY if there is less than a quarter-size amount of drainage on the removed dressing
- Prior to your shower, remove the dressing. Do not scrub the incision in the shower, just let the warm, soapy water run over the incision and pat dry with a clean towel.
- No soaking the incision in baths, hot tubs, pools, etc.
- Do not use lotions, ointments, creams, or powders on the incision.

You may discontinue dressing changes and leave the incision open to air once the incision is completely dry and free from drainage.

You may have steri strips under your dressing. Leave on until they fall off.

SIGNS OF INFECTION

- Persistent fever (oral temperature greater than 101.3 degrees)
- Shaking or chills
- Increased redness, tenderness, swelling or drainage from incision
- Uncontrolled pain

The best way to prevent infections is good hand washing.

BLOOD CLOTS

Surgery may cause the flow of blood to slow and clot in the veins of your legs. Taking your blood thinners as prescribed and walking around throughout the day will reduce the chance of a blood clot. While resting in a seated position or lying down, continue to do frequent feet and ankle pumps. However, it is important to recognize the signs of blood clots.

Warning signs of blood clots in the leg:

- Increased pain in the calf of your leg
- Tenderness, warmth or redness
- Increased swelling of the thigh, calf, ankle or foot that does not go down with elevation of the legs

Prompt treatment usually prevents the more serious complication of pulmonary embolus; an unrecognized blood clot could break off in the vein and go to the lungs.

Warning signs of blood clots in the lung:

- Sudden increased shortness of breath
- Sudden onset of chest pain
- Difficult and/or rapid breathing
- Localized chest pain with coughing, or when taking a deep breath
- Sweating
- Confusion

This is an emergency, and you should call 911 if suspected!

WHEN TO CALL THE SURGEON

- If you have new or worsening pain, numbness, or weakness
- If you have a severe headache when you change position from laying to sitting along with eye sensitivity to light

POST SURGERY FOLLOW-UP

Your first post-operative visit will generally be a few weeks after surgery. If you don't already have it, you should schedule your appointment as soon as you return home from the hospital. Your surgeon will assess your incision and possibly take an x-ray. You will also receive a new set of instructions for care and a list of activities that you can now engage in. Your next visit will be determined by your surgeon.

DENTAL CARE

Because infections commonly enter the body through the mouth, you must take certain precautions before having dental work.

- Tell your dentist that you have had lumbar spine surgery.
- Your surgeon may want you to take an antibiotic before dental work which will help keep bacteria from entering your blood stream. Your surgeon or dentist can prescribe the antibiotic.

INTIMACY FOLLOWING LUMBAR SPINE SURGERY

Your incision, muscles, and ligaments need time to heal. Sexual activity is not recommended immediately after surgery but can often resume safely at two to four weeks after surgery. Discuss with your surgeon when it is safe to return to sexual activity. Once a timeframe is determined, you can resume sexual activity when you feel ready.

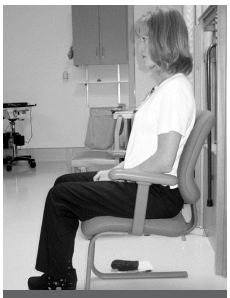
DO'S AND DON'TS FOR THE REST OF YOUR LIFE

Whether or not you have reached all the recommended goals in three months, all spine surgery patients need to participate in a regular exercise program to maintain their fitness and the strength of the muscles around their spine. With permission from both your surgeon and primary care physician, you should be on a regular exercise program three to four times per week lasting 20 to 30 minutes. In general, the aim of spine surgery is to return you to a full activity level, but certain precautions should be taken to help you maintain a healthy spine.

Section 8: Principles of Posture and Body Mechanics

WHEN STANDING

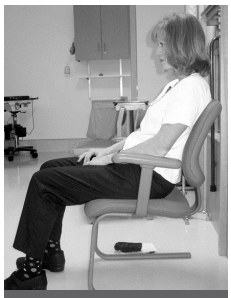
- Keep your head level and your chin up.
- Stand tall by looking forward and keeping your shoulders over your hips.
- Relax your shoulders.
- Tighten your stomach muscles by pulling in your stomach. This will relieve undue stress on your spine.



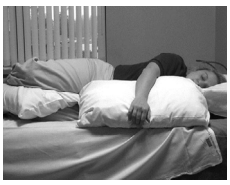
YES

WHEN SITTING

- Keep your head level and chin up.
- Place your buttocks all the way to the back of the chair. A rolled towel in the small of the back provides lumbar support. Do not slouch.
- Keep your feet flat on the floor to support your back. When your feet dangle, it pulls at your lower back. If your feet don't firmly touch the ground place your feet on a stool and put a pillow behind your back.

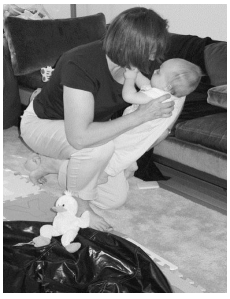


NO



WHEN LYING

- Use a firm mattress.
- Lie on your side with your hips and knees slightly bent and with a pillow between your legs.
- Lie on your back with a pillow under your head and one under your knees to take the strain off your lower back.
- Avoid lying on your stomach.



WHEN LIFTING

- Keep your head level and chin up.
- Keep your back straight, bend your knees and hips and squat as low as possible, keeping your feet apart and chest up.
- Lift with the strength of your legs.
- Never twist or turn while lifting.
- Hold objects close to your body.
- Use a partner whenever necessary, especially if the object is heavy or an awkward size.
- If carrying objects in both hands, make sure weight is evenly distributed.

WHEN WALKING

- Your goal is to increase the distance you walk each day.
- For the first few days at home, do multiple short walks throughout the day.
- This approach is better for reducing stiffness. As you can tolerate it, advance your walking distance. Frequency is better than pushing yourself to walk a certain distance initially. Mild back pain is expected, but should dissipate within 15 minutes of rest afterwards.
- Keep your head up, chest up, shoulders back and relaxed, buttocks and stomach tucked in.
- Typically, people use the walker for distant ambulation to keep pressure off the back. As tolerated, you can wean yourself off the walker unless otherwise indicated by your surgeon.

PRINCIPLES OF EXERCISE

A post-operative exercise program is an important component of a successful spine surgery. Patients should work with their physical therapists to develop a maintenance program that is specific to their needs and is one that they enjoy. The ultimate goal for each patient is that strength, flexibility and mobility are restored through a progressive and safe exercise program. The goals and guidelines for exercise are noted on the next few pages.

- These exercises help to stabilize your spine and improve the strength and flexibility in your legs and thus optimize your surgical outcome and functional mobility.
- Whenever approved by your surgeon, you may start more vigorous low-impact exercises such as using a recumbent bike or walking on a treadmill.
- Exercises are best done on a firm surface or a firm bed. Protect your back. Keep good posture when exercising. Move slowly. Stop if you have excessive pain or discomfort.
- Read your body. If you notice increased discomfort or fatigue, recall what you did earlier that day or the day before. Chances are, you overdid things, and need to scale back until tolerated. Continue to slowly advance yourself as you tolerate the activity.
- Whenever you are performing an exercise, try to keep your abdominal muscles tight by "pulling your belly button in towards your spine." Make sure you are breathing continuously when performing the exercises. Try counting out loud to keep from holding your breath.

