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Welcome

Thank you for choosing Legacy Spine Center–Good Samaritan. Preparing and planning for your spine surgery is important for a successful outcome.

Our spine center provides comprehensive pre-operative and post-operative rehabilitation services for patients undergoing laminectomy, diskectomy or fusion. Our program involves care by a multi-disciplinary team of rehabilitation specialists. This includes doctors, nurses, physical therapists, occupational therapists, pharmacists, social services and nurse spine case managers. Working together, these skilled professionals provide you with a full array of patient services:

• Advanced planning for hospital stay and post-hospital care
• Individualized physical therapy
• Occupational therapy — instruction on bathing, dressing, home safety, utilizing assisted devices and more

Our goal in the Spine Center is to make your recovery and rehabilitation as easy, pleasant and productive as possible. Please contact us if you have any questions or concerns along the way. Our team is excited to be your partner in this process, and we hope we can assist you in approaching your surgery with knowledge and confidence.

We are here to help, and we are committed to do everything we can to make your surgery and recovery a success.

Legacy Spine Center–Good Samaritan staff

Complimentary valet parking
Patients and visitors may use our complimentary valet service at the main entrance of the hospital, Monday through Friday from 7 a.m. to 4:30 p.m.

Important phone numbers

Legacy Good Samaritan Medical Center
Orthopedic and spine coordinator .......................... 503-413-7649
Main hospital ................................................................. 503-413-7711
Clinical resource coordinator .............................. 503-413-7629
Bloodless Surgery Program ................................. 503-413-8396
Financial counselor .................................................. 503-413-8417
Patient Business Services ..................................... 503-413-4048
Pre-Admission Services ......................................... 503-413-8036
Rehabilitation Services ............................................ 503-413-7753

www.legacyhealth.org/spine
Your pre-surgical appointments are part of our commitment to prepare you for the best possible outcome. We will gather important information about your health so we can safely care for you. Completing these visits as scheduled will help avoid any delays or cancellations on the day of surgery.

**Medical clearance**
An evaluation by a medical practitioner may be recommended to ensure that you are in good condition for surgery. This evaluation can be done by your primary care provider. They will review your complete medical history and discuss with you any medication changes or further testing you may need. This appointment should take place about three weeks before your surgery so we can coordinate any further tests and prevent any delays in scheduling.

What to expect at this visit:
- A review of your medical history and current medications
- A physical exam
- You may have blood drawn
- You may be asked to provide a urine sample
- You may have an EKG (wear comfortable clothing)

**Pre-admission services**
- You will be contacted by a patient access representative who will verify your address, contact information and insurance.
- A nurse from the pre-admission office will contact you to review your medical history and current medications.
- The nurse will also review information about the day of surgery.
- If you are a member of the Bloodless Surgery Program (BSP) and have not already done so, please contact the BSP office at 503-413-8396.

**Pre-surgical appointment with your surgeon**
Before your surgery, you will see your surgeon. At this visit, your surgeon will:
- Review your blood work and information from your medical clearance appointment and ensure that you are fit for surgery
- Check your surgical site
- Review the benefits, risks and alternatives of your surgery and have you sign a consent form
- Answer any questions you may have
  Take the time to write down any questions you have for your surgeon, so you will remember to ask them during your appointments.
Medication instructions

There are medications that you need to avoid before surgery. Please discuss all of your medications with your primary care physician and surgeon.

**To be filled in by doctor/nurse practitioner:**

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Physician signature          Date
Preparing for surgery

There are many steps you can take in the days and weeks before your surgery to put yourself on the road toward a successful recovery.

Mobilize your support system

Legacy Health is dedicated to “family-centered care.” However you define family, we believe their involvement is an important part of your experience.

We encourage a family member or friend to come with you to your appointments and class before surgery. You will also want to start thinking about your support system after discharge.

We think the optimal discharge location is your home, with a support system to assist you. Every patient recovers at varying speeds. How much care you will need will depend on how you feel and how well you are moving.

We expect you to have someone to help care for you for a week or two after the surgery. You will also need someone to drive you to therapy and doctor appointments. It is helpful to have your support person present during your therapy in the hospital. This will allow the therapist time to teach them how to provide the support you will need at home.

