Dear Spine Patient,

Thank you for choosing the Spine Surgery Patient Guide Program at Palomar Health. As your partner in health, we will work with you to make your joint replacement a positive experience. Expert doctors, state-of-the-art technologies, therapists, case managers and specialty-trained orthopedic nurses all work together for the best possible outcomes with a patient-centered approach to care.

Before, during and after your surgery, our Spine Care Team will work closely with you. We encourage your active involvement in the whole process. If any issues come up during your treatment, or you feel that we are not meeting your expectations, please let us know. We value your feedback.

Sincerely,

Palomar Health Orthopedic & Spine Center
My Surgery Quick Facts

Surgeon: ________________________________________________________________

Surgeon Phone Number: __________________________________________________

If you would like to Register for the Pre-operative Spine Class, please call 800.628.2880 or visit PalomarHealth.org/Classes.

Date & Time of Spine Class: ________________________________________________

Location of Spine Class: __________________________________________________

Date & Time of Pre-Operative Appointment at Surgeon’s Office: __________________

Date & Time of Pre-Operative Screening With Nurse: ____________________________

Date & Time of Surgery: ____________________________________________________

Surgical Procedure: _________________________________________________________

Hospital: ___________________________ Time you should arrive at the hospital: ______

Date & Time of Post-Surgical Follow-Up Appointment with Surgeon: ______________

Home Health Agency Contact Number: _________________________________________

Palomar Medical Center Escondido Main Line: 442.281.5000
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Introduction

Our mission at Palomar Health is to heal, comfort and promote health in the communities we serve. Our goal is to provide you with a very good healthcare experience.

Now that you and your surgeon have decided that spine surgery is the best treatment for your condition, you will begin the steps to get ready for surgery, undergo your operation and begin healing. Your Spine Care Team will work with you to make sure your needs are met. You are the most important member of this team. Taking part in your treatment plan is key to a good outcome. We want you to experience a quick, but complete, recovery so you can return to a more active lifestyle.

This guide provides a full description of the journey that you will travel through Palomar Health and serves as a valuable resource to answer general questions that you may have about your pre-operative clearance, progress in physical therapy and healing.

This packet includes:
- Information for understanding spine surgery
- What to do before surgery
- What to expect while in the hospital
- Care after you go home

We encourage you to use this guide as a journal of your spine surgery journey. Please bring this packet with you to the Pre-Operative Spine Class, ALL appointments, therapy sessions, doctor visits, including your hospital stay. There may be information that you would like to write down and ask questions about. We urge you to:

- Write down your question(s) on the “Questions and Notes” pages.
- Complete the medication list at the end of this guide.

Centers of Excellence

Palomar Medical Center Escondido and Palomar Medical Center Poway are nationally recognized as top performing orthopedic and spine centers, and have both been designated as a Center of Excellence by Blue Shield and Aetna. Palomar Health is a California Healthcare District.
Palomar Health Spine Program

The Spine Program is made up of the following steps:

1. Visiting the orthopedic or neurosurgery surgeon’s office to discuss spine surgery.
2. Participating in the free, mandatory Pre-Operative Spine Class. IMPORTANT: Please bring your caregiver and this packet with you to class.
3. Preparing your home for your safe return.
4. Completing a pre-operative screening by phone from your Pre-Admission Nurse.
5. Knowing the necessary equipment needed after your surgery (walker, commode or toilet riser, long shoe horn, etc.).
6. Getting a handicap parking placard from the Department of Motor Vehicles (DMV), AAA facilities or spine pre surgery education class.
7. Being admitted to the hospital for surgery, then healing on the Nursing Unit. Your Spine Care Team will include your doctor, nurses, therapists, dietitians, pharmacists and case managers.
8. Working with your Spine Care Team to develop a discharge plan. Depending on your healing progress in the hospital, your available insurance options and your ability to care for yourself at home, you may discharge to home with in-home or outpatient therapy or to an extended care rehab facility.
9. Completing daily exercises as directed by your surgeon and physical therapist.
10. Going to follow-up visits at your doctor’s office.
Put Yourself In The Best Position For Success

Stop smoking now
- Smoking can make medical problems worse and can make healing take longer. If you smoke, you should stop immediately.
- Quitting takes hard work and a lot of effort, but you CAN quit smoking.

Manage Your Diabetes Before and After Surgery

Good control of your blood sugar before surgery will help:
- Wound healing after surgery.
- Prevent infection.

Tell your doctors, nurses and pharmacists:
- The type of diabetes you have.
- Names of your medications, how much you take and the times you take your medicines.
- Your last A1C value, if you know it.
- The name of the doctor who cares for your diabetes.

Questions to ask your doctors, nurses and pharmacists:
- What diabetes medicines should I continue to take the day before and the day of surgery?
- How much of my diabetes medicines should I take the day before and the day of surgery?
- How will my diabetes be taken care of in the hospital?

Please contact your surgeon if you have any questions about your medicines, your surgery, or your upcoming hospital stay.

Your Surgical Journey Starts Today! This is Your To Do List.