Post-operative Exercises Prescription Plan for the Lumbar Patient

HOME EXERCISE PROGRAM

Weeks 1-2

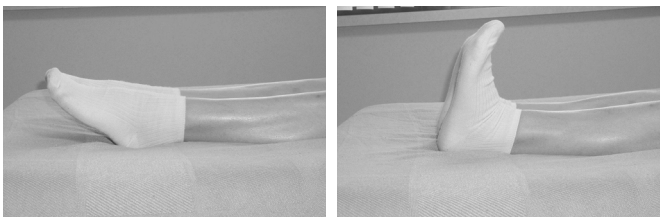
During weeks one and two your recovery goals are to:

- Continue to walk using the walker if needed. The walker typically reduces the stress placed on your spine and can help with balance. As your pain and discomfort lessen, increase your walking distance, and wean yourself from the walker as you feel comfortable.
- Walk frequently, slowly increasing your distance as tolerated.
- Gradually resume household tasks, keeping in mind to always adhere to your spine precautions (no bending, lifting, twisting).
- Do your home exercises two to three times a day. Remember that exercises may slightly increase discomfort, but it should not last longer than 15 minutes.

1. Ankle Pumps
Move ankles up and down as far as possible in each direction.

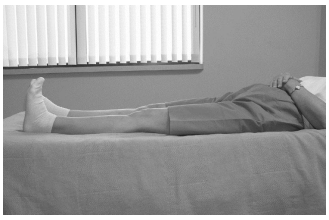
To prevent back strain, perform this exercise while lying flat or sitting in a chair.

Sets: 1
Reps: 20
Frequency: 2x day



2. Quad Sets
Lie flat on back with one leg straight. Tighten quadriceps muscles (front thigh muscles), by pressing back of knee into mat, and hold as indicated. Do not hold breath.

Sets: 1
Reps: 20
Hold: 3-5 sec.
requency: 2x day



3. Gluteal Sets (bottom squeezes)
Sit, lie or stand. Squeeze bottom together. Do not hold breath.

Sets: 1
Reps: 20
Hold: 3-5 sec.
Frequency: 2x day

4. Abdominal Sets (tummy tucks)

Lie flat on back with knees bent. Tighten your stomach (abdominal) muscles by drawing your belly button towards your spine. You should feel your abdominal muscles tighten across the front. Hold that position and continue to breathe comfortably. If you can't breathe comfortably, then you are trying to tighten the muscles too much. As you practice this exercise, you will learn how to engage your abdominal muscles without affecting your ability to breathe.

Sets: 1
Reps: 20
Hold: 5-10 sec.
Frequency: 2x day

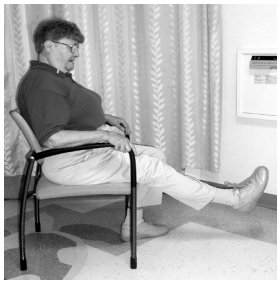
NOTE: This exercise is just the beginning of a lifelong challenge of being able to keep your abdominal muscles tightened. The strengthened muscles provide continuous support for your spine.

5. Heel Slides (slide heel up and down)

Lie flat on back. Slide heel toward your bottom. Keep your opposite knee bent to support your back. Repeat with other leg.

Sets: 1
Reps: 20
Frequency: 2x day

6. Long Arc Quads (knee extensions)



Sit in chair with knees bent (place buttocks at back of chair). Slowly extend one leg until knee is straight and hold. Return to starting position. Repeat exercise as indicated with other leg.

Sets: 1
Reps: 20
Hold: 5-10 sec.
Frequency: 2x day

Special Instructions:
Focus on tightening your thigh muscle. Start this exercise with your toes pointed down. If that is pain free, gradually progress to perform this with your toes pointed towards you. Any leg discomfort felt during this movement should dissipate immediately after resting. If not, you will need to perform this with the toes pointed down until it becomes pain free. Do not hold your breath and remember to stabilize your back by tightening your abdominal muscles.

7. Walking

Walk as far as possible, taking rest breaks as needed. Increase distance each day.

- Always adhere to your spine precautions (no bending, lifting, twisting) when moving around.
- Do your home exercises twice a day. Remember that exercises may slightly increase discomfort, but it should not last longer than 15 minutes.

Weeks 3-12

The following are general goals for weeks 3-12:

- Continue to walk daily. Slowly and steadily increase your distance and endurance. At this time, most patients do not need the walker. If you are unsure or having issues with balance or weakness, continue to use the walker and consult your doctor or physical therapist for advice.
- Gradually resume community tasks. Continue to avoid excessive activity and adhere to your spine precautions with all mobility. Give yourself frequent breaks during activity. Do not do continuous house/garden work for more than 30 minutes without resting.
- Do your home exercises two to three times a day. Remember that exercises may slightly increase discomfort, but it should not last longer than 15 minutes.

Post-operative Exercises Prescription Plan for the Spine Patient

1. Wall Squats . . . . . 20 reps 2 times/day
2. Heel Raises . . . . . 20 reps 2 times/day
3. Quad Stretch . . . . . 2 times/day
4. Calf Stretch . . . . . 2 times/day
5. Walking . . . . . Increase distance as tolerated

Weeks 6-12 (add the following):

7. Abdominal Bracing with Arms and Legs . . . . . 20 reps 2 times/day
8. Abdominal Crunches (curl up) . . . . . 10-20 reps 2 times/day
9. Nerve Glides . . . . . 20 reps 2 times/day

3 - 6 Weeks

1. Wall Squat

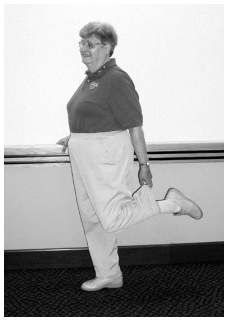
Keep head, shoulders and back against wall with feet shoulders width apart. Slowly lower buttocks by sliding down the wall until thighs are parallel to floor. Keep back flat. Do not let your knees pass in front of your toes (this will protect the knees from excess strain). Do not hold your breath.

Sets: 1
Reps: 20
Hold 5-10 sec.
Frequency: 2x day

2. Heel Raises

Stand next to a counter and slowly rise up onto your toes. Maintain this position for 5-10 seconds then lower yourself to standing. To help with balance, you may hold onto the
countertop for support.

Sets: 1
Reps: 20
Hold 5-10 sec.
Frequency: 2x day



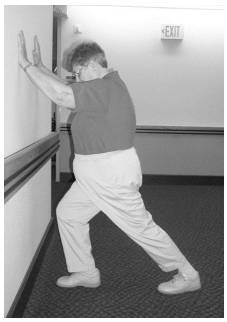
3. Quadricep Stretch

While standing and holding onto a firm surface, bend your knee and grab your ankle. Try to pull your heel in toward your buttocks. Stand tall and keep your hip straight and your knee pointing towards the floor. You should feel the stretch at the front of your thigh.

Sets: 1
Reps: 3 each leg
Hold: 15-30 seconds
Frequency: 2x day

SPECIAL INSTRUCTIONS:

- If necessary grab your pant leg instead of your ankle.
- Do not bounce.



4. Calf Stretch

Stand with one leg straight and one foot back. Keep your heel on the floor. Gently lean into the wall keeping your back straight until a stretch is felt in the calf. Do not bounce.

Sets: 1
Reps: 3 each leg
Hold: 15-30 seconds
Frequency: 2x day

6. Walking

Walk as far as possible, taking rest breaks as needed. Increase distance each day.

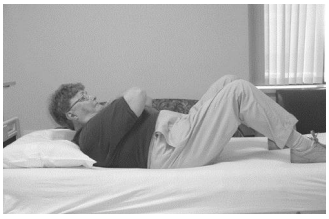
Weeks 6 – 12 (add the following)

7. Abdominal Bracing with Arms and Legs (alternating)

Lying on your back, tighten your abdominal muscles while keeping your back flat on the bed. Bend one leg at the knee and slowly pull it up towards your chest. As you do this, raise the opposite arm over your head. To continue this exercise, lower this arm and leg and repeat this sequence with the other arm and leg. You should feel tightness in the abdominal muscles, not your back.

