



**Wyoming**  
Medical Center

# Spine Surgery Education

Patient and Caregiver Manual

# Contents

- Introduction ..... 2
- Potential Complications ..... 3
- Physical and Psychological Preparation.....4
- Pre-surgery Tasks ..... 5
- Advance Preparations for Your Homecoming ..... 6
- Packing for Your Stay ..... 6
- What to Expect on Surgery Day..... 7
- Your Post-Surgery Healthcare Team ..... 8
- What to Expect After Surgery ..... 9
- A Note About Pain ..... 11
- Spinal Precautions and Restrictions ..... 12
- Wearing Your Brace ..... 13
- Body Mechanics ..... 13
- Positioning..... 14
- Transfers..... 15
- Walking ..... 16
- Activities of Daily Living ..... 17
- Assistive/Adaptive Devices and Equipment ..... 18
- Guidelines for Your Return Home ..... 19
- Frequently Asked Questions ..... 20

# Introduction

We are excited that you've decided to undergo spinal surgery to regain your quality of life. However, any surgery is a big step, and we expect you to have questions, concerns and hopes. As a result, we offer you this guide, which covers what to expect before, during and after your procedure so you have the information you need to proceed with confidence.

During your stay, you and your family will be taught proper body mechanics, spinal precautions, how to manage your brace (if ordered by the doctor) and how to safely perform your daily activities during your recovery. The more you understand and apply this education, the better you can contribute to the successful healing of your spine.

Please read this material carefully as you prepare for surgery. You may find it helpful to check off pre-surgery tasks as you complete them and to jot down any questions you may have. Make sure to go over pertinent information with your care team as well. The more you know, the better prepared you'll be to take charge of your comfort and mobility again.

# Potential Complications

The complication rate for spinal surgery is very low. Serious complications such as infection occur in less than 2 percent of patients. Most can be avoided or treated when addressed early. These include:

## **Anesthesia**

Among a very small number of patients, anesthesia can cause reactions and problems related to other medical complications. Be sure to discuss the risks and your concerns with your anesthesiologist.

## **Infection**

Post-surgery infection can occur in the hospital, after you return home or years later. While healthcare providers take many steps to minimize the risk of infection, it can't be completely avoided.

In the hospital, you will receive antibiotics starting with surgery and for 24 to 48 hours after to help prevent infection. The operating room is a filtered, clean-air environment, and your surgeon and surgical assistants will wear masks, sterilized gowns and two pairs each of sterilized gloves which they will change frequently. Just before surgery, your team will wash the surgical area, prepare it with antiseptic solution and cover it with sterilized drapes.

For years to come after your surgery, you will need to tell doctors or dentist about your spinal surgery and take antibiotics before undergoing even minor procedures to reduce the chance of infection in another part of your body spreading to the spinal area. If an infection does occur, your healthcare provider will have a plan to manage it.

## **Blood Clots**

A number of factors can cause blood clots, including decreased mobility after surgery, which slows the movement of the blood. Symptoms include a red, swollen leg, especially in the calf area, and shortness of breath. You can prevent blood clots with:

- Blood-thinning medications (anticoagulants)
- Elastic support stockings to improve blood circulation
- Plastic boots or sleeves that inflate to promote blood flow in the legs
- Elevating the feet and legs to keep blood from pooling
- Moving toes and legs immediately after surgery
- Walking within 12 to 24 hours of surgery, and then hourly

## **Pneumonia**

Pneumonia is always a risk after major surgery. You will be assigned a series of deep-breathing exercises to keep your lungs clear.

# Physical and Psychological Preparation

Getting physically and psychologically ready for spinal surgery can be an intense process. Those who are better prepared tend to achieve better results. Below are several tips for achieving optimal results:\*

• **Spinal Surgery Class.** Your first step to success is attending the spinal education class. The class is held regularly in order to inform and prepare you for your upcoming surgery.

- **Get to know your surgeon.** Your surgeon will become an important person in your life for years to come. Make sure you are comfortable with your doctor's approach, level of experience and personality.
- **Educate yourself about your surgery.** Use this guide and other resources to learn as much as possible about pre-operation preparations, the procedure, post-operation care, precautions and possible complications. Ask your doctor to review your surgical plan, outcomes and long-term care in detail.
- **Plan ahead.** Schedule surgery when you can afford to take time off from work and when it least disrupts your family or those who you are expecting to help you once you get home.
- **Weigh risks versus benefits.** Keep the big picture in mind so you avoid going into surgery dwelling on risks and potential complications.
- **Have a positive attitude.** Be encouraged and focus on the high rate of success for spinal surgery.
- **Talk with past patients.** Hearing about others' successes can help you gain perspective and ease your mind.
- **Visualize getting your life back.** The pain and deterioration of your spine has severely diminished your quality of life. Focus on how much things will improve after surgery.
- **Realize feeling tense or anxious is normal.** Don't fight it!

- **Actively participate.** Commit to doing your part to ensure a positive outcome and assume responsibility for your own care (i.e., follow precautions, do exercises daily, etc.). Share your questions and concerns with your surgeon.
- **Practice with a walker.** If you have spent time with a walker before, re-acquaint yourself with them so their awkwardness won't be overwhelming after surgery.
- **Don't view the recovery process as time lost.** This is a period for rest and recuperation. Time invested in rehabilitation is necessary for better health and to be able to return to normal activities.
- **Prioritize physical therapy.** Realize your physical therapy and post-operative exercise regimens are critical for a successful outcome. Think of each physical therapy session as a stepping stone toward improved strength, range of motion and function.
- **Prepare for downtime.** Remember that you will be laid up for about six weeks or longer. Organize, schedule appointments and take care of as much business as possible before surgery.
- **Take multi-vitamins and eat well-balanced meals.** Be particularly health conscious during the weeks and months leading up to surgery to promote better healing.
- **Be conscious of infection.** If you notice any sign of any kind of infection anywhere in your body, you must postpone surgery.
- **Ask a relative or friend to act as your "coach."** This individual can help you with exercises, ambulation and other tasks that may be challenging after surgery. You will appreciate having your own personal cheerleader to provide you with inspiration and confidence during your recovery.