As soon as you are scheduled for surgery:
- Attend the Spine Class.
  Schedule your free in-person spine surgery education class by calling to register at 800.628.2880 or visit PalomarHealth.org/Classes. The class title is: Spine Surgery Pre-OP Education Class.
- Activate your CarePath.
  Your surgeon has created a custom CarePath for you online. This roadmap will help you get prepared and organized for your surgery and recovery.
  We have just enrolled you, but now please activate your account through the link included in the CarePath email you will receive from your surgeon.
Spine Surgery

Most patients choose to proceed with spine surgery when their pain or weakness becomes disabling. This usually occurs when daily pain is present and interferes with daily activities.

Causes of the disability can include:

- **Degenerative disc disease** – damage of the disc caused by degeneration.
- **Disc Herniation** – also referred to as a “slipped disc,” the inner core of a disc leaks out through the outer portion of the disc.
- **Osteoporotic Fracture** – the thinning and weakening of the bone which can lead to fractures. A DEXA scan is used to test bone density (strength).
- **Stenosis** – spinal nerve roots become compressed.

Listed below is a brief description of the different types of spine surgery that could be performed on the cervical, thoracic, lumbar or sacral spine.

- **Laminectomy** – involves removal of bone through the back of the spine in order to relieve nerve compression.
- **Laminotomy** – making a hole in the back of the spine to access the disc or to decompress a nerve.
- **Foraminotomy** – removal of bone from the back of the spine to make the opening bigger where the nerve passes through.
- **Discectomy** – partial or complete removal of the disc material.
- **Fusion** – spine fusion aims to completely eliminate motion in the vertebral segments of the spine being fused. There are various types of devices used to perform a fusion and stabilize the spine: metal cage, screws, metal rods, metal plates and bone.
- **Artificial Disc Replacement also called Disc Arthroplasty** – replacing a disc with an artificial disc that mimics a normal healthy disc. Artificial discs are structurally similar to natural discs and share similar functions, helping to maintain normal range of movement.
Parts of the Spine

1. **Spinal Cord** – the pathway between the brain and the body, it is protected by the bones of the spine called vertebra.

2. **Spinal Canal** – a hollow passage in the vertebra that protects and supports the spinal cord and its many nerves.

3. **Nerve Root Branches** – branch off the spinal cord and supply sensation and strength to the body.

4. **Lamina** – forms the bony back of the spinal canal.

5. **Foramen** – a small opening where a nerve leaves the spinal canal.

6. **Transverse Process** – the bony wing where muscles attach on either side of each vertebra.

7. **Spinous Process** – the bony portion that you feel through your skin.

8. **Disc** – gel-like cushions that separate the vertebra and act as shock absorbers that allow for movement between the vertebra.

9. **Facet joints** – allow for movement in the spine.

10. **Dura** – the outermost layer of the spinal cord and brain.

11. **Dural sac** – contains the cerebrospinal fluid in which the spinal cord ‘floats’
Understanding Your Spinal Anatomy

The **spinal cord** is responsible for relaying messages and ensuring functioning to different body parts. Therefore, spinal cord injury or damage can cause numbness, weakness, pain or paralysis.

The vertebral column, also called the backbone or spine, protects the spinal cord, and is divided into four distinct areas that are separated by spongy gel like cushions called “discs.” These “discs” are made of cartilage and serve as the “shock absorbers” of the entire vertebral column. Each individual functional spinal unit allows for flexion, extension, rotation and bending from side to side.

- The Cervical Spine consists of 7 vertebra in the neck.
- The Thoracic Spine consists of 12 vertebra in the middle back area.
- The Lumbar Spine consists of 5 vertebra in the lower back area.
- The Sacrum consists of 5 sacral bones and 4 coccygeal or tail bones.

**Cervical Spine**
- The neck, or cervical spine, starts at the bottom of the skull and ends just above the shoulders.
- These seven vertebra support the weight of the head and control the arms and hands.

**Thoracic Spine**
- The mid-back, or thoracic spine, protects the organs of the chest and controls the region of the chest and abdomen.

**Lumbar Spine**
- The lower back, or lumbar spine, has five vertebra and controls the region of the legs and feet.

**Sacrum**
- The sacrum is the lowest part of the spine and serves as the junction between the spine and pelvis. These nerves control the bowel and bladder.

**Coccyx**
- Tailbone
Cervical Spine

- The neck, or cervical spine, starts at the bottom of the skull, and ends just above the shoulders.
- These seven Vertebra support the weight of the head.
- Provides more movement than the other segments of the spine.
Lumbar Spine

- The lower back, or lumbar spine, has five of the largest Vertebra.
- Carry most of the body's weight.
- Responsible for bending and twisting.

![Diagram of lumbar vertebra with labeled parts: Nerves in the spinal canal, Spinal canal, Disk, Foramen, Lamina, Nerve leaving the spinal canal, Vertebra, Disk, Foramen is an opening between Vertebra, LUMBAR VERTEBRA.](Image)
Understanding Blood Transfusion

If you are scheduled for surgery, you may have concerns about a possible blood transfusion. Our doctors do all they can to prevent blood loss during surgery. However, it may be that you still require a blood transfusion after surgery. While rare, we want you to be aware of the options.

**Autologous blood transfusion**

- Autologous blood is your own blood. For this type of transfusion, you donate your own blood before surgery. Make sure to discuss this option with your surgeon. If it is the right plan for you, it can take extended time to complete the process of donating your own blood.