Repeat 20 times
Frequency: 2x day

8. Abdominal Crunches



Lying on your back with hands folded across your chest and the small of your back against the bed, raise your head and shoulders from the surface. Move slowly, and focus on tightening the abdominal muscles. Do not arch your back. If you start to arch your back, this is a sign that your abdominal muscles are tired. Do not continue – instead, rest and try it again later.

Repeat 10-20 times or until you can no longer keep from arching your back.
Frequency: 2x day

9. Nerve Glides (sciatic)

Lie on your back with your knees bent. Interlock your fingers behind your thigh or use a towel to support your leg. Do not bend your hip past 90 degrees. Straighten your knee out until you feel a gentle stretch in the back of your leg. Hold up to 5 seconds. Stop this exercise if it creates lingering pain, tingling or numbness in your leg.

Repeat 20 times on each leg
Frequency: 2x day

What to do for exercise once cleared by your surgeon:

- Choose a low-impact activity.
- Enroll in recommended exercise classes.
- Follow the home program as outlined in this Guidebook.
- Take regular walks.
- Use home treadmill and/or recumbent bike.
- Exercise regularly at a fitness center.

Section 9: Body Mechanics — General Rules

HOW TO USE THIS SECTION

This section will give you some general tips on how to practice and adapt safe body mechanics to your everyday work activities. There are nine main sections (Standing, Sitting, Bending, Lifting, Turning, Reaching, Pushing vs. Pulling, Sleeping, and Household Chores.). Under each section, there are some general rules of thumb followed by more specific examples of activities you may perform. This is not an exhaustive list, but should help you learn to apply and practice optimal body mechanics when performing activities.

NOTE: *There is not only one correct way to do a task. It depends on your abilities. You may need to alter ways of moving based on your strength, flexibility, pain level, and/or other medical conditions. Ultimately, your physician will determine your activity level and physical restrictions.*

STANDING

- Do not lock your knees. A bent knee takes stress off your lower back.
- Wear shoes that support your feet. This helps to align your spine.
- If you must stand for long periods of time, raise one foot up slightly on a step or inside the frame of a cabinet. Resting a foot on a low shelf or stool can help reduce the pressure and constant forces placed on your spine. Shift feet often.
- While standing, keep shoulders back so that they do not roll forward.
- Keep back as upright as possible and keep your head and shoulders aligned with your hips.
- When standing over a sink for prolonged periods of time, keep one foot under the sink propped on lip of cabinet to reduce the stress on your back.

Shaving

- Stay upright with one foot on ledge of cabinet under a sink.

Showering

- To avoid bending or twisting, use a long-handled sponge to reach your back and lower extremities.
- Use a bathtub/shower chair and a hand-held shower spout.

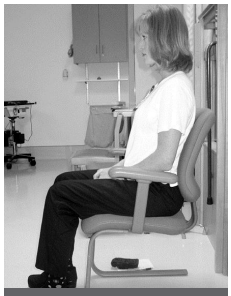
Brushing Teeth

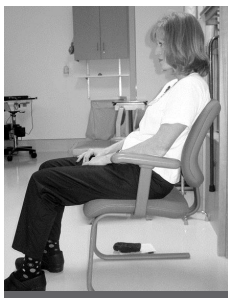
- While brushing teeth, stand up straight and keep knee bent with foot on cabinet lip.
- To avoid bending forward, spit into a cup and use a cup for rinsing your mouth. You can also support your back by leaning one arm on the sink/counter as you spit into the sink. Bend at your knees, not your back.

Ironing

- While ironing, keep the ironing board waist level to avoid leaning forward at your back.

SITTING


YES


NO

- Sit in chairs that support your back. Keep your ears in line with your hips. If needed, support your lumbar curve with a rolled-up towel or lumbar roll.
- Your knees should be level with your hips. Your feet should be well supported on the floor to support your spine. If needed, place your feet up on a footrest.
- Do not slouch. This puts your back out of alignment and adds extra stress to your lumbar curve. Don't sit too far away from the steering wheel when you drive.
- Keep your shoulders back and head centered over your hips.
- Do not let your shoulders roll forward.
- Keep the computer screen at eye level.
- Have a lumbar support for your chair.
- Armrests need to be placed at a level that supports the forearms and keeps them at waist level. Forearms should not be pushing up into your shoulders.
- Adjust the height of the chair so that the keyboard is level with forearms.
- Maintain a good upright sitting posture.
- Take frequent standing/rest breaks while working (every 30 minutes).

BENDING

- Bend at your knees and hips instead of at your waist/back. Keep your chest and shoulders upright, centered over hips. This maintains your three natural spinal curves, and keeps stress off your back.
- Hold objects close to your body to limit strain on your back.
- Do not bend over with legs straight. This motion puts great pressure on your lower back and can cause serious injury.
- Bend at knees and hips to get things out of lower areas. It is better to squat or kneel instead of bending.

Unloading the Dishwasher

- To get objects out of the dishwasher, squat or kneel down by door.
- Try sitting on a swiveling office chair to unload the dishwasher. You can place the items up onto the counter by pivoting around with your feet. Then stand and put items into the cupboard.

Tub Cleaning

- Do not overextend yourself when cleaning low places such as bathtubs. Use mop or other long-handled brushes.
- Always use non-slip adhesive or rubber mats in tub or "aqua/water shoes."
- Try to move lower by squatting and brace yourself with a fixed object.

Wiping Lower Surfaces

- When wiping or dusting low objects, do not bend the lower back.
- Try to kneel or squat next to an object.

Making Bed

- Do not bend over too far when making a bed.
- Try to move sheet to corners and kneel or squat to pull them around mattress.

Caring For Pets

- Have pet food at waist level.
- Use a reacher or squat to lift pet food into a bowl.
- Reverse process to place bowl on floor.

LIFTING

- Lift your body and the load at the same time. Let your legs do most of the lifting.
- Squat to pick up a heavy object and let your leg muscles do the work. Hold heavy objects close to your body to keep your back aligned. Lift objects only to chest height.
- Do not bend over at the waist to lift anything or twist while lifting. Avoid trying to lift above shoulder level.
- Use a reacher to pick up small objects from lower shelves.
- Use other leg to support.

Laundry - Loading Washer/Dryer

- Place laundry basket so that bending and twisting can be avoided.
- Place basket on top of washer or dryer instead of bending down with your back.

Laundry – Unloading Washer/Dryer

- Do not bend at lower back when removing laundry from dryer.
- Set basket on floor and squat or kneel next to basket when unloading dryer or front-load washer.
- You could try a “golfer’s bend” to unload the washer/dryer by supporting with one hand on the unit and holding the opposite leg straight out as you bend forward. This allows you to keep your back straight and take some of the pressure off your back with your arm supporting you.
- Use your reacher to obtain laundry one piece at a time.
- Use a chair in front of the dryer to reach the clothes if needed.

Kneeling Lift

- With awkward objects, kneel and move object onto one knee.
- Bring it close to your body and stand up.

Carrying Luggage

- Carry bags on both sides of body instead of on one side. Try to keep weight equal on both sides.
- Use luggage on wheels when able.

Lifting Object from Floor

- Stand with box between feet, grasping both handles while squatting. Keeping back straight, extend knees and lift box.
- Return to original position in same manner.

Childcare - Lift from Floor

- Do not bend over at your back to pick up a child. Instead, squat down, bring child close to chest and lift with legs.