**The surgeon and surgical team will do their work in the operating room. The therapists will instruct you in proper bed mobility, transfers, walking body mechanics, spinal precautions, brace management and safety. The rest is up to you. With inspiration and hard work, you will achieve great success throughout your rehabilitation, recovery and beyond.**

\*Adapted from an excerpt of "Arthritis of the Hip & Knee," by Allen, Brander M.D., and Stulberg M.D., as it appeared on <http://arthritis.about.com/od/surgicaltreatments/a/tipsforsurgery.htm>.

# Pre-surgery Tasks

Once you have made a personal commitment to undergo spinal surgery at Wyoming Medical Center, you should arrange a pre-operative visit with members of your care team to discuss your personal hospital care plan, including anesthesia, preventing complications, pain control and diet. Your team will outline several tasks for you to complete during the weeks before your procedure. In general, you may be required to:

- **Complete forms.** You will need to fill out a consent form for your surgeon confirming that you agree to have the operation and that you know the risks involved, as well as hospital forms about your past history, medications, previous operations, insurance and billing information.
- **Review medications.** Discuss your medication list with your doctor to determine the medications and supplements that you should avoid taking before surgery, when to stop them, and when you can restart them.
- **Exercise under your doctor's supervision.** It's important to be in the best possible overall health to promote the best possible surgical experience. Increasing upper-body strength is important to help you maneuver a walker (as appropriate) after surgery. Strengthening the lower body to increase leg strength before surgery can reduce recovery time.
- **Lose weight.** For overweight patients, losing weight helps reduce stress on spinal procedures.
- **Have a general physical examination.** Your primary healthcare provider should evaluate you to assess your overall health and identify any medical conditions that could interfere with surgery or recovery.
- **Stop smoking.** Breaking the habit is particularly important before major surgery to improve healing and reduce the risk of post-operative lung problems.
- **Have a dental examination.** Although infections after spinal surgery are not common, an infection can occur if bacteria enters the bloodstream. Therefore, dental procedures such as extractions and periodontal work should be completed before spinal surgery. Consult your surgeon for a time frame for when you should no longer have these procedures done before your surgery. After your procedure let your dentist know that you had a spinal surgery, as they may want to place you on an antibiotic prophylactically.
- **Get laboratory tests.** Your surgeon may prescribe blood tests, urine tests, an EKG or cardiogram, and a chest X-ray to determine whether you are fit for surgery. These tests should be performed within 14 days before the scheduled procedure.
- **Confer with physical therapist.** The physical therapist will record a baseline of information, including measurements of current pain levels, functional abilities, the presence of swelling and available movement and strength.
- **Fast the night before your procedure.** Do not eat or drink after midnight before surgery. As directed by your physician you may brush your teeth and have a few sips of water if you need to take medications. Discuss with your physician which medications you should take that morning.
- **Bathe before your procedure.** You should bathe with an antibacterial soap to clean the surgical area the night before and morning of your procedure to reduce the risk of infection. Do not use any after-bath lotions or perfumes. Tell the nurse if you are allergic to iodine or soap. Remove all nail polish and make-up. If possible, shampoo your hair. Do not shave your legs within three to four days of surgery.

Once you've scheduled your spinal surgery, you will meet with or receive a call from a pre-admission nurse (577-2259). The nurse will ask you questions about your medical history and any allergies you may have.

# Advance Preparations for Your Homecoming

Beyond physically and mentally preparing for your surgery and completing tasks directly related to your procedure, you should also make preparations for your homecoming. You should:

- Arrange for someone to care for your pets.
- Equip your house with reachers and other adaptive devices (please see the section on activities of daily living in this guide for a list of such items).
- Install rails along stairs.
- Obtain a walker bag or apron with pockets to carry small items such as glasses, books, silverware, etc.
- Attach a cup holder to your walker to carry drinks in covered cups.
- Prepare meals in advance and freeze them so they're ready when you return.
- Prevent falls by moving or remembering to watch for long phone or electrical cords lying across the floor; loose rugs or carpet; furniture you might trip over in stairs and hallways; piles of books, magazines and mail; pets that may run in your path; water spills on bare floors; bare bathroom tile or slippery floors; and ice or mildew on outdoor surfaces.
- Leave frequently used dishes in the dish rack and frequently used foods in your most accessible cabinets. Also place these items on easy-to-reach shelves.
- Obtain a rolling cart to take food from the refrigerator to the counter and from the counter to the table.
- Have a chair or stool handy in the kitchen to sit on while preparing and cooking food.

## Packing for Your Stay

Please remember the following recommendations as you pack for your stay:

- Do not bring jewelry, money, keys or other valuables to the hospital. Bring only enough money for items such as newspapers, magazines, etc. You and your family are responsible for any items you bring. WMC is not responsible for lost or damaged items.
- You may wear your eyeglasses (but not contact lenses) on the day of the surgery. Please bring a case for them.
- Bring a knee-length robe that opens in the front, loose-fitting shorts or sweats, a T-shirt or other comfortable shirt, short gowns, pajamas, underwear, socks/stockings, and slip-on non-skid shoes and slippers with closed backs.
- Bring two to three sets of loose-fitting street clothes to wear home.
- You may bring personal hygiene items such as a hairbrush, toothbrush and toothpaste. However, the surgical/neuro unit can provide these items.
- You may bring assistive devices you may already own such as walker, leg lifter, reacher, incentive spirometer, or gait belt. Your physical therapist can check these for suitability to your current circumstances.
- Bring educational materials you received in pre-admission classes, including this guide.
- Bring a list of medications you are currently taking at home, including the name, dosage and how often you take each one.
- Bring a list of allergies (to food, clothing, medicine, etc.) that includes descriptions of how you react to each one.
- Bring a copy of your insurance card.
- Bring copies of your living will and durable power of attorney. Hospital personnel are required by law to ask for these when you are admitted. They will make a copy for your medical record and return the original.