- Your doctor may ask you to take a daily iron pill.

**Allogeneic blood transfusion**

- If you are not able to donate for yourself, you may get blood donated by a blood bank donor. This is called allogeneic blood donation.

- Blood bank blood is screened for disease and it is considered safe.

- Relatives and friends with your blood type can also donate blood in your name.

- They are called designated (or directed) donors and may take extra time to process.

NOTE: If it is your choice to not have a blood transfusion, please let your surgeon know.
Getting Ready For Surgery

Please bring your health plan card, picture identification, advance directive and your social security number with you to all appointments including your hospital stay.

Before surgery you will need:

- To register on-line or in person for surgery.
- To complete insurance and financial transactions.
- To be cleared for surgery by your surgeon. Your surgeon may want you to:
  - See your primary spinal care doctor or your specialist before surgery for pre-operative clearance.
    - Obtain a brace if prescribed by your doctor and bring to hospital on day of surgery.
  - Have some tests done before surgery. Tests may include:
    - Blood work
    - An electrocardiogram (EKG) for your heart
    - A chest X-ray
    (Ask your doctor and insurance company where you can go to get your tests done.)
  - In order to keep your surgery on track, please allow sufficient time as additional testing may be necessary.
- To complete the following documents:
  - “Conditions of Admissions” – gives Palomar Health permission to provide you with care and treatment.
  - “Consent for Surgery” – identifies the exact body part to be operated on and a complete description of the type of surgery.
  - “Transfusion Consent” – gives Palomar Health permission to give you a blood transfusion if your surgeon decides that you need one during surgery.
  - “Health History Questionnaire” – gives your anesthesiologist important information that will help him/her in providing the right anesthesia and medications.
  - “Consent for Anesthesia” – gives the anesthesiologist the ability to give you medications (The anesthesiologist will discuss the type of anesthesia that is the best for you).
Pack Your Bag for the Hospital

Registration Items
To register for your surgery, you will need:

- Your health plan card.
- A picture I.D.
- Your social security card/number.
- The name of your primary care doctor.

You will also be asked to pay applicable copays.

What Not to Bring to the Hospital

- Large quantities of cash.
- Highly valued items such as precious jewelry or family heirlooms.
- Your actual medications (unless requested to do so by our staff).
- The name of your primary care doctor.

What to Bring with You at Check-In (if applicable)

- Reading glasses with case.
- Dentures with case.
- Hearing aids (plus extra batteries) with case.
- CPAP machine.
- Closed toe and closed heel shoes (no slippers or flip-flops).
- Loose fitting pants, shorts or loose house dress/house coat.

Pre-Admission Screening

A pre-admission nurse will screen you before your surgery. The screening will take place via phone. Anticipate the call taking 30 – 45 minutes so we may provide you with individualized instructions.

- Do NOT eat or drink after ____________ on ____________ (Time) ____________ (Date).
- Complete the medication list found at the end of this book. Various members of your healthcare team will inquire about the medications you take. This redundancy is intended for your safety.
- DO NOT shave or clip hair on operative site for 5 days prior to surgery.
- Plan rest periods before surgery to help your body be rested for surgery.
- Call your surgeon if you become ill, have an infection or skin problem prior to your surgery.
Preparing Your Home Before Surgery

Preparing your home with the following safety tips:

- Put away loose throw rugs.
- Move furniture so that you have enough space to move around easily with a walker or cane.
- Put away or tape down electrical cords.
- Set up pet care.
- Ensure adequate lighting to maximize safety.
- Plan for a cordless phone or cell phone to be near you at all times.
- Have option(s) for non-moving chairs (NO rocking, rolling or swivel chairs).
  - Use solid chairs with arm rests.
- Ensure your toilet seat is secure.
  - Consider borrowing or purchasing a 3-in-1 commode if your toilet is low.
- Identify narrowest hallways or areas to ensure walker will easily pass through.
  - My narrowest walkway is _______ inches.
- Identify the number of stairs required to travel through to complete activities of daily living.
  - The number of stairs to get around my living space, including the entrance to my home, is _______.
  - Describe your outdoor terrain: _______________________________________________________
- Identify the height of your bed.
- Use nonskid socks or foot wear that has a closed heel.
  - Consider shoes that fit snug without laces (tying your shoes may be difficult for a while after surgery).
- Plan activities so you can take your time. DO NOT rush.
- Anything else you feel is important to address for your own safety.

You will want to make arrangements for caregiver support at home. It may be several days to several weeks until you are independent with activities. You will need to have someone available to assist with:

- Showering
- Dressing
- Meal preparation
- Driving to appointments
Durable Medical Equipment

You and your Spine Care Team will determine what medical equipment you may need at home. The following are suggested pieces of equipment that may be useful during your healing. Please note, insurance policies may vary, you may want to check with your insurance company to determine your equipment coverage. If you already have a walker, please have a family member or friend bring it to your room after surgery. The physical therapist will ensure it is properly fitted for your height. If you do not already have a walker, the therapist will make equipment suggestions to your doctor. Your case manager will arrange for your needed equipment before you leave the hospital.
Pre-Operative Exercises

Pre-operative upper body physical therapy exercises for spine surgery
Your upper body strength will help when using a walker after spine surgery. You may begin the upper body exercises listed below before surgery to help build your strength. **DO NOT do these exercises if they cause your pain to increase above your tolerance level.**