Childcare - In/Out of Car

- When placing infant or child in car seat, always support yourself. Place knee on the seat of the car to unload the stress placed on your back.
- Never bend over at the waist.

Holding a Child

- To maintain good posture and decrease stress on back, hold the baby/child to the center of your body, not propped on a hip.
- Hold baby by cradling in arms.
- Keep the baby close to body.
- Keep the head as upright as possible.

Lifting in/out of Car

- Bend at your hips and lift object out of trunk.
- Keep abdominal muscles tight during the entire process.

TURNING

- Think of your upper body as one straight unit, from your shoulders to your buttocks.
- Turn with your feet, not your back or knees. Point your feet in the direction you want to go. Then step around and turn. Maintain your spine's three curves.
- Do not keep your feet and hips fixed in one position, and do not twist from your back. The joints in your back aren't designed for twisting; this kind of motion increases the risk of injuring your discs and joints.

In/Out Car

- Back up to seat and sit down while facing away from car.
- Scoot back and swing your legs into vehicle.
- Perform in opposite manner to get out.
- Do not twist. Keep shoulders in line with hips. Lead with your hips.

REACHING

- Store common items between shoulder and hip level.
- Get close to the item. Use a stool or special reaching tool, if you need to.
- Tighten your abdominal muscles to support your back. Use the muscles in your arms and legs (not your back) to lift the item.

Dusting

- Use a dusting aid that can reach distances so you don't have to reach far or lean backwards.

Reaching Out

- When getting objects that are low, but not low enough to kneel or squat, brace yourself by placing your hand on a fixed object such as a counter.

Avoid Twisting

- Avoid twisting trunk to reach things.
- Step in the direction of the object you are trying to reach.

PUSHING VS. PULLING

- Push rather than pull large or heavy objects.
- Make sure to lower your hips and keep back stabilized by tightening abdominal muscles.
- Keep elbows close at sides and use total body weight and legs to push or pull.

Vacuuming (type of pushing/pulling task)

- Use your legs, not your back, when vacuuming.
- Do not vacuum by reaching out away from body.
- Try to work for small intervals of time with frequent breaks.
- Keep the vacuum close to body.
- Use a lightweight vacuum.

SLEEPING

- Sleep on your side or back. If you sleep on your side, bend your knees slightly (not as far as the fetal position) to take some pressure off your back, put a pillow between your knees to keep your curves aligned. When on your back, lie with a pillow under your head and one under your knees.
- Do not sleep on a soft bed or couch. This takes your three spinal curves out of alignment and adds extra stress to your back. Avoid sleeping on your stomach, which can strain your back.

PERFORMING HOUSEHOLD CHORES

Kitchen

- Plan ahead! Gather all your cooking supplies at one time. Then, sit to prepare your meal. This cuts down on excessive trips to the refrigerator, cupboards, etc.
- Place cooking supplies and utensils in a convenient position so they can be obtained without too much bending over or stretching.
- Raise up your chair by putting cushions on the seat or using a high stool when working.

Bathroom

- ALWAYS use non-slip adhesive or rubber mats in tub.
- Attach soap-on-a-rope so it is within easy reach.

All Areas

- Remove throw rugs. Cover slippery surfaces with carpets that are firmly anchored to the floor with no edges to trip over.
- Be aware of all floor hazards such as pets, small objects or uneven surfaces.
- Provide good lighting throughout. Leave a light on at night in the bathroom.
- Keep extension cords and telephone cords out of pathways.
- Avoid slippers without covered toes or shoes without backs. They tend to cause slips and falls.
- Sit in chairs with arms. It makes it easier to get up.
- Rise slowly from either a sitting or lying position so as not to get light-headed.
- No heavy lifting for the first three months after your surgery and then only with your surgeon's permission.
- Stop and think and always use good judgment.

Appendix

FREQUENTLY ASKED QUESTIONS
About Lumbar Laminectomy/Hemilaminectomy/ Microdiscectomy

Q. What is wrong with my back?
A. You have a "pinched nerve." This can be produced by a ruptured disc or by bone spurs. Discs are rubbery shock absorbers between the vertebrae, and are close to the nerves which travel down to the arms. If the disc is damaged, part of it may bulge or even burst free into the spinal canal, putting pressure on the nerve and causing arm pain, numbness, or weakness. Bone spurs, usually the result of arthritis, can also put pressure on nerves. Occasionally, pressure from bone spurs or a ruptured disc may affect the spinal cord and cause abnormalities in the legs or lower parts of the body.

Q. What is required to fix the problem?
A. In most cases, a small incision is made in the anterior/posterior part of the back. Muscles supporting the spine are pushed aside temporarily, and a small "window" is made into the spinal canal. The spinal nerve is protected, and the ruptured part of the disc or the bone spur is removed. If bone spurs and arthritis are the cause of your problem, you may require a bigger incision and more bone may have to be removed.

Q. When is this operation necessary?
A. In almost all cases, the major reason for spine surgery is pain which is intolerable to the patient or neurological deficits. Often non-surgical measures can control the pain satisfactorily. However, if the pain persists at an unacceptable level, if you cannot function because of pain, or if weakness or other neurologic problems develop, then surgery may be necessary to relieve the problem.

Q. Who performs this surgery?
A. Both orthopaedic surgeons and neurosurgeons are trained in spinal surgery and both specialists may perform this surgery. It is important that your surgeon specialize in this type of procedure.

Q. How long will I be in the hospital?
A. The hospital stay is generally one to two nights.

Q. Will I need a blood transfusion?
A. There is usually very little blood loss with this operation, and transfusions are almost never necessary.

Q. What can I do after surgery?
A. You should resume low-impact activities as soon as possible, starting with walking. Walking is great for your back; it helps to keep your back and thigh muscles stretched and strong. Try to walk a little farther each day.

Q. What shouldn't I do after surgery?
A. Generally, you should avoid bending, lifting and twisting for six to nine months. Because screws and rods are used, it takes six to 12 months for the fusion to heal completely, and you must protect your spine during this time. Your surgeon may prescribe a brace for you to wear for part of this time. If you are a smoker, you definitely should not smoke until your fusion is completely solid, since smoking interferes with bone healing.

See page 19 on tobacco cessation.

Q. When can I go back to work?
A. Your surgeon will advise you on the length of time you will be off from work. This depends on the type of work you do. You may be able to return to a desk job (sedentary) fairly soon; however, it will take longer for more active work. It takes much longer to get back to work that requires strenuous physical activity due to the increased stress these activities place on the healing bone. Do not drive while on prescription pain medicine.

Q. What are my chances of being relieved of my pain?
A. More than 90 percent of patients get relief of their nerve symptoms or leg pain. Relief of back pain is less predictable, occurring about 75 percent of the time.

Q. Will my back be normal after surgery?
A. No. Even if you have excellent relief of pain, the disc has still been damaged. However, most people can resume almost all of their normal activities after disc surgery. People who do heavy work generally take longer to recover and may not be able to do everything they could do before their injury.

Q. Could I be paralyzed?
A. The chances of neurologic injury with lumbar surgery are very low, and the possibility of catastrophic injury such as paralysis, is highly unlikely, though not impossible. Injury to a nerve root with isolated numbness and/or weakness in the arm is possible.

Q. Are there other risks involved?
A. There are general risks with any type of surgery. These include, but are not limited to, the possibility of wound infection, uncontrollable bleeding, abdominal problems, collections of blood clots in the wound or in the veins of the leg, pulmonary embolism (a blood clot to the lungs) or heart attack. The chances of any of these happening, particularly to a healthy patient, are low. Rarely, death may occur during or after any surgical procedure.