# What to Expect on Surgery Day

After you arrive at the hospital at the appointed time, you will complete the admission process and undergo a final pre-surgery assessment of your vital signs and general health.

You will be required to remove all personal belongings – dentures, hearing aids, hairpins, wigs, jewelry, glasses, contact lenses and all clothing and leave them with your family or friends during surgery. You will wear a hospital gown and nothing else.

Your care team will perform several checks to ensure correct surgical site and procedure. Your surgeon will review your X-ray and mark the surgical site, and nursing staff will check the consent form you signed to make sure it agrees with the procedure on the operating room list.

Just before your transportation to the operating room, an intravenous tube (IV) will be inserted into your arm for administration of fluids, antibiotics and other medications.

The anesthesiologist and surgeon will speak to you before surgery. The anesthesiologist determines the type of anesthesia that will be used based on your medical history.

## **Surgery**

Surgery usually lasts two to four hours but varies with each person. During the procedure, your family can relax in the surgery waiting room.

Many people will be with you in the operating room, including:

- **Your surgeon.** This is the doctor who will perform your surgery.
- **An anesthesiologist.** This is the doctor or nurse who will give you anesthesia.
- **A scrub nurse.** This is the nurse who hands the doctors the tools they need during surgery.
- **A circulating nurse.** This is a nurse who brings items to the surgical team.

Your surgeon and the anesthesiologist will help you choose the best anesthesia for your situation. No matter what type of anesthesia you have, be assured you will not feel the surgery. Options include:

- **General anesthesia.** You are put to sleep. Minor complications such as nausea and vomiting are common but usually can be controlled and settled within one to two days.
- **An epidural.** Medicine injected into your back numbs you from the waist down. (This is also used for women giving birth.)
- **A spinal.** Much like an epidural, medicine injected into your back numbs you from the waist down.

After surgery, the doctor will inform your family of your condition, and you will spend about an hour in the recovery room, where staff will monitor your blood pressure, breathing and other vital signs. Pain and nausea medications will be available if needed.

Your family may see you once you have been transferred from the recovery room to your room on the surgical/neuro unit.

# Your Post-Surgery Healthcare Team

It's important for you to know that your post-surgery rehabilitation will require a team effort. With your participation, a healthcare team consisting of your surgeon, a hospitalist physician, nursing staff, a physical therapist, an occupational therapist and case management who will help you return to your previous level of independence.

## **Physician/Surgeon**

The physician is responsible for ordering specific medications and therapies. The physician will approve any change or progression in therapy and changes in your medication regimen. You may have a hospitalist managing your medical care. They will work in close conjunction with your surgeon. Your doctor will write and approve prescriptions for home equipment, which Case Management can assist with.

## **Nursing Staff**

The nursing staff is responsible for your acute physical care during your hospitalization. Duties include administering medications, assisting with bathing and toileting, wound and skin care, monitoring vital signs and assisting with proper bed transfers. As your program progresses, you will begin to take more responsibility for your physical care and proper transfers.

## **Case Management**

The case management staff are responsible for ensuring that you are properly discharged to your home or an appropriate post acute living situation or a facility. Their thorough knowledge of community resources will help you obtain appropriate home equipment and services to meet your needs. They are also available to assist with the many facets of your discharge needs.

## **Physical Therapist**

The physical therapist (PT) is responsible for the fitting of a brace, if ordered by the surgeon, review of spinal precautions, evaluation and treatment in the areas of muscle strength, bed mobility, transfers, walking, positioning and managing your brace. All of which will be emphasized and continually practiced throughout your hospitalization.

## **Occupational Therapist**

The Occupational therapist (OT) is responsible for evaluation and treatment of your functional status and training in the areas of activities of daily living (ADLs), i.e. dressing, bathing, toileting and homemaking. A brief physical and/or cognitive-perceptual evaluation may be conducted to determine the existence of any other limitations (not related to surgery) which may impair your functional independence. OT will also teach proper positioning, transfers, mobility and spinal precautions in conjunction with PT. Evaluation, demonstration and training in the use of adaptive equipment and devices will also be given in order to carry out daily activities and ensure safety at home.

## **Orthotist**

The Orthotist is responsible for measuring and fitting you with a brace, if your surgeon has ordered a custom fit brace.

## **Patient**

You are the director of your own care and are ultimately responsible for return to your previous level of function. You will be expected to assist in your own self-care including: bathing, toileting, grooming, etc. You will also be required to demonstrate understanding and independence in the following areas prior to discharge from the hospital: managing your brace, following spinal precautions, complying with proper positioning during bed mobility, transfers, walking and using adaptive equipment.

# What to Expect After Surgery

After surgery, you'll spend a great deal of time walking and progressing your mobility and time out of bed as well as doing deep breathing exercises to prevent lung congestion. You may be surprised at how soon after surgery patients are encouraged to get up and start moving – often as early as the day of surgery. The more quickly you start moving again, the sooner you will be able to regain your independence. With time, your pain medication will be reduced, your IV will be removed, your diet will progress to solids and you will become increasingly mobile.

Once you return to your room, your physical therapist will fit you with a brace, if ordered by your surgeon, and will help you move from your hospital bed to a chair as able. Occupational therapy will assess your home situation, needs and ability to complete daily living tasks. By the second day, you'll begin walking longer distances using a walker and brace as applicable. Patients are expected to be up for all meals and walking 3-4 times per day during your stay.

Whether you are sent directly home or to a facility for rehabilitation will depend on your physician's and therapists' assessment of your abilities. In general, if you live with someone who can assist you, you will probably be discharged home. Your case manager will make your arrangements for home or outpatient physical therapy.

If you live alone or in an environment where your safety is in question because you have not achieved your discharge goals, you may be recommended for placement in a rehabilitation center. These facilities are usually available for a short-term stay, with emphasis on returning the patient home in a short period after aggressively addressing any problems with independence. If you live alone or are not progressing rapidly enough in therapy sessions, and you are unlikely to be able to do so in an inpatient rehab setting, a sub-acute/extended care facility may be recommended for a longer period of recuperation.