Log Roll Out of Bed

<table>
<thead>
<tr>
<th>Step #1</th>
<th>Step #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lying flat on your back, bend both knees up with your feet flat on the bed.</td>
<td>Tighten abdomen and begin rolling onto your side toward edge of the bed in one motion.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step #3</th>
<th>Step #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slowly lower legs off the edge of bed while stabilizing your upper body with your elbow and opposite hand.</td>
<td>As you begin to sit up, try keeping your shoulders, hips and knees aligned to push yourself up to a sitting position.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step #5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete seated position to stand up. Use these same steps in reverse to lie down in bed.</td>
</tr>
</tbody>
</table>
Chair Push-ups
(be sure to conduct this exercise with a chair with arm rests)

<table>
<thead>
<tr>
<th>Step #1</th>
<th>Step #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>While holding onto the arms of the chair, scoot to the front of your seat and lean forward from hips.</td>
<td>Using the strength of your arms, push up from the chair into a partial squat position and hold for 1-2 seconds.</td>
</tr>
</tbody>
</table>

Walking

It is imperative to continue to build your upright endurance, strength and balance in preparation for surgery.

Continue to walk as much as you are able.
Neutral Spine Concepts
To prevent additional pain and aggravation leading up to your scheduled surgery, try to maintain proper posture throughout your normal everyday activity by:

- Keeping your neck and back in a straight alignment with your hips and knees.
- Chin pointing forward with ear aligned directly above shoulders.
- Keep your feet pointing in the same direction.
Surgical Site Infection Prevention Begins with You

Our hospital team does all we can to reduce patient’s risk for infection. We sterilize equipment, utilize clean linen/supplies, and we wash our hands frequently. We need you to be a proactive member of your Spine Care Team by preparing your skin for surgery. Showering with a special soap will reduce the normal bacteria on your skin, which can reduce your risk for infection.

General

Please take 3 showers using a 4% Chlorhexidine Wash (CHG) prior to your surgery,

- One shower 2 nights before (___________) (date)
- One shower the night before (___________) and (date)
- One shower the morning of your surgery (___________) (date)

Steps to Follow:

1. Purchase 4% Chlorhexidine Wash (CHG) at a local drug store.
2. Test the CHG soap on your wrist 1 hour prior. If you have any sensitivity, do not use the product. Liquid Dial™ can then be used as a substitute.
3. Wash your hair as usual with your normal shampoo and wash your body with regular soap. Do not shave operative area.
   - Rinse your hair and body very well to remove any shampoo or soap that may be on your skin.
4. Wet a clean, soft washcloth and turn off the shower.
5. Put the CHG soap on the clean, wet washcloth.
6. Apply the CHG soap externally to your whole body from the neck down only.
   - Do not put CHG on your face, eyes, head, ears, genital area.
   - CHG does not lather well.
7. Wash your body gently with a clean wash cloth or your hands, from your chest down to your feet, for 5 minutes. Do not scrub. Do not wash with regular soap after using CHG.
8. Turn the shower back on and rinse well to remove all soap from your body.
9. Pat yourself dry with a clean towel after each shower.
10. **Do not use any lotion, moisturizer, deodorant, makeup or other products on your skin.**
11. Put on clean clothes.
12. Change bed linens each day while using CHG.
Pre-Surgery / Procedure Patient Checklist

Steps to Follow:
1. Repeat your preoperative shower in the morning.
2. Do not eat or drink anything before surgery unless otherwise instructed.
3. Wear clean, comfortable loose fitting clothing.
4. Do not wear jewelry, including body piercings.
5. Do not wear contacts (glasses ok).
6. Bring insurance cards, photo ID, social security card or number.
7. Bring medication list
8. Bring brace.

Day of Surgery, Pre-Operative Area

You will:
- Have a “patient identification band” placed on your arm. This band will be used to identify you throughout your stay. As a safety precaution, you will be asked about your allergies frequently throughout your stay. If you have allergies, a red identification band will be placed on your arm.
- Be given a hospital gown.
- Have your belongings itemized and logged into our computer system.
  - Initially this should just be the clothes you wore to the hospital and any glasses, hearing aids, dentures you may have. Additional necessary items may be brought directly to your room after surgery.
  - CPAP machine
  - Back or neck brace prescribed by your surgeon.
  - Be sure to notify the staff of additional items so they can also be inventoried. Please note, Palomar Health is not responsible for any lost items.
- Be asked to remove dentures, contact lenses and glasses before going into the operating room.
- Be asked questions to double check important information for your surgery.
- Have an IV (intravenous fluid line) inserted to give you medications and fluids.
- Have your vital signs checked: temperature, pulse, blood pressure, level of oxygenation and respirations.
- Have the hair on your surgical site clipped and cleaned.
- Be given antibiotics before your operation.
- Meet with your anesthesiologist and your surgeon.
- Be able to ask any last minute questions.
- Be given medication to relax you.
- If ordered by your surgeon, be started on our pain protocol.
Hospital Stay

Surgery

- You will be moved to the operating room on a bed. If you have a loved one with you, they will be told where to wait. Your surgeon will speak with them at the end of your surgery. If your loved one cannot stay, they will be asked to provide contact information so the surgeon can contact them after surgery.