Q. Is my entire disc removed?
A. No, only the ruptured part and any other obviously abnormal disc material is removed. This generally amounts to no more than 10-15 percent of the whole disc.

Q. Could this ever happen to me again?
A. Unfortunately, yes. A fusion may add stress to the levels above and below the instrumented segment. If the fusion doesn't heal solidly, even with plates and screws, your symptoms may recur and additional surgery may be needed.

Q. Should I avoid vigorous physical activity?
A. No. Exercise is good for you! Walking either outside or on a treadmill, and using a recumbent exercise bike are examples of exercise that is appropriate for spine patients once approved by your surgeon. You may start these activities as soon as you are comfortable and approved by your surgeon.

Q. What do I do if I become constipated?
A. It is very common to have constipation after surgery. This may be due to a variety of factors, but is especially common when taking narcotic pain medication. While you are taking prescription pain medication you should continue with daily over-the-counter stool softeners. You may also try over-the-counter laxatives (i.e., Miralax, Dulcolax, Milk of Magnesia) as needed.

FREQUENTLY ASKED QUESTIONS About Lumbar Fusion

Q. What is wrong with my back?
A. You have one or more damaged discs and/or areas of arthritis in your back. This produces pain, and may produce abnormal motion, or misalignment of your spine. Discs are rubbery shock absorbers between the vertebrae, and are close to nerves that originate in the spine and then travel down to the legs. If the disc Is damaged, part of it may bulge or even burst free into the spinal canal, putting pressure on the nerve and causing leg pain, numbness, or weakness. Bone spurs associated with arthritis (spinal stenosis) may cause the same symptoms.

Q. What is required to fix the problem?
A. Your condition requires both a nerve decompression (freeing the nerves from pressure) and a spinal fusion (adding instrumentation to stabilize your spine).

Q. What is spinal fusion?
A. A fusion is a bony bridge between at least two other bones; in this case, two vertebrae in your spine. The vertebrae are the blocks of bone that make up the bony part of the spine, like a child's building blocks stacked on top of each other to make a tower. Normally each vertebra moves within certain limits in relationship to its neighbors. In spinal disease, the movement may become excessive and painful, or the vertebrae may become unstable and move out of alignment, putting pressure on the spinal nerves. In cases like this, surgeons try to build bony bridges between the vertebrae using pieces of bone called bone graft. The bone graft may be obtained from the patient (usually from the pelvis) or from a bone bank. Another option is for a cage to be placed and filled with "bone filler." There are advantages and disadvantages to either source; ask your surgeon for details. The bone graft is either laid next to the vertebrae or actually placed between the vertebral bodies (the rubbery disc that normally lies between the vertebrae must be removed). In either case, the bone graft has to heal and fuse to the adjacent bones before the fusion becomes solid. Spine surgeons often use screws and rods to protect the bone graft and stabilize the spine while the fusion heals.

Q. How is the operation performed?
A. An incision is made in the lower back. Muscles supporting the spine are pushed aside temporarily. The spinal nerve is exposed, moved aside, and protected, and the ruptured disc or bone spur is removed to free the nerve. The instrumentation is secured, and the wound is then closed and dressings are applied.

The operation typically takes three hours and may be longer, depending on the complexity of the problem. Sometimes the spinal fusion is performed with an anterior approach. In this case, the surgeon would make a four-to five-inch incision in the lower abdomen, gently move the internal organs aside, and proceed with the surgery as described above.

Q. Who is a candidate for lumbar fusion, and when is it necessary?
A. When the back and nerve problems cannot be corrected in a more simple procedure and the pain persists at an unacceptable level, it is necessary to do a fusion. Some of the conditions which require spinal fusion are discussed in the answer to "What is spinal fusion?"

Q. Who performs this surgery?
A. Both orthopaedic surgeons and neurosurgeons who specialize in spine surgery may perform this procedure, either individually or as a team. It is important that your surgeon specializes in this type of procedure.

Q. Could I be paralyzed?
A. The chances of neurologic injury with spine surgery are very low; and the possibility of catastrophic injury, such as paralysis, impotence, or loss of bowel or bladder control is highly unlikely. Injury to a nerve root with isolated numbness and/or weakness in the leg is possible.

Q. Are there other risks involved?
A. There are general risks with any type of surgery. These include, but are not limited to, the possibility of wound infection, uncontrollable bleeding, abdominal problems, collections of blood clots in the wound or in the veins of the leg, pulmonary embolism (a blood clot to the lungs), or heart attack. The chances of any of these happening, particularly to a healthy patient, are low. Rarely, death may occur during or after any surgical procedure.

Q. What are my chances of being relieved of my pain?
A. More than 90 percent of patients get relief of their nerve symptoms or leg pain. Relief of back pain is less predictable, occurring about 75 percent of the time.

Q. How long wlll I be In the hospital?
A. The hospital stay is generally one to two nights.

Q. What shouldn't I do after surgery?
A. Generally, you should avoid bending, lifting, and twisting for six to nine months. Because screws and rods are used, it takes six to 12 months for the fusion to heal completely, and you must protect your spine during this time. Your surgeon may prescribe a brace for you to wear for part of this time. If you are a smoker, you definitely should not smoke until your fusion is completely solid, since smoking interferes with bone healing.

See page 19 on tobacco cessation.

Q. What can I do after surgery?
A. You should resume low-impact activities as soon as possible, starting with walking. Walking is great for your back; it helps to keep your back and thigh muscles stretched and strong. Try to walk a little farther each day.

Q. When can I return to work?
A. Your surgeon will advise you on the length of time you will be off from work. This depends on the type of work you do. You may be able to return to a desk job (sedentary) fairly soon; however, it will take longer for more active work. It takes much longer to get back to work that requires strenuous physical activity due to the increased stress these activities place on the healing bone. Do not drive while on prescription pain medicine.

Q. Could this happen to me again?
A. Unfortunately, yes. A fusion may add stress to the levels above and below the repaired segment. If the fusion doesn't heal solidly, even with plates and screws, your symptoms may recur and additional surgery may be needed.

Q. Should I avoid vigorous physical activity?
A. No. Exercise is good for you! You should get some sort of vigorous, low-impact aerobic exercise at least three times a week. Walking either outside or on a treadmill and using a recumbent exercise bike are examples of exercise that is appropriate for spine patients once approved by your surgeon. You may start these activities as soon as you are comfortable and it is approved by your surgeon.

Q. What can I do if I become constipated?
A. It is very common to have constipation after surgery. This may be due to a variety of factors, but is especially common when taking narcotic pain medication. While you are taking prescription pain medications you should continue daily over-the-counter stool softeners. You may also try over-the-counter laxatives (i.e., Miralax, Dulcolax, Milk of Magnesia) and a Fleet enema if needed.

Glossary of Terms

Ambulation – is walking.

Annulus – The outer rings of rigid fibrous tissue surrounding the nucleus in the disc.

Anterior – A relative term indicating the front of the body.

Anticoagulants – are blood thinners that may be ordered to minimize the risk of developing a blood clot. Some examples include: aspirin, Coumadin, Lovenox, Xarelto, and Eliquis

Blood clot – blood clots in a vein occur when a person becomes immobilized and muscles are not contracting to push blood back to the heart. This stagnant blood begins to form small clots along the walls of the vein.

Bone spur – An abnormal growth of bone, usually present in degenerative arthritis or degenerative disc disease.

Cartilage – A smooth material that covers bone ends of a joint to cushion the bone and allow the joint to move easily without pain.