Insurance coverage for these post-hospital stays varies according to condition and plan. You, case management and your insurance company will need to discuss your circumstances as warranted.

Before your discharge, you will learn to consistently remember to use precautions to prevent injury to the spinal surgery region. You also will learn to safely get in and out of bed, get in and out of a chair, walk up to 100 feet with a walker, as applicable, travel up and down stairs, access the bathroom, get in and out of the shower, dress with adaptive equipment, and get in and out of a car. You should be able to complete these tasks with adaptive equipment or minimal assistance.

Below is a more detailed description of how the first few days after surgery typically go.

## The First 24 Hours After Surgery

- A nurse will change your body position and check your breathing, pulse and blood pressure frequently.
- For the first few days after surgery, you will be asked frequently to cough, breathe deeply and perform other lung exercises to prevent fluid from collecting in your lungs.
- You may need supplemental oxygen for one to two days after surgery.
- Pressurized stockings called sequential compression devices (SCDs) will be placed on your legs to help prevent blood clots. You also will begin receiving a blood-thinning medication to help prevent blood clots. You may be discharged on this medication or switch to another blood thinner before discharge.
- A catheter (tube) may be inserted into your bladder to drain urine. This device usually will be removed one to two days after surgery.
- You most likely will receive patient controlled analgesia (PCA) for pain management. This machine allows you to push a button to deliver a small amount of pain medication through your IV to increase your comfort. Only you can push this button, no family member is allowed to push the button.

### **The First 24 Hours After Surgery (cont.)**

- A regular meal will be served a few hours after surgery if you and your nurse determine that you can tolerate eating without becoming nauseated. You will be ordering your own meals.
- Once you are able to tolerate food, your nurse can supplement the PCA with oral pain pills.
- Physical therapy may see you the afternoon of surgery for initiation of the brace fitting and mobilization to the edge of bed or chair as able.

• If you have not gotten up with therapies the evening of your surgery, it is expected that nursing will help you sit up in bed, dangle your feet and if tolerated, stand beside the bed.

- Gas and constipation commonly occur after surgery. Increasing your physical activity, eating a high-fiber diet and drinking plenty of fluids help prevent these problems. You will also be receiving stool softeners to help with the above.
- Your family may help with your personal hygiene needs.

### **Day 1 Post-Operation**

- Your blood will be drawn for testing early in the morning.
- A member of your care team will help you with bathing (anticipate a bed bath until your dressings have been changed or removed) and transferring you to a chair in preparation for breakfast and therapy.
- Your nurse will monitor the effectiveness of your pain medication and will encourage you to use oral medication and rely on PCA only for breakthrough pain. Your PCA may be turned off if you are doing well with your oral pain medication.
- Your dressings may be changed or reinforced as needed.
- Therapy will continue helping you walk and will instruct you on proper back precautions/safety. You may use a walker and your coach is invited to participate.
- Physical therapy will assist with ambulation/mobility daily. The nursing staff and your coach also can assist you with ambulation.

- Occupational therapy will help you with dressing and provide adaptive equipment as needed to encourage your independence.
- Your case manager and therapists will review your discharge plan. From here, this will occur daily.
- You and your family should discuss concerns about pain, mobility and overall care with your care team.

### **Day 2 Post-Operation**

- Your blood will be drawn for testing early in the morning.
- Your plan of care will continue much the same as Day 1, with therapy and ambulation with nursing. Your family and coach are encouraged to assist you with your activity as much as they feel comfortable.
- You can expect to shower.
- Occupational therapy will continue to assist you with dressing in your own clothing.
- You will be encouraged to take oral pain medication before therapy. Let your nurse know if the medication fails to decrease your pain to a tolerable level.

### **Day 3 Post-Operation**

- Your blood will be drawn for testing early in the morning.
- Your plan of care will continue.
- Mobility/activity will be the main focus. With therapy's approval, you can walk to and from the bathroom and elsewhere independently. Otherwise, nursing will continue to assist you.
- Your nurse will continue to monitor your pain medication and help you with any other needs.
- Therapy will evaluate your mobility before discharge.
- Final plans will be in place for home equipment needs.
- You can expect to be discharged home. If you need continued assistance or therapy, you may be transferred to inpatient rehabilitation or you may be transferred to an extended-care facility.

# A Note About Pain

Everyone experiences pain, which commonly occurs after surgery, differently. Your healthcare team will take treating your pain seriously and will strive to make you as comfortable as possible. These efforts can make a big difference in your recovery.

Specifically, your doctor may prescribe pain medication administered by mouth, injection through your IV, through a tube placed in your back (epidural) or a femoral (iliofascial) block. Medication will not completely eliminate your pain but will reduce it to a slight to moderate level. Pain is best controlled if you take medication before your discomfort becomes severe. Be sure to tell your nurse when you are in pain.

You can use the following scale to estimate the intensity of your pain, which will help your doctor and nurse determine the correct type and amount of pain medication to administer to you.

## Pain Rating Scale

- 0 Pain free.
- 1 Very minor annoyance – occasional minor twinges.
- 2 Minor annoyance – occasional strong twinges.
- 3 Annoying enough to be distracting.
- 4 Can be ignored if you are really involved in your work, but still distracting.
- 5 Can't be ignored for more than 30 minutes.
- 6 Can't be ignored for any length of time, but you still can go to work and participate in social activities.
- 7 Makes it difficult to concentrate, interferes with sleep. You still can function with effort.
- 8 Physical activity severely limited. You can read and converse with effort. Nausea and dizziness set in as factors of pain.
- 9 Unable to speak. Crying out or moaning uncontrollably. Near delirium.
- 10 Completely distressed. Pain makes you pass out.

