NORTHERN ARIZONA HEALTHCARE

Spine Surgery Guidebook

The Ultimate Guide to Your Spine Surgery

Improving health, healing people.

Always better care.
Every person, every time...**together.**

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Welcome

Welcome to Northern Arizona Healthcare's Orthopedic & Spine Institute!

The spine surgery program you are about to enter will give you specialty care throughout your spine surgery journey. We want to help you improve your quality of life by giving you personalized care.

Our goal is to help you live with greater independence and movement.

In order to do this, we focus on four major points:

- Helpful and timely education
- Living a life of wellness
- High motivation of patient and helper(s)
- Attentive and dedicated staff

Meet your team

Your health care team includes your spine surgeon and office staff, anesthesiologist, operating room staff, nurse navigator, spine-trained nursing staff, physical and occupational therapists, and care coordination experts. Your overall care and wellness during your spine surgery experience is important to us, so it is a group effort between the medical team, laboratory, radiology and environmental and nutrition services. Our team will follow you throughout your stay and after discharge to help you have a successful recovery experience.

If you have any questions or comments, please call the nurse navigator in Flagstaff at **928-213-6433**, email **JRPSpineRN@NAHealth.com**, or call your spine surgeon's office. We look forward to meeting you and your helper(s) and welcoming you to our program. Thank you for letting us help you with better bone and spine health.

Sincerely,

Northern Arizona Healthcare
Orthopedic & Spine Institute

Purpose of the Guidebook

The purpose of this Guidebook is to start you off in the right direction, answer your questions and address any concerns.

Preparation, education, seamless care and a pre-planned discharge are important for ideal spine surgery results. This Guidebook is a teaching tool for you and your helpers. In reading this entire Guidebook and attending the pre-operative spine class, you and your helpers will be well prepared for great results. See the colored boxes in the Guidebook for reminders, tips and more resources.

We want you to know:

- What to expect every step of the way.
- What you need to do.
- How to care for your spine for life.

Please remember, this is just a guide.

Your surgeon, nurse navigator, therapists and/or care coordinator may need to work with you one-on-one to help build a plan for your best outcomes. Always listen to their advice and tips. Bring your Guidebook with you to the hospital and keep it as a handy tool for the first year after your surgery.

Helpful Reminders

You will be required to attend the Spine Surgery Class before surgery. The in-person class is highly recommended.

In-person class: Email JRPSpineRN@NAHealth.com if you are not yet scheduled.

Online class: If unable to attend in-person, use the QR code to find the website quickly.

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You can also type the link: **https://www.bit.ly/NAHJoint**

The online class works best with Google Chrome, Mozilla Firefox or Microsoft Edge internet browsers.

Tips

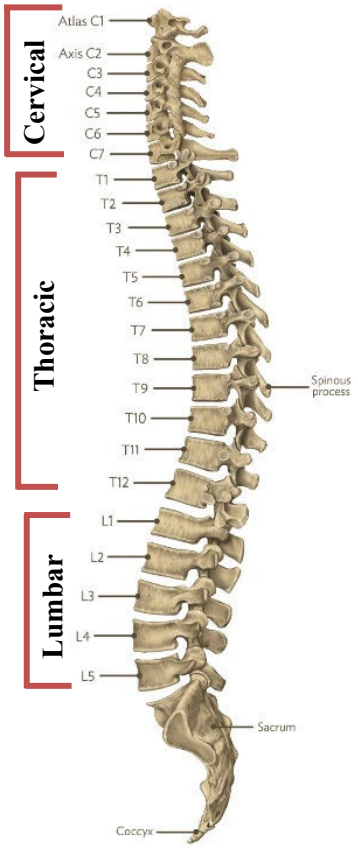
You will find tips in the green boxes. Remember, these are only suggestions. Please ask your spine surgeon, therapists or nurse navigator if you have any questions.

Frequently asked questions: lumbar, thoracic and cervical spine

Below is a list of the most commonly asked questions, along with their answers. If you have more questions, please ask your spine surgeon or nurse navigator.

What are the most common causes of back pain?

The most common causes of back pain are muscle injury and arthritis of the spine. Muscle injury can be caused from a specific event or simply because the muscles that support the trunk have become weak. Arthritis is a result of aging, genetics, or wear and tear on the joints and discs of the spine. Wear and tear alone can cause back pain and may cause leg pain if nerves are affected.



What causes neck pain?