Cervical Spine – The part of the spine that is made up of seven vertebrae and forms the flexible part of the spinal column. The cervical spine is often referred to as the neck.

Chlorhexidine – an antimicrobial skin cleanser is a form of soap that is used to clean the skin before surgery. It is stronger than regular soap because it contains an agent that kills germs on the skin that you cannot see.

Computed tomography scan (also called a CT or CAT scan) – A diagnostic imaging procedure that uses a combination of x-rays and computer technology to produce cross-sectional images, both horizontally and vertically, of the body. A CT scan shows detailed images of any part of the body, including the bones, muscles, fat and organs. CT scans are more detailed than general x-rays.

Congenital – Present at birth.

Contusion – A bruise.

Corticosteroids – Potent anti-inflammatory hormones that are made naturally in the body or synthetically for use as drugs; most commonly prescribed drug of this type is prednisone.

Deep vein thrombosis (DVT) – is a blood clot that forms in a vein deep in the body. Most deep vein clots occur in the lower leg or thigh. A deep vein thrombosis can break loose and cause a serious problem in the lung, called a pulmonary embolism, or a heart attack or stroke.

Degenerative Arthritis – The inflammatory process that causes gradual impairment and loss of use of a joint.

Degenerative Disc Disease – The loss of water from the discs that reduces elasticity and causes flattening of the disks.

Disc – The complex of fibrous and gelatinous connective tissues that separate the vertebrae in the spine. They act as shock absorbers to limit trauma to the bony vertebrae.

Discectomy – The complete or partial removal of the ruptured disc.

Dura – The outer covering of the spinal cord.

Dural Tear – A laceration or tear of the dura that can occur during surgery. Leakage of spinal fluid occurs at this site. This is often treated with bed rest for 24 to 48 hours thus allowing the tear to heal.

Facet – The small plane of bone located on the vertebra.

Foramina – Plural form of foramen (a natural opening or passage through a bone).

Foraminotomy – The surgical procedure that widens the opening (foramen) of the facet joint. This is done for relief of nerve root compression.

Fracture – A break in a bone.

Fusion – The result of a surgical procedure that joins or "fuses" two or more vertebrae together over time to reduce movement at this joint space. As a result, pain is lessened.

Herniated Disc – The abnormal protrusion of soft disc material that may impinge on nerve roots. Also referred to as a ruptured or protruding disc.

Incentive spirometry (ISB) – a breathing device designed to help you take long, deep breaths, such as when you yawn. The incentive spirometer shows you how well you are taking deep breaths and expanding your lungs. Because it makes you breathe deeply, it improves your ability to clear mucus from your lungs. It may also increase the amount of oxygen that gets deep into your lungs.

Inflammation – A normal reaction to injury or disease which results in swelling, pain, and stiffness.

Intravenous – fluid passed directly in to the vein by way of a small flexible tube.

Joint – Where the ends of two or more bones meet.

Lamina – The bone that lies posterior to the vertebrae.

Laminotomy – The removal of a small portion of the lamina.

Laminectomy – The removal of the entire lamina.

Ligaments – Flexible band of fibrous tissue that binds joints together and connects various bones.

Lumbar Spine – The portion of the spine lying below the thoracic spine and above the pelvis. This part of the spine is made up of 5 vertebrae. Also called the lower back.

Magnet designated hospital – this prestigious distinction recognizes excellence in nursing care. UPMC Pinnacle is Magnet certified at its Harrisburg, Community Osteopathic, and West Shore hospitals.

Magnetic Resonance Imaging (MRI) – A diagnostic procedure that uses a combination of large magnets, radiofrequencies, and a computer to produce detailed images of organs and structures within the body.

Multimodal Analgesia – the use of two or more medications that relieve pain and when used together are more effective in blocking pain signals.

Myelopathy – A condition that is characterized by functional disturbances due to any process affecting the spinal cord.

NSAID – An abbreviation for nonsteroidal anti-inflammatory drugs, which do not contain corticosteroids and are used to reduce pain and inflammation; aspirin and ibuprofen are two types of NSAIDs.

Nerve Root – The portion of a spinal nerve that lies closest to its origin from the spinal cord.

Neuropathy – A functional disturbance of a peripheral nerve.

Norco – a common narcotic given in tablet form.

NPO – nothing by mouth; meaning nothing to eat or drink.

Nucleus Pulposis or Nucleus – The relatively soft center of the disc that is protected by the rigid fibrous outer rings.

Osteoporosis – A condition that develops when bone is no longer replaced as quickly as it is removed.

Osteophyte – A bony outgrowth.

Pain – An unpleasant sensory or emotional experience primarily associated with tissue damage.

Pain scale – a scale from 1 to 10 which allows the nurse to approximately gauge your pain. 0 is no pain and 10 is the worst pain.

Pain Threshold – The least experience of pain that a person can recognize.

Pain Tolerance Level – The greatest level of pain that a person is prepared to tolerate.

Paresthesia – An abnormal touch sensation, such as burning or tingling.

Percocet – a common narcotic given in tablet form.

PIN Number – a unique number given to family and friends by the patient if they are willing to allow their health information to be released to a designated person. This number changes with each admission to ensure privacy.

Post Anesthesia Care Unit (PACU) – the recovery room.

Posterior – A relative term indicating that an object is to the rear of or behind the body.

Pre-admission testing – testing done prior to surgery to evaluate if the patient is healthy enough for surgery. Includes blood work, EKG and chest x-ray. May be more extensive for those patients that have a cardiac history.

Pulmonary Embolism (PE) – a sudden blockage in a lung artery. The cause is usually a blood clot in the leg called a deep vein thrombosis that breaks loose and travels through the bloodstream to the lung.

Radiculopathy – A condition involving the nerve root that can be described as numbness, tingling or pain that travels along the course of a nerve.

Sacral Spine – The last section of the spinal column located below the lumbar spine. It is made up of several semi-fused pieces of bone.

Sciatica (also called lumbar radiculopathy) – A pain that originates along the sciatic nerve.

Scoliosis – A lateral, or sideways, curvature and rotation of the back bones (vertebrae), giving the appearance that the person is leaning to one side.

Senokot – a stimulant laxative that is used post-operatively to prevent constipation.

Sequential compression device (SCDs) – inflatable compression sleeves that force circulation in legs when a patient is resting in bed in order to prevent blood clots.

Soft tissues – The ligaments, tendons, and muscles in the musculoskeletal system.

Spine – The flexible column of 24 vertebrae, disks, ligaments and muscle that lie between the head and pelvis and behind the rib cage. Also referred to as the spinal column.

Spinous Process – The part of the vertebrae that you can feel through your skin.

Spondylosis (spinal osteoarthritis) – A degenerative disorder that may cause loss of normal spinal structure and function. Although aging is the primary cause, the location and rate of degeneration is individual. The degenerative process of spondylosis may impact the entire spine creating over growth of bone and affecting the intervertebral discs and facet joints.

Spondylolisthesis – A forward displacement of one vertebra over another.

Sprain – A partial or complete tear of a ligament.

Stenosis – A narrowing of the open spaces within the spine, which can put pressure on the spinal cord and the nerves that travel through the spine. Symptoms of spinal stenosis are pain, numbness, muscle weakness and problems with bladder or bowel function.

Strain – A partial or complete tear of a muscle or tendon.

Stress fracture – A bone injury caused by overuse.

Tendon – The tough cords of tissue that connects muscles to bones.

Thoracic Spine – The portion of the spine lying below the cervical spine and above the lumbar spine. This part of the spine is made up of 12 vertebrae.