# Spinal Precautions and Restrictions

\*For 1-3 Months

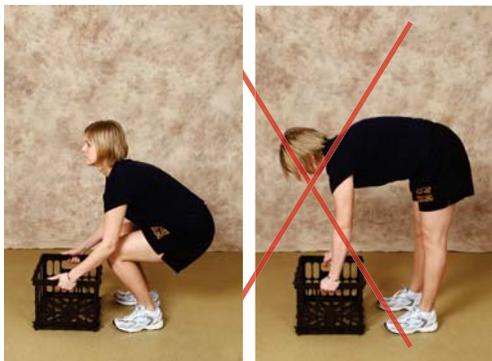
## DO

- Wear your brace as instructed by your therapist/orthotist until your physician releases you from wearing it.
- Maintain your proper body mechanics with log rolling as directed by your therapist.
- Use your adaptive equipment for your activities of daily living as directed by your occupational therapist.

## DON'T

Remember *BLT*

- Bend at the waist.



- Lift objects heavier than ten pounds (avoid heavy purses, briefcases, diaper/tote bags).



- Twist your trunk.



### Other Precautions

- Don't sit for longer than 30 minutes without standing, walking or changing positions.
- Don't bridge in bed (lift bottom off bed using legs).
- Don't recline in recliner chairs.

# Wearing Your Brace (if applicable)

Depending upon which type of surgical procedure you've had, your physician may require you to wear a brace to further protect your spine while you heal. The brace should be worn at all times except when laying in bed. Expect to wear the brace for one to three months, or until otherwise indicated by your physician.

Your therapists will educate you on the proper techniques of putting on and taking off the brace. It is recommended that a snug-fitting T-shirt be worn under the brace to provide comfort and protect your skin from potential irritation and breakdown.

## Body Mechanics

Maintaining proper body mechanics and positioning during the post-surgical period is essential for the healing process. This involves using correct muscles to complete a task safely and efficiently, without undue stress or strain on your muscles and joints.

### Principles of good body mechanics

- Keep your back straight.
- Keep your center of gravity low.
- Bend at the knees and hips.
- Maintain a wide base of support, keeping feet apart.
- Avoid stooping, twisting, or stretching.
- Maintain good balance with activity.
- Push or pull items rather than lift them.
- Lift items close to your body (once lifting is allowed by your physician).

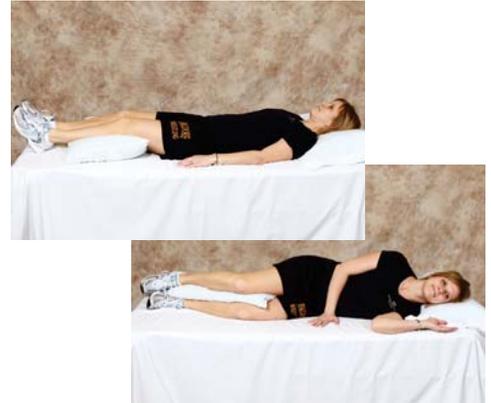
### Reasons for the use of proper body mechanics

- Promotes proper alignment and posture.
- Improves your efficiency with movement.
- Prevents excessive or undue fatigue.
- Reduces muscle tears or strains.
- Decreases the risk of injury to patient and caregivers.

# Positioning

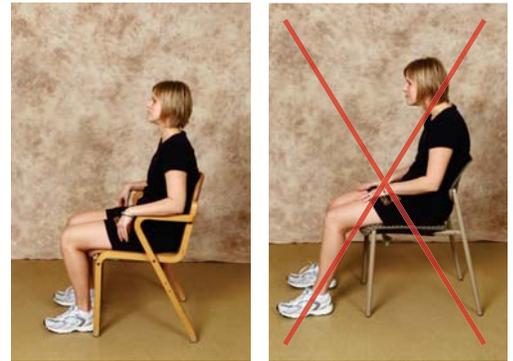
## Lying:

- Use the log roll technique for getting in and out of bed (as taught by your therapist).
- Avoid low surfaces and sleep on a firm bed.
- Avoid multiple pillows under your head and neck.
- Pillows may be used under knees, between knees, or under your low back for comfort.
- Do not pull both legs up towards chest.
- When lying on your side, place a pillow between your knees to balance your spine.



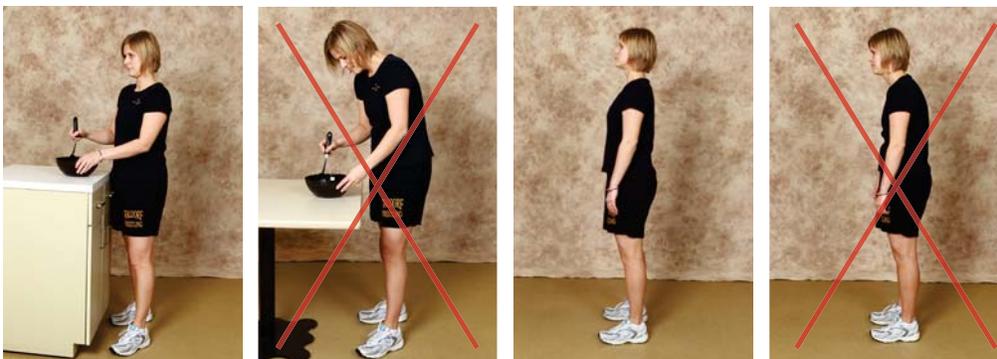
## Sitting:

- Sit in a rigid, straight-back chair with arm rests.
- Keep feet firmly supported on the ground.
- Do not sit on soft furniture that will allow you to sink down.
- Avoid rocking chairs or reclining chairs.
- Do not elevate legs when sitting.
- Sit on a firm and supportive surface.
- Make sure hips are slightly higher than knees to make standing easier.
- Only sit for a maximum of 30-45 minutes at a time, before repositioning (standing, walking or changing position).