If you have concerns about returning home after your hospital stay, please let your surgeon and care team know so we can discuss this with you. For a small number of patients, a short stay at a nursing facility may be needed. If necessary, we can assist you in making these arrangements in conjunction with your insurance company.

Prepare your body

• Good nutrition is important in the healing process. It is important to eat a well-balanced diet including fruits, vegetables and lean protein.
• Be sure to drink at least six 8-ounce glasses of fluid each day. These can be water, juice or non-caffeinated soda.
• In the time leading up to your surgery, be sure to keep your bowels regular. This will help prevent problems with constipation after surgery. Constipation is often a side effect of pain medications.

Tobacco-free campus

To promote a healthy lifestyle, Legacy Good Samaritan Medical Center is a tobacco-free campus, and there are no designated smoking areas.

Studies have shown that smoking negatively impacts bone health, including the healing of spinal fusions. If you or a loved one smoke, you may want to stop before surgery. In addition to talking with your doctor about options, resources include the Oregon Quit Line. Visit www.quitnow.net/oregon or call 800-QUIT-NOW (800-784-8669).

Create a recovery environment at home

• Remove loose throw rugs, which are a safety hazard and can cause falls.
• Remove bathmats from all bathrooms.
• Pick up any clutter and clear pathways.
• If you have stairs, make sure you have a sturdy handrail.
• You may need a raised toilet seat. If it is difficult for you to stand up from the toilet now, it will be difficult after surgery. A seat with arms is nice if you do not have a counter close by to steady yourself. You can also have grab bars installed.
• Prepare some meals ahead of time and have them in the freezer to make mealtime less stressful.
• Fill any necessary prescriptions so you have enough of your daily medications to last several weeks after your surgery.
• Store frequently used items in an easy-to-reach place.
• Talk with family and friends about your upcoming surgery to establish a support system.
## Prevent falls — A checklist for your home

Falls are often caused by hazards that are easy to overlook. This checklist will help you find and fix those hazards in your home.

### When you walk through a room, do you have to walk around furniture and objects stored on the floor?
- Ask someone to move the furniture so your path is clear, allowing room for a walker or crutches.
- Keep objects off the floor and stairwells.

### Do you have throw rugs on the floor?
- Remove rugs. They can be a hazard, particularly when using a walker or crutches.

### Is the shower floor or tub slippery? Do you need support when getting up from the toilet?
- Put a non-slip rubber mat or self-stick strips on the floor of the tub or shower.
- Have grab bars secured next to the toilet, tub or shower.

### Is the path from your bed to the bathroom dark?
- Put in a night-light to help you see where you are walking.
- Place a lamp where it is easy to reach, close to the bed.

### Are the handrails loose or broken? Is there a handrail on only one side of the stairs?
- Fix loose handrails or put in new ones. Make sure handrails are on both sides of the stairs and are as long as the stairs.

### Other things you can do to prevent falls
- Have your vision checked regularly. Poor vision can increase your risk of falling.
- Get up slowly after you sit or lie down.
- Wear supportive shoes both inside and outside the house. Avoid going barefoot or wearing slippers.
- Improve the lighting in your home. Florescent bulbs are bright and cost less to use.
- Coil or tape cords and wires next to the wall so you cannot trip over them.
- Have your doctor check your medications, including over-the-counter meds. Some medicines can make you sleepy or dizzy.
What to take to the hospital

- This notebook
- Please wear comfortable, loose-fitting clothing. If you will be using a back brace, you will need a cotton T-shirt and elastic pants/sweatpants.
- Toiletries
- Glasses, contact lenses, hearing aids and/or dentures with the necessary storage containers
- Any inhalers, eye drops, medicated creams or CPAP machine. Please alert the staff if you bring these items to the hospital.
- For Admitting, you will need a driver’s license or some other legal photo identification.

The day before surgery

- Do not eat or drink anything after midnight (unless instructed otherwise by your doctor). This includes water, gum, hard candy, lozenges and chewing tobacco.
- Limit alcohol intake and do not smoke for 24 hours before surgery.
- Notify your surgeon if you develop a sore throat or fever.
- Get a good night’s sleep. Set your alarm!

The morning of surgery

- Do not apply body lotion, deodorant, makeup or wear contact lenses.
- Do not take jewelry or valuables to the hospital.
- Please come to the hospital at the instructed time.
Protecting yourself from infections

Patient safety is our top priority. While most patients who undergo surgery do not develop infections, it is important to be aware of the symptoms and what you can do to prevent infections.