Torticollis (also called wryneck) – A twisting of the neck that causes the head to rotate and tilt on an angle.

Transverse Process – The wing of bone on either side of each vertebra.

Trigger Point – Hypersensitive area of muscle or connective tissue, usually associated with myofascial pain syndromes.

Ultrasound – A diagnostic technique which uses high-frequency sound waves to create an image on the internal organs.

Vertebra (e) – The bone or bones that form the spine.

White Board – A dry erase board in your hospital room used for the nurse and PCA to communicate with you.

X-ray – A diagnostic test which uses invisible electromagnetic energy beams to produce images of internal tissues, bones and organs onto film.

Living Will Declaration

I,_____ being of sound mind, willfully and voluntarily make this declaration to be followed if I become incapacitated. This declaration reflects my firm and settled commitment to refuse life-sustaining treatment under the circumstances inidicated below.

I direct my attending physician to withhold or withdraw life-sustaining treatment that serves only to prolong the process of my dying, if I should be in **a terminal condition or in a state of permanent unconsciousness.**

I direct that treatment be limited to measures to keep me comfortable and to relieve pain, including any pain that might occur by withholding or withdrawing life-sustaining treatment.

In addition, if I am in the condition described above, I feel especially strong about the following forms of treatment.

I ☐ do ☐ do not want cardiac resuscitation.
I ☐ do ☐ do not want mechanical respiration.
I ☐ do ☐ do not want tube feeding or any other artificial or invasive form of nutrition (food) or hydration (water).
I ☐ do ☐ do not want blood or blood products.
I ☐ do ☐ do not want any form of surgery or invasive diagnostic tests.
I ☐ do ☐ do not want kidney dialysis.
I ☐ do ☐ do not want antibiotics.

I realize that if I do not specifically indicate my preference regarding any of the forms of treatment listed above, I may receive that form of treatment.

Other instructions: _____

_____

_____

I ❑ do ❑ do not want to **designate another person as my surrogate** to make medical treatment decisions for me if I should be incompetent and in a terminal condition or in a state of permanent unconsciousness. Name and address of surrogate (if applicable):_____

_____

Name and address of substitute surrogate (if surrogate designated above is unable to serve):

_____

I ❑ do ❑ do not want to make an **anatomical gift** of all or part of my body, subject to the following limitations, if any:

_____

_____

I made this declaration on the _____ day of_____ (month/year).

Declarant's Signature:_____

Declarant's Address: _____

The declarant or the person on behalf of and at the direction of the declarant knowingly and voluntarily signed this writing by signature or mark in my presence.

_____ _____
Witness Signature Witness Signature

Address:_____ Address:_____

UPMC Pinnacle

LIVING WILL DECLARATION

PATIENT IDENTIFICATION

Patient Name: _____

MR Number: _____

Date of Birth:_____

Form 4250-169 (02/18) MR (InD)
Aztec Barcode 10

Notice Informing Individuals About Nondiscrimination and Accessibility Requirements and Nondiscrimination Statement: Discrimination Is Against the Law

UPMC Pinnacle complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. UPMC Pinnacle does not exclude people or treat them differently because of race, color, national origin, age, disability, or sex.

UPMC Pinnacle:

- **Provides free aids and services to people with disabilities to communicate effectively with us, such as:**
  - Qualified sign language interpreters
  - Written information in other formats (large print, audio, accessible electronic formats, and other formats)
- **Provides free language services to people whose primary language is not English, such as:**
  - Qualified interpreters
  - Information written in other languages

If you need these services, contact the Customer Relations Department, Patient Representative at 717-782-5503.

If you believe that UPMC Pinnacle has failed to provide these services or discriminated in another way on the basis of race, color, national origin, age, disability, or sex, you can file a grievance with: UPMC Pinnacle Customer Relations Department, Patient Representative, 111 S. Front Street, Harrisburg PA 17101-2099, 717-782-5503, fax 717-782-5587, or email okumsa@upmc.edu or myerscd@upmc.edu. You can file a grievance in person or by mail, fax, or email. If you need help filing a grievance, the Customer Relations Department Patient Representative is available to help you.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically through the Office for Civil Rights Complaint Portal, available at https://ocrportal.hhs.gov/ocr/portal/lobby.jsf, or by mail or phone at:

U.S. Department of Health and Human Services
200 Independence Avenue, SW Room 509F, HHH Building Washington, D.C. 20201, 1-800-368-1019, 800-537-7697 (TDD). Complaint forms are available at http://www.hhs.gov/ocr/office/file/index.html.

Aviso informando a los individuos de los requisitos acercade la no discriminación y la accesibilidad, y declaración de no discriminar: La discriminación es contra la ley

UPMC Pinnacle cumple con las leyes federales de derechos civiles aplicables y no discrimina por motivos de raza, color, nacionalidad, edad, discapacidad o sexo. UPMC Pinnacle no excluye a las personas ni las trata de forma diferente debido a su origen étnico, color, nacionalidad, edad, discapacidad o sexo.

UPMC Pinnacle:

- **Proporciona asistencia y servicios gratuitos a las personas con discapacidades para que se comuniquen de manera eficaz con nosotros, como los siguientes:**
  - Intérpretes de lenguaje de señas capacitados.
  - Información escrita en otros formatos (letra grande, audio, formatos electrónicos accesibles, otros formatos).
- **Proporciona servicios lingüísticos gratuitos a personas cuya lengua materna no es el inglés, como los siguientes:**
  - Intérpretes capacitados.
  - Información escrita en otros idiomas.

Si necesita recibir estos servicios, comuníquese con Departamento de Relaciones de Clientes, Representante de los Pacientes.

Si considera que UPMC Pinnacle no le proporcionó estos servicios o lo discriminó de otra manera por motivos de origen étnico, color, nacionalidad, edad, discapacidad o sexo, puede presentar un reclamo a la siguiente persona: Departamento de Relaciones de Clientes, Representante de los Pacientes, 111 S. Front Street, Harrisburg PA 17101-2099, 717-782-5503, 717-782-5587 fax, correo electronico okumsa@upmc.edu, myerscd@upmc.edu. Puede presentar el reclamo en persona o por correo postal, fax o correo electrónico. Si necesita ayuda para hacerlo, Departamento de Relaciones de Clientes, Representante de los Pacientes, está a su disposición para brindársela.

También puede presentar un reclamo de derechos civiles ante la Office for Civil Rights (Oficina de Derechos Civiles) del Department of Health and Human Services (Departamento de Salud y Servicios Humanos) de EE. UU. de manera electrónica a través de Office for Civil Rights Complaint Portal, disponible en https://ocrportal.hhs.gov/ocr/portal/lobby.jsf, o bien, por correo postal a la siguiente dirección o por teléfono a los números que figuran a continuación:

U.S. Department of Health and Human Services
200 Independence Avenue, SW Room 509F, HHH Building Washington, D.C. 202011-800-368-1019, 800-537-7697 (TDD) Puede obtener los formularios de reclamo en el sitio web http://www.hhs.gov/ocr/office/file/index.html.

Interpreters Available

You have access to interpretation services 24/7 at no personal cost to you.
This chart includes languages commonly spoken in your community; additional languages are available.

English: Do you speak [language]? We will provide an interpreter at no personal cost to you.