## Standing:

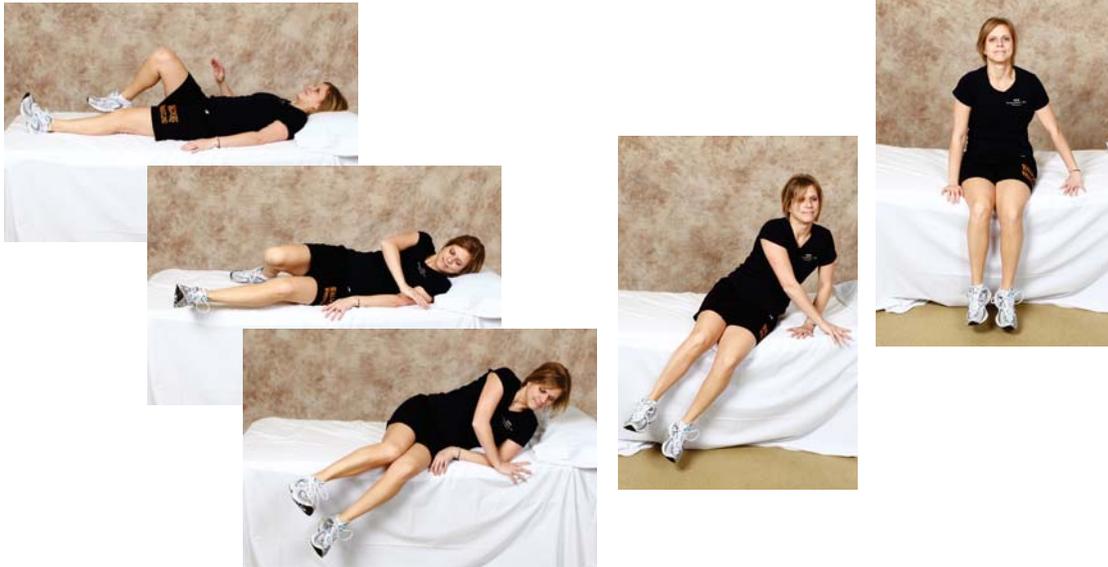
- Keep your feet flat on the floor, about 12 inches apart.
- Keep in an upright position.
- Keep your arms at the sides of your body.
- Tighten your abdominal muscles.
- Stand erect when walking with an assistive device as instructed by your therapist.
- If using a walker, have at least one hand on the bed or chair when sitting or standing to prevent the walker from tipping.



# Transfers

## Bed Transfers

- Use a firm bed and avoid a low bed.
- Sit down on the edge of the bed in the same manner as you would for the chair.
- Sit high enough in the bed, to allow being positioned on the pillow.
- Scoot your buttocks back so that your knees are back against the bed.
- Start lowering your body sideways down onto your elbow and using your opposite arm for support.
- At the same time you are lowering your upper body, bring your hips, knees and feet together up onto the bed.
- If you have someone who can assist you, they may help by slowly raising your legs into bed. (AVOID TWISTING)
- Keeping your knees together, log roll on to your back and position yourself for comfort.
- When getting out of bed, reverse the order.



## Chair Transfers

- Use a firm, sturdy straight back chair with arm rests. Make sure the chair is high enough and firm enough to avoid sinking down. You may need to sit on several pillows to increase your height when sitting.
- Back up to the chair with the walker, making sure you feel the chair on the back of both of your legs.
- Reach back for the armrest and lower yourself slowly.
- DO NOT PLOP DOWN.
- When getting up, reverse the order.

### Car Transfers

- If possible, enter the side of the car that would be the easiest.
- Back up to the car door.
- Have the seat scooted back as far as it can be with the seat semi-reclined.
- Reaching back for the dashboard and the edge of the seat or window base, lower yourself slowly down onto the seat.
- Scoot back onto the seat into a semi-reclining position.
- Bring your legs up together into the car.
- Use a garbage bag to make it easier to slide back into the seat.
- Once your feet are flat on the floor, you can elevate the seat into an upright position.
- Avoid extreme reclined positions.
- On longer trips, get out of the vehicle every hour to avoid increased sitting times.
- Always wear your brace when riding.
- Check with your doctor before driving.

### Toilet Transfers

- Use of an elevated seat may assist you with your comfort when getting on/off of the toilet.
- Back up to the toilet until you feel the toilet on the back of your legs.
- Reach back for the handles of the toilet (if equipped).
- Slowly lower yourself down onto the toilet. Reverse the procedure for getting up from the toilet, push up off the handles of the toilet seat (if equipped).

## Walking

Your physical therapist will instruct you in ambulation with any assistive device necessary during your stay in the hospital. On occasion, you may need to go home with an assistive device for a short time to increase the safety of your walking.

Walking is very important to your healing. Upon discharge from the hospital, walk up to four times per day, start at 5-10 minutes and increase your distances as tolerated.

### Stairs

You will be instructed in stair training, which is best suited to your own situation. To be safe, walk with a family member for support. If equipped, always use the handrail along your stairs for support. Avoid leaning down onto railing.

When walking upstairs:

- Step up with what you feel is your stronger leg.
- Then step up with the weaker leg.
- Bring assistive device (if using one) up.

When walking downstairs:

- Put the assistive device (if using one) down first.
- Then step down with the weaker leg.
- Step down with the stronger leg.

You can easily remember the sequence with the saying:  
***Up with the good leg, down with the bad leg.***

# Activities of Daily Livings

## Dressing

Since you are restricted in the amount that you are permitted to move by twisting and bending, it will be difficult for you to dress in the usual way. This is the area in which Occupational Therapy will be working with you. Adaptive equipment mentioned in this section will be covered in depth.

The following procedures are recommended:

## Pants and Underwear

- Use the adaptive equipment recommended to you by your therapist.
- Sit on the side of the bed or in an armchair.
- Put shirt on first.
- Put the brace over the shirt.
- Using the reacher, catch the waistband of your underwear/slacks.
- Lower them to the floor and slip them up on the weaker leg first.
- Do the same for your other leg.
- Pull the underwear/slacks up over your knees.
- Stand, pull the underwear/slacks up.