The symptoms

• Redness and pain around the surgical area
• Drainage of cloudy fluid from your surgical wound
• Fever

What you can do to prevent a surgical infection

Before surgery

• Tell your surgeon about all your medical issues.
• Quit smoking.
• Do not shave near the site of the surgery.
• Shower before arriving at the hospital.
• Wash and change your bed linens.

At the time of surgery

• Speak up if someone tries to shave you with a razor before surgery.
• Ask if you will receive antibiotics before surgery.

After surgery

• Ask that your providers wash their hands.
• Ask your family and friends to wash their hands before and after visiting you.

Protect yourself at home

• Be sure you fully understand how to care for your wound at home.
• Be sure you know whom to contact if you have questions about your wound.
• Always wash your hands before and after caring for your wound.
• If you have any symptoms — redness, pain or drainage from the surgical area or a fever — call your doctor immediately.
• Keep pets away from the incision.

What Legacy does to prevent infections

• Providers wash their hands before and after caring for each patient.
• Surgical team members wear protective hair covers, masks, gowns, foot covers and gloves during surgery.
• Surgical team members clean their hands and arms up to their elbows.
• We administer antibiotics before your surgery starts. In most cases, patients receive a dose 60 minutes before the surgery starts, and the antibiotics are stopped within 24 hours of surgery.
• The surgical team cleans the skin at the surgery site with a special soap.
At the hospital

Check in at the admitting desk located at the main entrance of the hospital. From here, you will be escorted to a room in our Short Stay Unit. A friend or family member is welcome to accompany you to that area.

While you are in Short Stay you will:
- Meet the nurse who will coordinate your pre-operative care
- Change into a hospital gown
- Have an IV (intravenous catheter) started to give you fluids and antibiotics
- Have your surgical site marked and prepared
- Confirm your surgery with your surgeon
- Speak with the anesthesiologist and surgical nurse about your surgery

Surgery

While you are in surgery, friends and family can wait in our waiting areas. The surgeon will want to talk with them when your surgery is finished.

Your friends and family should check in at the volunteer desk. If they want to go to the cafeteria or for a short walk, the volunteers will give them a pager so they can be notified when they need to return.

After surgery

After surgery you will be transported to the recovery room. The specially trained staff will care for you as you awaken from anesthesia.
- Your heart rate, blood pressure, respiratory status and temperature will be monitored closely.
- Nurses will assess and treat your pain and any nausea you may experience.
- You may have a tube (Foley catheter) that collects your urine.
- Your surgical site will be covered with a dressing.
- You may have a tube for drainage from your surgical site.

When you are ready to leave the recovery room, you will be transported to your room on the surgical unit. Your friend or family member will be able to join you in your room.

What happens to your belongings?

Your belongings will be locked up until you have been assigned a room on the surgical unit. Our staff will transport your belongings to your new room. If you wish, your family member can keep your belongings and take them to your room.
Road to recovery

Pain management

Spine surgery is designed to reduce the amount of pain you are currently experiencing. However, you will have some discomfort following surgery as your incision heals. Our medical staff will do everything possible to attend to your comfort. Although not all pain can be eliminated, pain relief medications can safely lessen the pain you feel after surgery. You should be comfortable enough to participate in your rehabilitation as well as rest effectively. As you progress, you can expect the pain to be less intense.

Communication with your health care team is essential. Tell your care providers how you feel and how well pain relief measures are working for you. We need to know how much pain you are having when you are moving, not just when you are at rest. In turn, we will discuss options for pain relief and what you can expect from different interventions.

Pain medications can be delivered in different ways. Medications delivered through an intravenous line, or IV, begin to work quickly but generally do not provide prolonged relief. Oral medications, or pain pills, provide longer lasting pain control. These drugs are most effective when taken as soon as pain begins. In the beginning you may require a combination of IV and oral pain pills. By the time you leave the hospital, you will take only oral pain medications.

Other effective ways you can help manage your pain include simple relaxation techniques, ice therapy, repositioning and movement. Practicing slow focused breathing before surgery can help this become an effective tool during your recovery.

Mobility

Getting up and moving is probably the most important part of your recovery and the most effective way to decrease your risk of developing a complication after surgery. Mobility aids digestion, improves circulation and lung health, and decreases pain.