Albanian Shqip	Flisni shqip? Ne do t'ju sigurojm një përkthyes pa asnjë kosto personale për ju.
Arabic اللغة العربية	هل تتحدث اللغة العربية؟ سوف نوفر لك مترجمًا فوريًا بدون أي تكلفة عليك.
Bosnian Bosanski	Da li govorite bosanski? Obezbjedićemo Vam prevodioca besplatno.
Cambodian ភាសាខ្មែរ	តើអ្នកនិយាយភាសាខ្មែរដែរទេ? យើងខ្ញុំនឹងផ្តល់ជូនអ្នកបកប្រែភាសាដោយឥតគិតថ្លៃផ្ទាល់ខ្លួនដល់អ្នក។
Cantonese 粵語	您講粵語嗎？我們將免費為您提供翻譯。
Croatian Hrvatski	Govorite li hrvatski jezik? Osigurat ćemo Vam prevoditelja besplatno.
Farsi فارسی	فارسی صحبت می کنید؟ یک مترجم شفاهی رایگان در اختیار شما قرار خواهیم داد.
French Français	Parlez-vous français ? Nous vous fournirons gratuitement un interprète.
French Creole Kreyòl Ayisyen	Èske ou pale Kreyòl Ayisyen? N ap ba ou yon entèprèt gratis.
German Deutsch	Sprechen Sie Deutsch? Wir stellen Ihnen unentgeltlich einen Dolmetscher zur Verfügung.
Gujarati ગુજરાતી	તમે ગુજરાતી બોલો છો? અમે ઈન્ટરપ્રીટર દુભાષિયો પૂરો પાડીશું, જેનો ખર્ચ તમારે ઉપાડવાનો રહેશે નહીં.
Haitian Creole Kreyòl Ayisyen	Èske ou pale Kreyòl Ayisyen? N ap ba ou yon entèprèt gratis.
Hindi हिन्दी	क्या आप हिन्दी बोलते हैं? हम आपके लिए बिना किसी निजी लागत के एक दुभाषिया को उपलब्ध कराएँगे।
Hungarian Magyar	Beszél magyarul? Teljesen költségmentesen biztosítunk egy tolmácsot az Ön számára.

Apakah Anda berbicara bahasa Indonesia? Kami akan menyediakan penerjemah tanp biaya apa pun untuk Anda.	*Indonesian* Bahasa Indonesia
Parla italiano? Le forniremo gratuitamente un interprete.	*Italian* Italiano
한국어를 사용하십니까? 무료로 통역 서비스를 제공해 드리겠습니다.	*Korean* 한국어
您讲国语吗？我们将免费为您提供翻译。	*Mandarin* 中文
तपाईं नेपाली बोल्नुहुन्छ? हामी तपाईंको लागि निःशुल्क रूपमा दोभाषे उपलब्ध गराउने छौं।	*Nepali* नेपाली
Wann du Deitsch schwetzscht, darrefscht du ebber griege, as aa Deitsch schwetzt un dich helfe kann mit die englisch Schprooch.	*Pennsylvania Dutch* Deitsch
Czy mówisz po polsku? Zapewnimy bezpłatną pomoc tłumacza.	*Polish* Polski
Fala português? Vamos facultar-lhe um intérprete, sem custos para si.	*Portuguese* Português
Вы говорите по-русски? Мы абсолютно бесплатно предоставим вам переводчика.	*Russian* Русский
Ma ku hadashaa Af Soomaali? Waxaan kuu helaynaa tarjumaan bilaa lacag ah.	*Somali* Af Soomaali
¿Habla español? Le proporcionaremos un intérprete sin costo alguno para usted.	*Spanish* Español
Je, unazungumza Kiswahili? Tutakupatia mkalimani bila gharama yoyote kwako.	*Swahili* Kiswahili
کیا آپ اردو بولتے ہیں؟ ہم بغیر آپ کے ذاتی لاگت کے آپ کے لئے ترجمان فراہم کریں گے۔	*Urdu* اردو
Quý vị nói được tiếng Việt không? Chúng tôi sẽ cung cấp một thông dịch viên miễn phí cho quý vị.	*Vietnamese* Tiếng Việt

American Sign Language (ASL)

CYRACOM
Language Solutions

My Medication List

Please complete this medication list before the day of surgery and bring it with you to the hospital.

_____ _____

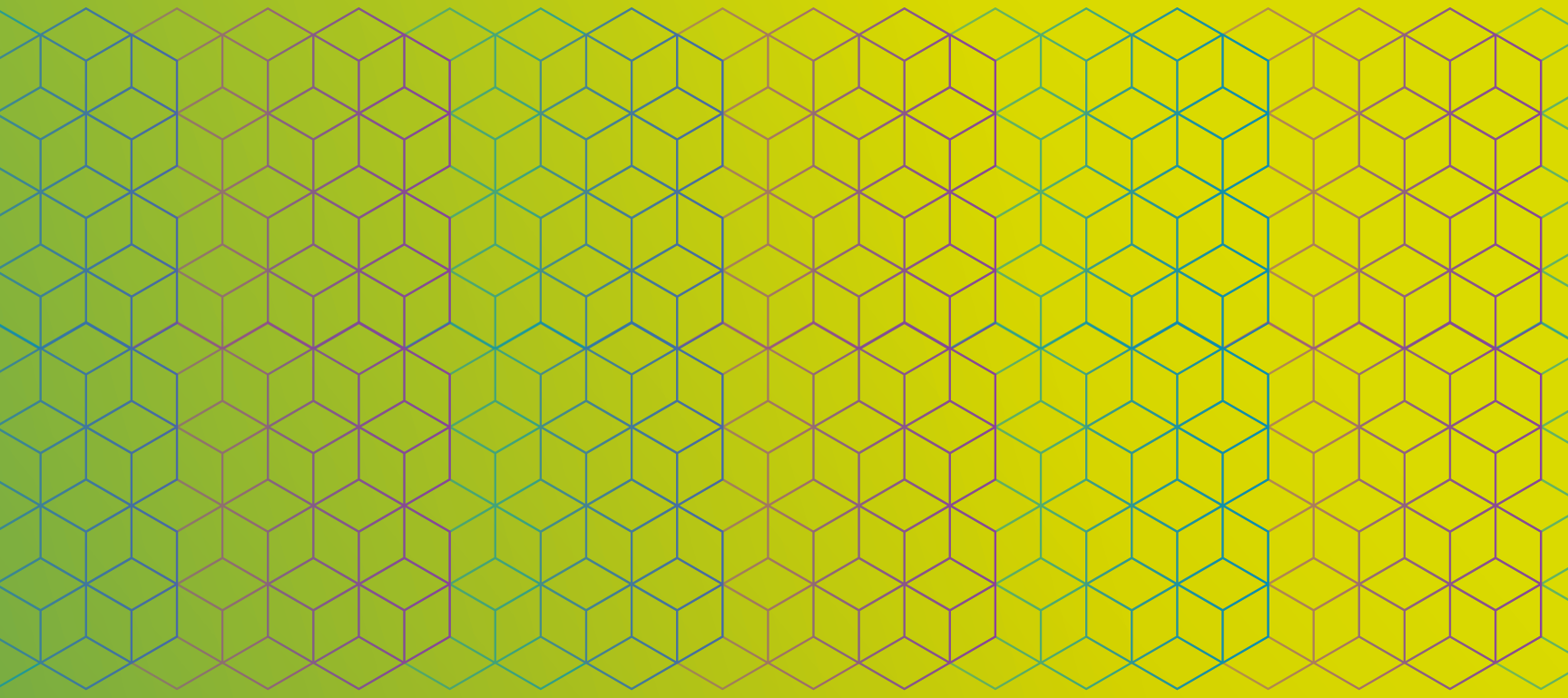
Name Date of Surgery

Name of Medication	Dose/Amount	Number of times taken per day

Notes

Notes

Your Guidebook for Lumbar Spine Surgery



UPMCPinnacle.com

INV 78682