The most common cause of neck pain is strain on the muscles and ligaments that support the neck. This pain can be due to overuse, poor posture or minor injuries. This type of pain often stops within a few days. Arthritis is another cause of cervical pain. As we age, the joints in our neck may develop arthritis that is like the degeneration that develops in other major joints, such as the hips and knees. In the same way, the shock absorbers of the neck, the discs, may degenerate. As this gets worse, the discs become dry and cause pain. Fractures, tumors or infections of the cervical spine can also cause pain.

Why does my spine surgeon choose the front or the back of the neck for cervical surgery?

Approaching your neck through the front may cause less muscle injury and tends to be less painful. Going through the back of the neck is necessary at times, but is more painful because there is more involvement of the muscle. Your spine surgeon will know which surgery is best for you.

What are the risks of spine surgery?

Many of the risks of spine surgery are the same as with any type of surgery. Risks include blood clots, bleeding, infection, damage to nerves or vessels, scarring, pain, and the risk of the anesthesia itself. However, these risks are all low and not common.

Other risks may include cerebral spinal fluid leak, failure of fusion, nerve injury, spinal cord injury, trouble swallowing, hoarseness of voice and the risks of the general anesthetic.

How long will I be in the hospital?

The time spent in the hospital will depend on the procedure you have. However, some patients go home the same day as surgery, and many go home the next day.

What activity level should I expect after surgery?

You should restart low-impact activities as soon as you can. *Walking is the best exercise*. Try to walk longer distances, slowly over time. A therapist will work with you before discharging home. Talk to your spine surgeon before starting more activities.

Please use ice packs to help with pain relief and swelling. Do not put ice directly on the skin. Ice for about 20 minutes at a time.

What should I avoid after surgery?

We use the acronym to remember movements to avoid: avoid a **BLT** with a double side of **P**ickles. Do not:

- **B**end over
- **L**ift more than 10 pounds
- **T**wist the spine
- no **P**ushing or **P**ulling

Avoid reaching above your head. No high impact activities. Always ask your spine surgeon about activities before doing them.

Why should I quit smoking before surgery?

Many surgeons tell their patients to stop smoking before surgery and to think about quitting for good. Tobacco products have a negative effect on blood vessels, which can limit the body's ability to heal wounds and bones. The risk of infection and lung problems after surgery is also greater for patients who use tobacco. Many helpful sources of information are available to help people quit smoking.

Will I need help at home?

You will need someone to help you for a few days to a few weeks after your hospital stay. The length of time help is needed depends on your progress. You will need someone to help you with meal preparations, house cleaning and your activities of daily living. If you prepare before your surgery, you can reduce the amount of extra help you will need. It is best to have the laundry done, house cleaned, yard work done, clean linens put on the bed and single-portion frozen meals made.

Will I need to wear a brace after surgery?

Most spine surgery patients do not need a back brace. If your spine surgeon tells you to wear a brace after surgery, they will order the brace. Your surgeon will decide whether you need to wear a brace and for how long.

Please ask questions at any time.

Use the following space for more questions:

Before your surgery checklist

Complete this checklist to be ready for your surgery.

☐ **Step 1**

Know your surgery date and time. Your surgeon's office will tell you the surgery date only. You will receive a pre-admissions phone call one-to-two weeks before your surgery. This nurse will also provide you with a tentative surgery time. The time may change, so you will receive another phone call one to two business days before surgery to give you the final check-in time.
If you have questions about your surgery date and time, you may call 928-773-2048.

☐ **Step 2**

Attend the pre-operative spine class. Complete the class one-to-four weeks before surgery. We highly recommend attending in-person for personalized education related to your surgery type and surgeon. Please email JRPSpineRN@NAHealth.com or call your navigator to get more information for the in-person class. If you are unable to attend in-person, find the online class at the following link: **https://www.bit.ly/NAHJoint** or scan the QR code. The link works best with Google Chrome, Mozilla Firefox or Microsoft Edge internet browsers.

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☐ **Step 3**

Start asking people to help care for you for the first couple weeks, or more, after surgery. This may include people traveling to town to help you, creating a rotation of helpers or paying a private caregiver. Research shows that going home is the best place for you to recover.

☐ **Step 4**

Prepare your home. Prepare your home for your return from the hospital. Remove throw rugs and tack down loose carpeting. Remove electrical cords and other obstacles from walkways. Install night-lights in bathrooms and hallways. Prepare meals at home that can easily be reheated. Set up any adaptive equipment (elevated toilet seat, shower chair, grab bars, etc.)

☐ **Step 5**

Stop all vitamins and herbal supplements seven days before surgery. You will receive other medication instructions during your pre-admissions phone call/appointment.