Most people stop doing something when it causes pain. However, moving is very effective in decreasing your overall pain. Each time you get up will be easier, and you will be one step closer to your goal of recovery.

Nursing and therapy staff will assist you when you are first getting up and walking. Until given permission by your therapist, always have a member of your health care team assist with activity.
**Bladder care**

If you have a urine catheter, it will be removed the day after your surgery. Removing the catheter as soon as possible decreases the risk of getting a bladder infection. While you may be nervous about getting up and going to the bathroom, this is actually an important step in your recovery. Our staff will be able to assist you to the bathroom, or we can provide a bedside commode until you are able to walk to your bathroom.

**Bowel care**

The narcotics you are taking for pain control can cause constipation. You will be on a stool softener to avoid this. Other ways to keep your bowels regular are drinking water, including fiber in your diet and being active. If you have any concerns, please let your doctor or nurse know.

**Respiratory care**

Following surgery, congestion in your lungs may occur, which can lead to pneumonia. To prevent pneumonia, your nurse will instruct you on coughing and deep breathing, as well as using a device called an incentive spirometer (IS). Getting out of bed also helps your lungs work properly.

**Getting rest**

It is important to find time to rest in order to participate effectively in your rehabilitation. During the day, you should create a balance between hard work and restorative down time. Resting in bed without distractions is the best way to recharge yourself. We encourage you to limit your visitors during your initial recovery.
Preventing blood clots

Blood clots in the legs can form after surgery and general anesthesia, as a result of being less active. There are several ways we will work together to promote circulation.

- You will wear sequential compression devices (SCDs). They provide gentle, intermittent compression to your calves. SCDs should be worn at all times except when you are walking or exercising. If the SCDs are not compressing while in bed or sitting in a chair, please tell your nurse.

- Exercise about every two hours:
  - Start by wiggling your toes.
  - Next, pump your ankles up and down.
  - Tighten your thigh muscles (quad sets).
  - Tighten the muscles in your seat (gluteal sets).

**Important:** Tell your surgeon if you or someone in your family has a history of blood clots.

The following may be signs of a blood clot and should be reported to your doctor immediately:
- Calf pain in either leg
- Warmth, redness or tenderness of calf
- Difficulty breathing or chest pain
What to expect while in the post-op surgical unit

Your care team and your care
Your care is delivered by a team consisting of you, a registered nurse (R.N.), a certified nurse assistant (CNA), physical therapists, occupational therapists and others.

• Patient rooms will have a dry-erase board with the names of R.N./CNA.
• A CNA will often be the one to do vital signs (temperature, heart rate, blood pressure and respirations), daily hygiene, assist you to the bathroom or walking.
• The R.N. will fully assess you daily — check your neurologic status; check your IV; administer medications; ask you questions about nausea; assess your current pain and how it compares to pre-surgical pain; and check on your ability to urinate and pass gas.
• If needed, a clinical resource coordinator can assist you in making arrangements such as transfers to a skilled nursing facility or home health therapy, if those are recommended by your surgeon.

What to expect on the first day and night after surgery
The first day and night after your surgery is an important time for us to pay attention to many issues related to your condition. Because of the many activities, your rest will be frequently disturbed. You should expect:

• Frequent checking of your vital signs. Blood pressure cuffs are often left on your arm; they will cycle on/off.
• Frequent asking about your pain
• Assessments of your extremity strength, sensation and circulation.
• You may have a tube for drainage from your surgical site. If so, expect the drain to be emptied every eight hours.
• Your activity will be determined by the physician. Depending on your surgery, you will be allowed and encouraged to go to the restroom, walking with or without a brace.
• A clear liquid diet as your first meal. After that, your diet will be advanced as you can tolerate, as long as you are not nauseated.

• To be encouraged to move. We may roll you in bed, as well as encourage you to turn.
• To take deep breaths and cough every few hours
• To bend your knees before turning with or without assistance
• To sit up or lie down from side-lying position using “pendulum motion”
• Lower-leg compression stockings may come off if you are walking, but need to remain on while you are in bed. You are encouraged to do foot pumping and thigh quad exercises while in bed to help prevent blood clots in the legs due to immobility.

Your post-operative daily routine
The following addresses many aspects of your routine beginning on the first day after your operation.