## Socks

- Slide the sock onto the sock aid. Make sure the heel is at the back of the sock aid and the toe is tight against the end.
- Holding onto the cords, drop the sock aid out in front of the foot.
- Slip your foot into the sock and pull it up.
- To take socks off, use the reacher to hook the back of the heel and push the socks off your foot.

## Shoes

- Wear slip-on shoes with a closed heel, velcro shoes, or shoes with elastic shoelaces so you won't have to bend over to put them on or tie the laces.
- Use a reacher or a long handled shoehorn to put on or take off your shoes.

## Toileting

If it is difficult for you to stand from the toilet, a raised toilet seat can be provided for use at the hospital and one can be purchased for use at home.

## Bathing

Showering is the most desirable means of bathing during post-surgical recovery period. You will likely go home with a dressing covering your incision. You can shower when permitted by the physician. In order to shower, you must be able to stand for 10-15 minutes without difficulties. If you have difficulty with showering, you may want to use grab bars, a shower chair or even a tub transfer bench and a hand-held shower. In order to assist you with washing your feet and lower legs without bending over, a long-handled sponge is recommended.

## Tub/Shower Transfer

When a tub/shower is used for bathing, the following transfer method is recommended. It is recommended that you use grab bars attached to the tub to increase your safety with your transfers.

- Walk to the side of the tub, turn and back up to the tub-transfer bench, reach back for the bench.
- Sit down, sliding back onto the bench far enough to turn and get your legs into the tub.
- To get out of the tub, reverse the order above.
- If using a shower chair or standing during your shower, stand facing the wall for support to step over the tub.

## Homemaking

You should not attempt chores such as heavy cleaning or vacuuming during the first six to 12 weeks after surgery. If possible, arrange for other people to complete these tasks. Take the following precautions when you cook or undertake other kitchen activities:

- Use alternatives to carrying objects.
  - Slide items along the counter.
  - Place items in a cart.
  - Place small, light objects in a walker, crutch bag or basket.
  - Wear an apron with large pockets that will accommodate items.
- Hold on to the counter when reaching into high cupboards or low cabinets. Avoid bending down to access low cabinets and use a reacher to grab items.
- Use alternatives to bending to pick up objects off the floor.
  - Use a reacher.
  - Move a chair closer to the object and then sit and use a reacher.

- Use the following cleaning methods:
  - Lean against a wall when sweeping or vacuuming.
  - Use a long-handled sponge or mop to clean up spills.
- Stand to the side of the oven to open the door.
- If you feel unsteady, use a stool or chair to sit by the stove, refrigerator and sink as you use them.
- Organize your kitchen and plan ahead to minimize your movement across the room.

## Sexual Activity

- Ask your doctor when you are able to resume sexual activity.
- Try to avoid positions that would cause you to arch your back.
- Side-lying positions or being on your back may be more comfortable and place less strain on your back.

# Assistive/Adaptive Devices and Equipment

The following are the most frequently recommended devices and equipment that will assist you in regaining your independence:

- Elevated toilet seat - used to raise the height of the toilet to avoid low surface and make toilet transfer easier.
- Walker - used to assist in safe walking until you are strong and stable enough to go without it. If you were not using a walker prior to surgery, the goal will be to return you to that independence prior to going home. Your physical therapist will train you on proper techniques and use.
- Hand-held shower (plastic with flexible hose) - used for ease in rinsing off while seated in the shower.
- Bathtub transfer bench/shower chair - made out of lightweight washable materials. Used for sitting in bathtub/shower until tolerance for standing increases.

- Dressing equipment - reacher, dressing stick, stocking/sock aid, shoehorn and elastic shoelaces are used to aid you in dressing. They are made from a variety of materials with light-weight construction. Reachers are trigger operated and can be used to pick up items from the floor or from shelves since you are unable to bend. Your occupational therapist will train you on how to use this equipment.
- Long-handled sponge/brushes - used to wash your lower legs, feet and back while showering.

Insurance companies are variable in their willingness to pay for assistive devices/equipment. It is necessary to obtain a prescription from your physician and submit it and the bill to your insurance company. Medicare will not cover bathroom equipment.

# Guidelines for Your Return Home

Each member of your healthcare team will help you work toward a smooth, safe return to your home or a temporary facility. Proper care and exercise are vital in continuing your physical progress after you leave the hospital. Follow the guidelines below to facilitate your full recovery.

## Transportation

Arrange for family or friends to take you home after your discharge from the hospital.

Do not drive for a minimum of six to eight weeks after surgery unless your doctor authorizes you to do so. Whenever you travel in a vehicle during this period, follow the guidelines for transfers outlined in the section on mobility in this manual. Stop and take frequent breaks if you will be traveling a long distance.

## Physical Care

Patients who have undergone spinal surgery are at increased risk for re-injuring the spinal area. Avoid activities that might put you in danger. Always think before you move to avoid injuring yourself.

Check your incision daily and keep it clean and dry. You will follow up with your surgeon in 10-14 days post-operatively and he will care for the incision as needed. Your incision will heal, and any swelling and bruising will decrease over the next few weeks. In the meantime, however, notify your physician if you experience any of the following complications:

- A marked increase in pain around the incision.
- Drainage and/or redness around the incision.
- Calf tenderness and/or swelling.
- Chills and fever that last longer than 24 hours.
- Chest pain or heaviness in your chest.
- A productive cough that results in red-tinted sputum.

## Medication

Your doctor may recommend taking a multivitamin with iron daily for a month as well as prescribe a number of medications. These may include drugs that prevent blood clots, some of which require monitoring through blood draws two times per week. Check with your doctor about special precautions while taking blood-thinning medications such as Coumadin, Lovenox, Arixtra, or Xarelto. Unless you are on these medications, your doctor also may advise you to take one to two enteric-coated aspirin daily for six weeks and non-steroid anti-inflammatory drugs for pain and swelling. Preventing pain is easier than chasing it, so make sure to take pain medication 30 minutes before exercises.

## Exercise

Keep up with a walking program as described in the walking section of the manual.