- The operating room staff will greet you and go over any final surgical plans. Repeated checks are safeguards to make sure everything is in order while you are in the operating room. Your safety is our highest priority.

- In the Operating Room, your anesthesiologist will talk you through each step of the anesthesia process. They will then give you a general anesthetic, as discussed during your anesthesia interview. They will monitor your status throughout the operation.
Surgical Recovery Room

Immediately after surgery, you will be taken to the Post-Anesthesia Care Unit (PACU).

■ Nursing staff will monitor you closely in the PACU while you recover from anesthesia and slowly wake up.

■ There will be a mask over your nose and mouth, providing oxygen until you are able to take deep breaths on your own.

■ Your nurse will continuously check your heart and lung functions. You will have a blood pressure cuff on your arm, EKG patches on your chest and a small oxygen monitor on your finger.

■ Your bladder may be emptied through a tube called a urinary catheter. This catheter will drain your urine into a collection bag until you are able to urinate on your own.

■ A drain may be placed at the surgical site. This drain will gently remove blood or excess fluid from your surgery site to promote healing.

■ You will continue to get fluids through your IV.

■ You may feel a gentle squeezing on your legs due to a pumping device (called PAS or pulsatile anti-embolism stockings) used to help keep blood flowing through your body, which prevents blood clots.

■ After several hours, you will be moved from the PACU to your hospital room, where loved ones can visit you.
Post-Surgical Care: Your Hospital Room

■ Your primary nurse will monitor you closely for the first few hours.
■ Your nurse or certified nursing assistant (CNA) will take all of your vital signs often. This includes asking you about the pain at your surgical site.
■ Soon after your surgery, a nurse or respiratory therapist will teach you breathing exercises using an incentive spirometer (IS). This will help keep your lungs clear, make your breathing muscles stronger, and help stop future problems such as pneumonia, a lung infection.
■ Your nurse and CNA will help you move positions by changing the pressure points beneath you with a few well-placed pillows.
■ It is very important to flex your ankles up and down to keep the flow of blood through your body. This will reduce your risk for blood clots.
■ If you have a catheter that drains urine from your bladder, it may be removed the day or two after your surgery.
■ Your continuous IV fluids will be stopped as soon as you are able to take fluids and medication by mouth without feeling sick.
■ You will have physical and occupational therapy to help you get better. You will be taught exercises that will strengthen your legs.
■ Continue to observe spinal precautions as ordered by your doctor.
Measuring Your Pain

A pain scale helps you measure the amount of pain. On the scale, 0 means no pain, and 10 is the worst pain possible. While in the hospital, you will be asked your level of pain.

You will also be asked what “level of pain” is acceptable. Our goal is to keep you at or below YOUR acceptable level of pain.

My acceptable level of pain is: ___________

You may feel some pain even with medications. Tell your nurse or doctor if medications do not lower the pain. Be sure to tell them if the pain gets worse or changes.

Pain Control

There are many different types of pain control to help take care of your pain and keep you comfortable. Your doctor will choose the method right for you based upon your medical history, how much pain you are having and how fast you are healing. Your surgeon may utilize our pain protocol which includes long- and short-acting pain medications and acetaminophen. For best control, some medications will begin before your surgery.

The goal is to stop the pain before it becomes a problem. The key is to stay ahead of the pain and ask for pain medicine as needed. If your pain becomes too severe, it will be harder get it back under control.
Medications are not the only way to deal with pain after surgery. Try the following ideas:

- Visualization helps take your mind off the pain.
  - Close your eyes and breathe deeply.
  - Picture yourself in a quiet, peaceful place. Imagine how you feel in that place.
  - If other thoughts enter your mind, take a deep breath and try again.
- Progressive body relaxation helps relieve stress and pain.
  - Close your eyes. Tighten your foot muscles.
  - Hold for a few seconds then release.
  - Do it again with the muscles in your calves, then your thighs and work slowly up your body.
- Deep breathing relaxes your whole body.
  - Inhale slowly and deeply as you count to five (5) and exhale slowly through your mouth.

Let your nurse know right away if you are having any of these side effects from medication:

- Nausea, vomiting, diarrhea, lasting constipation or stomach cramps
- Headaches
- Breathing problems or a fast heart rate
- Feeling very tired, sluggish or dizzy
- Itching or skin rash
Post-Surgical Care: Physical Therapy

- After your surgery, you will have a physical therapy (PT) evaluation.
- The physical therapist will evaluate your current abilities including bed mobility, walking, strength and balance.
- The physical therapist will ask you questions about your home set-up and your mobility before surgery.
- The physical therapist will teach you how to safely:
  - Get in and out of bed.
  - Go to and from a chair.
  - Walk or climb stairs.
- You should feel better each day. It is important for you to focus on working towards doing these activities by yourself. Remember that you make the difference in the speed and success of your healing.