• A comfort-function goal will be determined between you, your nurse and your doctor.
• Limit your twisting, turning and bending. Your comfort will guide these activities. Important: no lifting
• Your nurse will give you medications in the morning and other times during the day as ordered. Physical assessments are done usually at least twice by your nurse.
• Vital signs will be monitored approximately every four hours.
• Medications for bowel care will start the first day after your operation, due to constipating effects of pain meds, your inactivity and the changes in your diet while in the hospital.

Physical therapy and occupational therapy
Physical therapy (PT) may begin working with you after surgery to gradually increase your activity. The therapists will teach you body mechanics, including how to move in bed, how to get in and out of bed and how to walk using either a walker or cane if needed.

Occupational therapy (OT) may begin working with you after surgery. Your goal in occupational therapy will be to learn how to follow your spine precautions during activities of daily living, including dressing, bathing, using the toilet and managing
your household activities. The therapist also will instruct you in the application of your back brace if needed.

**Remember that activity and participation in your therapies are important to the quality of your surgery outcome.**

**Walking**

After your back surgery, you may need a walker or a cane to ambulate. Stand up straight and look ahead when walking. Gradually increase the distance you walk. It is important for your recovery to walk at least 4–6 times daily.

- Slippers and shoes should offer support, comfort and stability, non-slip soles and no high heels.

**Stairs**

Patients will often have one leg stronger than the other, often before surgery and then continuing for a while after surgery.

- When climbing stairs, use the handrail if one is available. Step up with your stronger leg first, then follow with your weaker leg.
- When descending stairs, step down with your weaker leg first, then follow with your stronger leg.

**Application of cold modality (ice packs)**

Applying ice to your surgical area for 15–20 minutes often will assist with pain control and help decrease inflammation or swelling. Ice should never be applied directly on skin. Wrap the ice in a pillowcase or towel to help protect skin. Ice can be used periodically throughout the day.
Sleeping positions

- Use a firm mattress
- Use pillows for positioning
- You may sleep on your back, side or stomach

**On back**

Place pillow under knees. A pillow with cervical support and a roll around waist are also helpful.

**On side**

Place pillow between knees. Use cervical support under neck and a roll around waist as needed.
Log roll / bed mobility

1

Lying on your back, bend your knees and place your arm across your chest.

2 3

In one movement, roll to your side, keeping your hips and shoulders aligned.

4 5

To sit up, use your arms to assist, moving without twisting. Keep your trunk aligned with your legs. Always move as one unit. To lie down, use the same movements in reverse.
Back care

Posture: standing

Good posture is important. Avoid slouching or a forward head thrust. Maintain the curve in your lower back and align ears over shoulders and hips over ankles.

When standing to complete tasks such as brushing teeth, place one foot on a ledge, and if needed, one hand on the counter. If needed, bend your other knee slightly to keep your back straight.

Avoid twisting

Pivot around using foot movements, and bend at knees if needed when reaching for articles.

Avoid twisting or bending back.
Posture: sitting

- Avoid slouching or slumping.
- Avoid chaise lounges, soft sofas, chairs on wheels or chairs with moveable supports.
- Avoid deep, low chairs. They are difficult to arise from.
- Adjust chairs for proper height.
- Use chairs with arm rests and back support.

Stairs

Go up stairs with your stronger leg. Bring your sore/weaker leg up to that step. Take a minute to get your balance, then continue up steps, leading with your stronger leg.

Go down stairs by placing your sore/weaker leg on the step first. Take a minute to get your balance. Then bring your stronger leg down onto the same step.

Remember to go up stairs with the good leg first and down stairs with the bad leg first.
Stand close to the task area. Bend your knees, not your back.

Use a reacher to pick up light items from low surfaces.
Activities of daily living

Keep task items between waist and shoulder level to avoid bending, twisting or reaching. Ideal work height is no more than two to four inches below elbow level when standing and at elbow level when sitting. Do not reach for items that are farther than an arm's length away. When you reach, keep your elbows slightly bent.
Dressing your lower body

Lie on your back to pull socks or slacks over your feet, or sit and bend your leg while keeping your back straight. Avoid these techniques if either cause pain.