## Outpatient Therapy

You may be expected by your physician to continue therapy through an outpatient facility after your discharge from the hospital to maximize your recovery. If you are unable to enroll in an outpatient program, a therapist may be able to visit you in your home. Case management can help you find a home health agency that best fits your needs. (See related handout.)

# Frequently Asked Questions

## **What kinds of tests will I need before surgery?**

All patients are required to have routine blood work and urinalysis at least 14 days before surgery. You must also have a physical examination within 30 days of your surgery.

Patients over 50 and those with a cardiac or respiratory history must also have an EKG and chest X-ray within days of surgery. Most pre-admission testing can be performed either by your personal physician or at the hospital where the procedure will be performed.

## **Will I need to donate blood before surgery?**

During your pre-hospital admission/testing you will be typed and screened for blood. If necessary you may receive blood from the hospital blood bank. This department follows universal guidelines in screening blood and blood products to ensure safety.

## **Do I need to take any medications before surgery?**

This will be based on your physician's recommendations.

## **Do I need to stop taking any medications before surgery?**

You can take most medications up until the day of surgery. Don't take anti-inflammatory medications containing aspirin, which can act as blood thinners, within two weeks of surgery unless your physician instructs otherwise. With any questions contact your physician having your medication list in hand, to clarify medication that need to be stopped.

## **What should I bring to the hospital?**

Bring all of your personal toiletries, comfortable and loose-fitting clothing, slip-on non-skid shoes or slippers with closed backs, a list of current medications including dosages, assistive walking devices you already own, and any paperwork the hospital has requested.

Do not bring radios, televisions, large amounts of cash or other valuables.

## **When should I arrive at the hospital for surgery?**

You should arrive two hours before surgery to go through admission, change into hospital clothing, meet the anesthesiologist and nursing personnel and address any questions about your procedure.

Remember: Do not eat or drink after midnight on the day of your surgery. You may be allowed to take pre-approved medication with the least amount of water necessary. Report any medication taken, along with dosage, to your admitting nurse.

## **Can my family stay with me?**

Your family may stay with you until you are taken to the operating room. Once you are in your room after surgery your family can visit you during normal hospital visiting hours (7 a.m. to 10 p.m.).

## **Do I need to be "put to sleep" for this surgery?**

You may have a general anesthetic, which most people call being "put to sleep." Some patients prefer a spinal or epidural anesthetic, which numb your legs without requiring you to sleep. You can discuss options with your anesthesiologist.

## **Will the operation hurt?**

As with any surgery, individual patient results and experiences vary. Many patients only experience mild discomfort in the days and weeks after spinal surgery. However, after years of living with spinal pain, most find this a welcome relief. Make sure to talk with your doctor before surgery about your pain-management options. You may receive pain medicine through your IV, through an epidural or in shots or pills. Most likely, you will become mobile within hours of surgery.

## **How long will the surgery take?**

Depending upon the complexity of your case, surgery can take anywhere from one to three hours with an additional one to two hours in the recovery room.

## **Who will perform the surgery?**

Your orthopedic/neuro surgeon will perform the surgery.

**Will the surgeon see my family immediately after surgery?**

Whenever possible, the surgeon or an assisting surgeon will meet with family members immediately after surgery. If, for any reason, this is not possible, you may contact the doctor's office to arrange a time to discuss the surgery's success.

**What will my hospital stay be like?**

You will most likely be groggy at first from the medications you receive in surgery. You will be transported from the recovery room to your hospital room once your surgeon and medical team deem your transfer safe.

Once you are fully awake, you will be able to drink and eat as tolerated. Nurses will closely monitor your vital signs, urinary output and any drainage.

Your healthcare team may monitor your pain medication closely. Make sure to talk with your doctor before surgery about your pain-management options. You may receive pain medicine through your IV, through an epidural or in shots or pills. It may also be administered intravenously by "pain pump" for the first 24 hours, allowing you to control your own pain level up to a predetermined dosage.

Starting on the day of surgery you will work one to two times a day with physical and occupational therapists, who will go over bed mobility, transfers and exercises to help you adapt daily activities to your post-operative limitations.

**How long will I be in the hospital?**

Most patients are hospitalized for about three to five days, including the day of surgery. This may be extended to include treatment at a rehabilitation center or sub-acute facility. You should contact your health insurance provider to find out what, exactly, is covered and obtain these provisions in writing.

**Do I need someone to stay full time with me when I go home?**

It is best for someone to be with you the first 24 to 72 hours after discharge. If you live alone, and a friend or relative offers to stay with you, accept the offer! If you can't arrange a full-time helper, perhaps a friend of neighbor can call daily to check on your progress. Home care also can be arranged through social services / case management.

**When can I go up and down stairs?**

Many patients can climb stairs before leaving the hospital.

**Will I need pain medicine after I'm discharged?**

Most patients do benefit from a short-term course of pain medication. Expect to take some kind of pain medication for several weeks after discharge, especially at night or before therapy sessions. You can call your doctor's office for prescription renewals.

**When can I go outside?**

Once home, you may go outside at any time. Start with short trips at first and increase the number and length of outside activities as you feel more comfortable.

**When can I drive?**

Most patients must wait for six weeks before driving. You are not allowed to drive while you are on pain medications either. However, some physicians may allow patients to drive earlier if they believe the patients can do so safely. The type of surgery and the patient's overall general condition play a part in that decision. If you wish to drive before six weeks have passed, consult with your surgeon for further details.

**When can I return to work?**

Most patients wait until at least six weeks after surgery to return to work. Some may return earlier if they can do so safely. You should discuss your own situation with your surgeon during a follow-up visit.

**How often will I need to see my surgeon?**

You will need to schedule your first post-operative visit two to three weeks after discharge. The frequency of additional visits will depend on your progress.



Wyoming Medical Center  
1233 E. Second St.  
Casper, WY 82601  
(307) 577-7201  
[WyomingMedicalCenter.org](http://WyomingMedicalCenter.org)

This book is intended for patients preparing for surgery at Wyoming Medical Center.  
Please do not copy, cite or distribute without permission.