**Your participation in your therapy program is vital to your success.**

- There will be some pain as you increase your activities. Pain medication can be scheduled around your therapy times.
- Exercise and movement are important parts of your healing.
- During your hospital stay, you will have daily physical therapy sessions.
- For your safety, the physical therapist may suggest help for you while you walk, such as a walker or a cane.
- Family or friend(s) who will be helping you at home during your healing are encouraged to participate in therapy sessions. Please inform your therapist so your therapy sessions can be scheduled accordingly.
Cervical Spine Surgery Therapy Plan

First day of physical therapy
- Review cervical spinal precautions and neutral spine concept.
- Perform log rolling technique to/from edge of bed with 25% help.
- Stand from bed and walk 50–100 feet with 25% help.
- Practice proper fitting and placement of cervical brace.
- Sit up in chair.

Physical Therapy on day of going home from hospital
- Perform proper log roll technique and maintain cervical precautions.
- Demonstrate ability to put on and take off cervical brace with minimal help of others.
- Understand your assigned physical therapy exercises.
- Walk 100–200 feet with a walker, cane or no device without help of others.
- Climb stairs safely with minimal help.
- Establish family and/or caregiver assistance for return to home.

Cervical Bracing
The Physical Therapist and Occupational Therapist will instruct and educate how to put on and take off your assigned cervical brace according to your Doctor’s orders. You will be instructed how often you will need to wear your brace and when to put on brace for safe mobility.
Cervical Spinal Precautions

Limiting the motion of your neck will help prevent additional stress and strain of your surgically repaired neck. It is very important to follow the listed precautions to avoid further injury of your neck and allow your surgery to heal properly.

**Your surgeon will inform you how long you will have to limit the motion of your neck and what physical activities you are allowed to perform while you are healing.**
Cervical Spine Surgery Therapy Exercises

**Shoulder & Chest Stretch**
Place palm of left hand against door frame and bend elbow as shown. Turn body away form fixed hand until stretch is felt.
Keep neck straight & avoid twisting spine.
Hold for 10-15 seconds.
Repeat 3 times per set.
Do 3 sets per sessions per day.
Do 3 sessions per day.

**Shoulder Blade Pinch & Hold**
Pull arms back, pinching shoulder blades together.
Keep neck straight while pinching shoulders.
Hold for 3-5 seconds.
Relax.
Repeat 10 times per arm.
Do 3 sessions per day.

**Shoulder Rolls**
Roll shoulders forward, making 5 small circles. Then roll shoulders backward, making 5 small circles.
Repeat 10 times. Do 3 sessions per day.

**Warm-Up Shoulder Shrugs**
Raise shoulders toward ears, then slowly lower them down. Repeat motion with smooth movements. Allow your shoulders to relax with rest breaks.
Repeat 10 times per arm.
Do 3 sessions per day.

**Elbow Flexion & Extension**
Place one arm out with palm up. Slowly bend elbow and raise forearm toward shoulder. Then slowly straighten elbow to relax.
Repeat with other arm.
Repeat 10 times with each arm.
Do 3 sessions per day.

**Shoulder Flexion with Arm Raise**
Lift arm from thigh to shoulder height with palm down. Slowly lower arm down to side of body. Repeat with other arm.
Repeat 10 times per arm.
Do 3 sessions per day.
*Lite weight optional

Reference:
www.hep2go.com
Lumbar Spine Surgery Therapy Plan

First day of physical therapy
- Review lumbar spinal precautions and neutral spine concept.
- Perform log rolling technique to/from edge of bed with 50% help.
- Stand from bed and walk 25 – 50 feet with 50% help.
- Practice proper fitting and placement of lumbar brace.
- Begin in bed exercises as instructed by Physical Therapy.

Physical Therapy on day of going home from hospital
- Perform proper log roll technique and maintain lumbar precautions.
- Demonstrate ability to put on and take off lumbar brace with minimal help of others.
- Understand your assigned physical therapy exercises.
- Walk 100 – 200 feet with a walker, cane or no device.
- Climb stairs safely with minimal help.
- Establish family and/or caregiver assistance for return to home.

Lumbar Bracing
The Physical Therapist and Occupational Therapist will instruct and educate how to put on and take off your assigned lumbar brace according to your Doctor’s orders. You will be instructed how often you will need to wear your brace and when to put on brace for safe mobility.
Lumbar Spinal Precautions

Limiting the motion of your back will help prevent additional stress and strain of your surgically repaired back. It is very important to follow the listed precautions to avoid further injury of your back and allow your surgery to heal properly.

**Your surgeon will inform you how long you will have to limit the motion of your back and what physical activities you are allowed to perform while you are healing.**
**Lumbar Spine Surgery Therapy Exercises**

**Knee-to-Chest Stretch**

With hand behind right knee, pull knee in to chest until a comfortable stretch is felt in lower back and buttocks. Keep back relaxed. Hold for 15 seconds. Repeat with left knee.

Repeat 3 times per set. Do 3 sets per session.

Do 3 sessions per day.

**Piriformis Muscle & Low Back Stretch**

Pull right knee towards opposite shoulder until you feel a comfortable stretch across your lateral buttock. Keep back flat on bed. Hold for 15 seconds. Relax. Repeat with left knee.

Repeat 3 times per set. Do 3 sets per session.

Do 3 sessions per day.

**Isometric Abdominal**

Lying on back with knees bent, tighten stomach and keep abdomen firm. Hold 2–3 seconds. Relax then repeat.

Repeat 10 times per set. Do 3 sessions per session.

Do 3 sessions per day.