Dressing your lower body with adaptive equipment

You may need to use adaptive equipment to dress yourself. A reacher can help with donning and doffing pants and underpants. A sock aid, long shoe horn and long-handled bath sponge may also be required.
Getting into and out of a car

Lower yourself onto seat, scoot back, turn to face forward, avoid twisting, then bring in one leg at a time. Reverse sequence to get out.
Exercises

Ankle pumps
Point and pull back toes to flex/extend ankle, alternating feet. Repeat 10–15 times, periodically throughout the day.

Gluteal squeeze
Squeeze buttocks, hold for 5 seconds and release. Repeat 10–15 times, two or three times a day.

Quad sets
Tighten muscles on top of thigh by gently pushing knee down into surface, hold for 5 seconds and release. Repeat 10–15 times, two to three times a day.
**Trunk stability**
Lying on back with knees bent, tighten stomach and hold for 5 seconds. Repeat 10–15 times, two or three times a day.

![Trunk stability exercise](image1)

**Heel slide**
Bend knee and slide heel toward buttocks. Straighten out knee and relax. Repeat 10–15 times, two to three times a day.

![Heel slide exercise](image2)
Home and beyond

Leaving the hospital

Together we will create a plan to meet your goals for a safe discharge. This will include assisting you in obtaining any equipment or other support you may need.

In order to go home you need to meet the following criteria:

- Be in stable medical condition
- Be able to get in and out of bed with minimal help
- Demonstrate safety with mobility/walk a functional distance to make you safe at home. Be able to navigate stairs if you have them.
- Have your help at home adequately trained to assist you as needed.
- Be able to take food and fluids without nausea or vomiting
- Have no signs of infection
- Understand your discharge instructions

When you go home, you will continue your rehabilitation with a home exercise program as instructed by the physical therapists during your stay.

In addition, your surgeon may prescribe home health or outpatient physical therapy. We can assist you in setting this up.

Some people may not be able to return home directly and may qualify for a short stay at a skilled nursing facility, where they will receive additional rehabilitation and nursing care. Our clinical resource coordinator (CRC) is available to assist you with this process.

Pain medication

Effective pain medication should be identified for you before you are discharged. Your physician will provide a prescription for you to fill that will help manage your pain.

It is important to keep in mind that pain medications do not take away 100 percent of your pain. The medication (or combination of medications) will help reduce the level of pain you may be experiencing to a manageable level. Taking the medication at consistent intervals will provide more effective pain relief. Keeping a log sheet may help you manage your recovery more effectively.

Taking pain medication with food in your stomach and plenty of water helps to prevent stomach upset. Because constipation is a common side effect of taking narcotic medications, we recommend that you increase your daily intake of fluids, fiber and fruits. If necessary, you can try an over-the-counter gentle laxative or stool softener as directed on the label. Should you continue to have constipation problems, please contact your physician.

Please call your physician if you develop a rash, itching, swelling or repeated nausea while taking pain medications. We ask that you refrain from consuming alcohol while taking narcotic medications.

Do not stop taking your pain medication suddenly — especially if you have been taking narcotics consistently for 3–4 weeks. Stopping your pain medications abruptly can lead to rebound pain and withdrawal symptoms.

Symptoms of withdrawal can be, but are not limited to: nausea, vomiting, sweating, depression, abdominal cramping, irritability, chills, weakness,

Call your doctor if you notice any of the following because it might be a sign of infection:
- Warmth, redness, increased pain or swelling of incision
- Increased clear drainage from your incision
- Any thick, green or foul-smelling drainage from your incision
- Separation of the wound edges
- Temperature above 101 F
Home and beyond

Discharge planning needs to occur before your hospital admission. You should plan to have someone stay with you or be available to help you for several days after discharge.

**The person who will help me at home is:**

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<th>PHONE NUMBER</th>
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If you do not have anyone to stay with you or help you after discharge, you may need to consider alternative living arrangements. Depending on your need, there are several different levels of care available after discharge. Check with your insurance company to determine which facilities it covers. If you choose an alternative living facility, you will want to visit that facility before your hospitalization. Please have a first and a second choice.