☐ **Step 6**

Pack the following for your hospital stay:

- ☐ Insurance cards
- ☐ Copy of advanced directive (if you have this)
- ☐ Your Guidebook
- ☐ Personal hygiene items
- ☐ Home CPAP/BiPAP machine (if told to bring)
- ☐ Glasses, hearing aids and dentures with your name on containers
- ☐ A few loose-fitting shirts, stretchable pants or shorts, undergarments, and closed-back walking/gym shoes with or without laces.
- ☐ Your front-wheeled walker, if directed (not a four-wheeled walker), and any adaptive equipment purchased
- ☐ Do not bring valuable items, such as: jewelry, a large amount of money or medications (unless told by your care team). Weapons are not permitted on our campuses.

☐ **Step 7**

Follow the pre-operative instructions. Please review and carefully follow the pre-operative instructions you received from your pre-admissions appointment. The instructions will include using special shower soap/wipes before surgery.

☐ **Step 8**

Carefully follow fasting and food/drink instructions. This is important to avoid problems or cancellations of your surgery.

Tips

Prepare yourself for surgery; your life depends on it.

- **Stop smoking** as smoking slows healing and increases risk of infection. For help and safe weaning tips contact:
  - Coconino County Health Department 928-679-7222.
  - Yavapai County Health Department 928-639-8130.
  - CDC Free Coaching 1-800-QUIT-NOW (1-800-784-8669).
- **Stop drinking** alcohol as it can mix poorly with anesthesia, cause bleeding or dehydrate you. For help and safe weaning tips contact:
  - Flagstaff Guidance Center 928-527-1899.
  - Cottonwood Spectrum Healthcare 928-634-2236.
  - National Council on Alcoholism and Drug Dependence 1-800-NCA-CALL (1-800-622-2255).
- **Do you need help** with housing/shelter, expenses/utilities, food, disaster recovery, mental health, transportation, etc.? Dial 211 or visit 211arizona.org.
- Ask your nurse navigator for a local community resource guide, including places to find discounted equipment.

Hospital maps

Flagstaff Medical Center
1200 N. Beaver St., Flagstaff, Arizona 86001

Pre-operative spine class

The purpose of this class is to prepare you and your helpers for this surgery.

You are required to attend the pre-operative spine class one-to-four weeks before your surgery. Your surgery may be postponed if you do not complete the class and prepare yourself. We recommend coming to the in-person class with your helper, if possible.

Benefits of the in-person class. You will:

- Set yourself up for the best recovery possible.
- Complete pre-op testing in one stop (you **must** request this).
- Experience lower anxiety and worry levels.
- Learn ways to prepare your body/home/helper.
- Create a safe recovery plan with your team.
- See where to go on your day of surgery.
- Meet your care team.
- Be able to ask questions in real-time.
- Receive personalized information.

If you or your helper are unable to attend in person, the online class can be found at the following link: **https://www.bit.ly/NAHJoint** or by scanning the **QR code on page 6**. It is available any time and you can take the class as many times as you would like. It works best with Chrome, Firefox or Edge browsers.

The class format is as follows:
● Nursing presentation. ● Physical therapist presentation. ● Occupational therapist presentation.

Please include your helper(s) when watching the class so they can hear the same information you do. This will prepare them to best help you during your recovery.

In-person classes are offered in Flagstaff. You may be scheduled to complete your pre-operative testing before or after the in-person class (urine, MRSA nasal swab, non-fasting blood work and an electrocardiogram). If coming to the in-person class, bring the following:
☐ The person who will help you after surgery
☐ This Guidebook

If you have any questions regarding the pre-operative class information, contact the nurse navigator at 928-213-6433 or email JRPSpineRN@NAHealth.com.

Daily events/schedule

Evening before surgery

- Shower the evening before surgery with the soap/wipes you received from the office or in the mail.
- Do not eat solid foods or drink dairy products/juices with pulp after midnight.

Surgery day

- In the morning, complete your final shower with the special soap/wipes at home.
- Follow the instructions you were given that tell you which medications, if any, are OK to take with a sip of water.
- Arrive to the pre-op waiting room at the time given to you on your instructions.
- Wait in the holding area, meet the anesthesiologist and see your spine surgeon.
- Go to the operating room.
- Wake up in the recovery room; your helper(s) will be updated.
- Sequential compression devices (SCDs) placed around your calves or feet. They gently squeeze your muscles. This improves blood flow to help prevent blood clots in your legs.
- Transfer to your room or complete your stay in the recovery room and then discharge home.
- Increase diet as you can tolerate, starting off with ice chips or clear liquids.
- Pain will be lowered (*not* eliminated) with oral and/or IV medications. Communication with your nursing staff is important for pain management.
- Sit at edge of bed, stand, or transfer to a chair with the help of a therapist or nursing staff (if medically stable). Your spine surgeon may tell you if a straight back chair or recliner is OK after surgery.
- Vital signs will be taken frequently; you may rest in the chair for the evening.