**Isometric Gluteal**

Tighten buttocks and keep back flat against bed. Press through your heels while tightening buttocks.

Hold 2–3 seconds.

Repeat 10 times. Do 3 sessions per day.

**Standing Heel Raises**

Holding a stable object, rise up on toes. Hold 1–2 seconds. Then rock back on heels while lifting toes and Hold 1–2 seconds. Keep entire spine straight while looking straight ahead.

Repeat 10 times. Do 3 sessions per day.

**Sit --> Stand**

With straight back, tighten stomach, place feet back under chair, lean forward and stand. Push with hands at sides as needed.

Slow rise to fully upright standing posture.

Then slowly lower self back to sitting with hand support.

Repeat 10 times per set.

Do 3 sessions per day.

Reference: www.hep2go.com
Post-Surgical Care: Occupational Therapy

After your surgery, you may have an occupational therapist (OT) talk with you if your doctor determines that you need this service. The occupational therapist will go over your upper body strength, range of motion and your ability to complete your activities of daily living. They will teach you to complete your activities of daily living such as dressing, bathing, toileting, grooming and hygiene, while keeping any activity limitations you may have. The occupational therapist will also ask you questions about your home and bathroom setup.

The occupational therapist will develop a program for you and may suggest special equipment, such as a reacher or a sock aide, to help you progress toward independence. Bring a pair of shorts or loose pants and closed-heel shoes to practice lower body dressing.

Lower Body Dressing

Applying socks

- Slide the sock onto the sock aide.
- Use the cords to place the sock aide on the floor in front of your foot.
- Place foot into the sock aide.
- Pull on cords until sock slips onto your foot and the sock aide is free. Repeat on the other side.
Applying pants/shorts/undergarments

- In sitting position, use a dressing stick or reacher to hold the item by the waist band.
- Lower the item to the floor in front of your leg. Slip the item over one leg first, then over the other leg.
- Pull the item up above your knees using the reacher or dressing stick, stand with a walker and then pull the item up all the way.
## Spine Care: Home Activities

### Sleeping on Back
- Place pillow under knees. A pillow with cervical support is also helpful.

![Sleeping on Back](image)

### Side-Lying in Bed
- To maintain positioning in midline, place pillows between knees and under head.

![Side-Lying in Bed](image)

### Dressing Lower Body
- Cross leg tailor fashion to start clothing over foot. May use dressing aids to assist in pulling up.
- Keep back in neutral position. Avoid arching back or bending.

![Dressing Lower Body](image)

### Grooming and Lower Body Hygiene
- Lie on supportive surface.
- Bring leg toward chest, keeping other leg in position shown (foot flat on bed and knee bent).
- Do not arch back.

![Grooming and Lower Body Hygiene](image)

### Home Activities
- When attempting to reach a lower item bend at your hips and knees.
- Keep your back straight.
- Be cautious when squatting down and standing up.

![Home Activities](image)

### Sitting
- Do not sit on low surfaces or soft seats as this causes additional stress on your spine.
- Your hips should not be lower than your knees. Keep your hips and knees parallel.
- Avoid recliners, rocking chairs and low stools.
- Recommend use of a tall back chair with armrests when possible.

![Sitting](image)
Going Home

Arrangements may be made for outpatient or home health physical therapy as ordered by your surgeon. Patients requiring additional care may be transferred to another healthcare facility for further treatment.

Goals for going home:

- You are able to eat the diet ordered by your surgeon.
- Your stomach is active and bowel movements are returning to normal.
- You are able to use the toilet safely.
- Your surgical wound is clean and dry and you understand your wound care instructions.
- You show safe movement when moving from the bed to the chair, standing, walking, climbing stairs without help, and performing home exercises and activities of daily living by yourself.
- You understand your medication schedule.
- You understand your discharge instructions.
- You understand your resources in your home, family and community, including those necessary in case of an emergency.

Questions to ask your doctor when getting ready to go home:

- What type of diet should I follow?
- How much and what type of activity can I do?
- What medications do I need to be taking?
- When can I drive?
- When do I need to come back for follow-up appointments?
- When and where should I call for medical advice if I experience problems?
- Can I get a return to work slip (if needed)?
- When can I take a bath or shower?
- What special equipment do I need at home?
- Where can I buy medical supplies?
- When can I resume sexual relations?
Going Home Process

You will be visited by a social worker or case manager to talk about your physical therapy and/or medical care needs after leaving the hospital.

Most patients can discharge to home. If you are not able to meet the medical criteria for home management and safety, your Spine Care Team member will provide names and telephone numbers of places that can be hired for added care at home or at a Rehabilitation Facility.

- The Spine Care Team will make sure you have the equipment you need at home.
- Please note that if you are being sent to another facility for added therapy, your choices can be limited based on what your insurance carrier covers, and they will provide equipment.
- **Your Spine Care Team members will include you in the decision-making process and will ensure that you get the care you need.**

If you and your Spine Care Team determine that you are ready to go home, written instructions will be given to you and the nurse will talk with you about the instructions.

- You may receive prescriptions for medications that you need to fill.
- Follow-up doctor appointments will be explained to you or may be made prior to your leaving the hospital.
- You will be asked to sign a form that states you understand and are willing to follow the outlined instructions.
- You should have your transport or support person get there early so they may also listen to the instructions.