The following resources are available to assist you with your discharge planning needs:

- **Meals on Wheels (Loaves & Fishes)** — 503-736-6325
- **Aging Services**
  - Washington County — 503-640-3489
  - Multnomah County — 503-988-3646
  - Clackamas County — 503-794-8008
  - Tillamook County — 503-368-4200

**At discharge, the individual who will take me home is:**

<table>
<thead>
<tr>
<th>NAME</th>
<th>PHONE NUMBER</th>
</tr>
</thead>
</table>

Discharge will occur once your doctor has written the order and your nurse has reviewed the discharge instructions with you. It is best to arrange your ride home prior to your hospital admission. If you need help with these plans, please let your nurse or the discharge planner know.

- [ ] I have prescriptions for my new medications, including pain medications.
- [ ] I have a raised toilet seat, if needed.
- [ ] I have, or know how to obtain, any necessary equipment.
- [ ] I have arranged for someone to drive me home and help care for me.
- [ ] I have a follow-up appointment with my surgeon.

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**Insomnia, increased blood pressure and palpitations** (abnormal heartbeats). These symptoms can be life threatening. All narcotics need to be slowly discontinued under our direction.

Some medications cannot be refilled over the phone so you must be careful to coordinate your refills. Loss of medication or written prescriptions is not considered a valid reason for refills.

**Regular follow-up appointments with your surgeon**

It is very important, over the weeks to come, that you keep in touch with your surgeon. How often you need to be seen will be determined by your surgeon, but it will be your responsibility to make those appointments.
Rehabilitation after spinal surgery

Choose Legacy Rehabilitation Services for expert help recovering after surgery. Our physical therapists will provide you with personalized care in 45 minutes to one-hour appointments.

We can help you:

- Get back to moving and walking again
- Learn strategies to help manage pain
- Regain strength that has been lost due to decreased activity

Call 503-413-3707 today to set up your outpatient appointment. We accept most insurance plans and provide assistance in insurance verification and authorization.

Our locations

- Legacy Emanuel Medical Center, Northeast Portland
- Legacy Good Samaritan Medical Center, Northwest Portland
- Legacy Meridian Park Medical Center, Tualatin
- Legacy Mount Hood Medical Center, Gresham
- Legacy Salmon Creek Medical Center, Vancouver, Wash.
- Legacy Physical Therapy — Hawthorn Farm, Hillsboro
- Legacy Physical Therapy — Tualatin Clinic, Tualatin
Anatomy overview

Your spine is composed of bones (vertebrae), joints between the bones (facets), discs, ligaments and nerves. The bones or vertebral bodies are the building blocks that provide the basic structure of your spine and protect the nerves. The discs are located between the bones and work as shock absorbers. They also allow flexibility of the spine. The ligaments connect the bone and discs together, keeping the spine stable as it moves.

The neck is known as the cervical spine, the mid back as the thoracic spine and the low back as the lumbar spine. The cervical spine has seven bones, the thoracic spine 12 bones (with ribs attached) and the lumbar spine five bones.

If your symptoms are only in the middle of your neck or back, they are referred to as axial symptoms (pain, numbness, tingling). If your symptoms radiate into the upper and/or lower extremities, these symptoms are referred to as radicular symptoms. Axial symptoms are usually caused by a problem with the disc. Radicular symptoms are usually caused by irritation or compression of the nerve.

Disc disease

Many conditions in the spine are the result of the disc failing to work as a shock absorber. The center portion of the disc is a fluid saturated material that allows stable motion of the spine. The disc can lose fluid because of one single injury or many smaller injuries. It can also lose fluid for unknown reasons in an otherwise healthy person and as part of the aging process.

As the disc weakens, it can result in internal disc disease, disc herniation, stenosis or spondylolisthesis. This typically results in a combination of axial (neck/back) symptoms and radicular (upper/lower extremity) symptoms.

Internal disc disease results in neck or back pain with or without extremity symptoms. The disc develops cracks and tears in the center and the outer walls that results in irritation of the nearby nerves.

A disc herniation is known as an HNP (herniated nucleus pulposus) and occurs when the outside wall of the disc weakens. The weakened wall expands and compresses the nearby nerve.
Stenosis and spondylolisthesis occur when the disc fails as a shock absorber and allows too much motion. The body responds by making spurs of bone to fuse or stiffen the spine. The spurs of bone work as spot welds to stop the spine from moving. When the spurs from each side meet, the spine is fused and is less painful. If the spurs grow too large, the room for the nerves is narrowed. The narrowing is referred to as stenosis. If the disc becomes unstable, one bone shifts forward on another and is known as a spondylolisthesis.
**Surgical treatment**

Surgical treatment is considered when non-surgical treatment has not worked. The three types of surgery on either the neck or the back include decompression, fusion and motion preservation.

Decompression includes any procedure where either bone or disc is removed to relieve compression on a nerve. This is described medically as either discectomy, laminotomy, foraminotomy or laminectomy.

Fusion includes any procedure where spine segments with excessive painful motion are operated on so that they join together with bone and no longer move.

Motion preservation includes any procedure where spine segments with excessive painful motion are stabilized while preserving motion. An artificial disc is an example of this.

**Spondylolisthesis before treatment**

Spondylolisthesis can occur when a worn disc allows the vertebra above it to slip forward.
Understanding fusion surgery

Before undergoing fusion surgery, you may want to understand more about the procedure. In fusion surgery, your surgeon links together two or more vertebrae into a single, solid bone to relieve pressure off of the spinal nerves.

The surgery is also known as lumbar interbody fusion or LIF. There are three main approaches. The surgery is listed depending on which approach your surgeon takes:

• PLIF — Posterior approach, done from the back
• TLIF — Transforaminal approach, from the side and from the back
• XLIF — Extreme approach, performed from the side

During surgery, you will be on your abdomen or your side. Because of the positioning, many patients feel some numbness, tingling and discomfort in their thighs. This discomfort should slowly resolve.

Spinal fusions use some type of bone material, called a bone graft, to help promote the fusion. Generally, small pieces of bone are placed into the space between the vertebrae to be fused. The type of material used is determined by the condition and the surgeon. Among the materials are bone chips from the patient.

Rods and screws help hold the fusion; the hardware is titanium and not likely to trigger security alarms and airports and other places.

Working with your brace

As part of your spinal fusion, your doctor may prescribe a brace to protect your spine while healing takes place. Your brace will be fitted the first day after your spine surgery; you will wear it at all times, except for showering and in bed, for six to 12 weeks.

Your doctor will decide which brace to use. Among the options:

• Lumbosacral corset — An elastic corset-type brace with a Velcro attachment
• Flexiform — One or two plastic molded pieces with straps and soft foam lining
• Thoracic-lumbo-sacral-orthosis (TLSO) — Two molded plastic pieces with straps on each side. You will work with physical therapy and occupational therapy staff to learn how to operate the brace.
• Aspen cervical collar — Two molded plastic pieces easily adjusted with Velcro tabs. It is rigid and used to stabilize the neck and cervical spine after cervical fusion.
Knowing your limits: A quiz

Key to preventing yourself from injury after spinal surgery is knowing what your body can and cannot do. This quiz helps you remember your limits. *(Quiz adapted from Sky Ridge Medical Center.)*

1. Is it safe to cross legs and use both hands to put on socks and shoes?  T   F
2. Name four things to remember when log rolling:

3. When and how long should you use body mechanics?

4. Name three things to remember when sitting to ensure good posture:

5. Is walking the only aerobic exercise to be done after surgery?  T   F
6. What is pacing, and why should you do it?

7. When should you put on your brace and when can you take it off?

8. Name three post-op spine precautions:

9. Name three things to ensure safety in the bathroom:

10. Name four things to remember when lifting:

11. When sitting and standing, how often should you change your position?

12. Name two standing exercises:

13. How many miles should you walk two weeks after surgery?__________

14. Explain why you have precautions after surgery

15. Name three pieces of equipment you should purchase before surgery:

16. What does B, L, T mean?__________

**Answers**

1. False
2. Bend knees, cross arms, tighten stomach, roll
3. All the time, for the rest of your life
4. Hips back in chair, shoulders over hips, feet flat on the floor
5. True
6. Stop before you are tired; plan the day; prevent pain and over fatigue
7. In bed, shower
8. Bending, lifting, twisting
9. Tub bench/shower chair, non-slip mat, shower caddy, person close by
10. Lift with knees; keep item close to you; move your feet to the object; do not lift more than 10 pounds
11. 30 minutes
12. Mini squats; heel-to-toe exercises; high stepping; hip abduction
13. Up to two miles a day (4,200 steps)
14. Protect the fusion
15. Reacher; sock-aid; elevated toilet seat; shower chair
16. Bending, lifting, twisting
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