**Please note**

- Vehicles such as Recreational Vehicles and SUVs (Sport Utility Vehicle) are tall and it may be hard for you to climb in and out of. Traveling home in a sedan may be easier for you.
- Do not drive until your doctor gives you permission. This is usually about four weeks after surgery. Long distance travel should be minimal for the first 6–8 weeks and include many stops where you can get out and walk.
Things To Know At Home

Pain management at home
Once you are home, you may have some pain. When it comes to pain management, the tips you learned in the hospital also work at home. To get the best pain relief possible, remember these points:

- Use your pain medications as directed.
  - Take only the medications that your healthcare provider tells you to take.
  - Take pain medications with some food to avoid an upset stomach.
  - Call surgeon if pain is not relieved by medication.
- Remember that medications need time to work.
  - Consider alternatives to medications (see pages 26–27 for more information).
  - Most pain relievers taken by mouth need at least 20–30 minutes to take effect.
  - Take pain medication at regular times as directed. Do not wait until the pain gets bad to take pain medicine.
  - Once you become more active, and as your pain lessens, try taking less medication.
- Time your medication so that you take it before starting an activity, such as dressing, exercising or sitting at the table for dinner.
  - Keep a log of when you take your medicines so that you can keep track of when your next dose may be due.
  - Taking your medication at night may help you get a good night's rest.
- Avoid wearing tight fitting clothes over the incision as this can increase pain.
- Avoid drinking alcohol while taking pain medication as this combination can cause dizziness and slow your breathing. It can even be fatal.
  - Avoid driving or operating machinery while taking pain medication.

Bowel health
Constipation is a common side effect after surgery and with some pain medications. It is also preventable. Please be proactive about your bowel regimen. Tips to reduce your chances of constipation include:

- Eating fruits, vegetables and other high fiber foods.
- Being diligent about water intake.
- Consider over-the-counter laxatives if these efforts are ineffective. Check with your surgeon if you need suggestions.

Your doctor and surgeon want you on the road to recovery as quickly as possible. Please feel free to call them with any questions you may have. For more information about dietary guidelines, go to: ChooseMyPlate.gov.
**Lung health**

While you are regaining strength and endurance, your lungs are at risk for pneumonia and infection. Inactivity and shallow breathing can put you at risk for pneumonia and other lung infections. Continue deep breathing exercises and incentive spirometer use at home.

**Protect your spine**

- Avoid lifting heavy objects more than 10 pounds (no more than a gallon of milk) for 6–12 weeks after your surgery to protect your spine from injury.
- Follow precautions taught to you during your hospital stay.
- Continue strengthening exercises as instructed.

**Wound health**

Keep your wound clean and dry. You will most likely go home with an occlusive dressing over your incision. As long as this dressing is intact and in place, you are allowed to shower. You may shower without a dressing when permitted by your surgeon. Avoid taking baths, swimming or being in a jacuzzi until cleared by your surgeon. Soaking in tubs increases the risk for infections.

**Contact your surgeon if you have any of the following:**

- A fever of 100.4°F or higher.
- New or more redness at your surgical incision site.
- More pain that does not get better with rest and is not because of more activity or physical therapy.
- Drainage of any amount from your wound several days after going home from the hospital.
- Medical conditions that you already had that get worse, such as blood sugar or blood pressure levels are too high.
- Chest pain, palpitations (a “pounding heart”), difficulty breathing or fainting episodes.

**These symptoms are a medical emergency, dial 911 for immediate care.**

**Blood clot prevention**

Firm swelling in the back of the calf, knee and/or thigh is a possible blood clot (called a deep vein thrombosis or DVT). After your surgery, you remain at risk of blood clots for about a month. Notify your surgeon if you experience such symptoms. Strategies to prevent blood clots include walking frequently and performing ankle pumps when in bed or sitting for extended periods of time.
Restrictions After Surgery

After Cervical Surgery
The following restrictions may apply to patients that have had cervical surgery. Continue these restrictions until your physician releases you to full activity.

1. No lifting more than ___ lbs.
2. No pushing / pulling more than ___ lbs.
3. No raising arms more than ___ degrees.
4. Head of Bed elevation: no more than ___ degrees.

After Lumbar Surgery
The following restrictions may apply to patients that have had lumbar surgery. Continue these restrictions until your physician releases you to full activity.

1. No lifting or carrying more than ___ lbs.
2. No pushing / pulling more than ___ lbs.
3. No sitting more than ___ minutes.
4. Head of Bed elevation: no more than ___ degrees.
Tell Us About Your Experience

Your comments are important to us

Following your visit with us, you may receive a survey asking about your experience with Palomar Health. We value your feedback and look forward to receiving your response.

If you have an experience you would like to share with us about your visit to Palomar Health, please contact us directly by calling 760.740.6345 or by emailing ContactUs@PalomarHealth.org.

It is our privilege to serve you.
Medication List

Please include all medications you take. This includes all prescription, over the counter, topical ointments/patches, eye drops, herbs, vitamins or other supplements.

Patient's Name: __________________________________________________  Date: ______________
(Please Print)

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<th>Purpose (Why do you take it?)</th>
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*Please list all allergies (environmental, dietary, metal, etc.).