First day after surgery/discharge day

- Lab work will be taken early in the morning.
- With help, get up to sit in the chair before breakfast arrives. Always call for help before moving.
- See and talk to the physician assistant and/or spine surgeon.
- Eat breakfast sitting up in the chair (if allowed). Rest and ice. Do ankle pumps.
- If your spine surgeon orders, a therapist will work with you. This may include physical therapy and/or occupational therapy.
- Eat lunch sitting up in the chair. Rest and ice. Do ankle pumps.
- Discharge home when allowed by your medical team.

Discharge day

- Your spine surgeon and/or your physician assistant will write discharge instructions and talk about them with you. Plan to go home with a helper staying with you for the first couple weeks or more. Your helper can help with light activities at home.
- When going home, your discharge time may be late morning to afternoon. Please plan and talk with your helper to have a ride home ready, before your surgery. You are invited to wait in the discharge lounge until your ride arrives.
- New prescriptions may be filled at our retail pharmacy for your ease. Plan to bring cash or card to pay for what insurance may not cover.

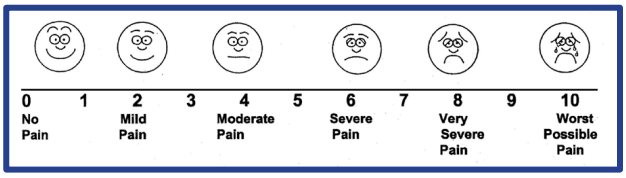
Plan to discharge home the day of surgery or the day after surgery.

Call! Don't fall!

After your surgery, there is a greater chance of falling when you move. Do not get out of bed or up from the chair by yourself. We will help you move from the bed to the chair or to the bathroom. There will be a call light within reach to use to call for help. At home, let your helper make sure the path is clear before walking. Sit in a chair or lie down if you feel lightheaded or dizzy.

Managing your pain

You will have pain after surgery. Everyone handles pain differently. Expect some discomfort/pain after your surgery. While you are in the hospital, open communication between you and your health care team is the **key** to better pain management. Our goal is to lower your pain to a level you can tolerate. We may use a number scale, as seen below, to help better communicate your pain level. Let your care team or helper know if your pain level increases, so they can help lower your pain with medications, positioning, cold therapy and/or relaxation techniques.



Ice is very important in helping with pain management and reducing swelling. Apply ice 20 minutes, many times per day, especially the first three days. After the first three days, ice when you have increased pain. Use ice as needed the first year after surgery.

Coughing and deep breathing

You will receive directions to take deep breaths **10 times every hour** while awake, with a device called an incentive spirometer. You will learn more about the importance of coughing and deep breathing while in the hospital. These activities will help fully open your lungs and avoid post-operative respiratory infections. Use your incentive spirometer for one-to-two weeks after you are discharged from the hospital.

Post-operative activity

You may have physical and/or occupational therapy sessions while you are in the hospital. After surgery, you will begin walking and practicing activities of daily living while protecting your spine.

Depending on our visitor rules, please have a helper at one of these sessions so they understand your exercises as well.

Activity guidelines

Keeping your back healthy will take some work on your part. Your spine surgeon will want you to walk as your number one exercise. Do not go to outpatient therapy unless ordered by your spine surgeon, this may be 6 to 12 weeks after surgery. Always check with your spine surgeon before you start an exercise program. If you have a lot of pain doing an exercise, **STOP**. Be sure to follow your spine precautions/limits given to you by your spine surgeon and health care team.

General activities

- **Most spine patients need to follow spine precautions.** Remember the acronym; avoid a **BLT** with a double side of **p**ickles. That means no:
  - **B**ending
  - **L**ifting
  - **T**wisting
  - **P**ushing and **P**ulling

Your spine surgeon will give you instructions.

- Walking is the best exercise. Start the night of surgery and focus on many short walks, at least four times a day. Increase your walking distance slowly as your pain level gets better.
- Log roll when getting in and out of bed.
- Limit your sitting time and use a straight back chair. You may use a recliner if approved by your health care team.
- Change your body position every 45 minutes.
- Shower as your spine surgeon gives you the OK.
- Ask your spine surgeon when you can start driving. It is illegal and dangerous to drive while taking prescription pain medication.

Safety is first. Your spine surgeon and/or therapists must give you the okay before doing any exercises.

Exercise options

- Regular walks
- Home treadmill, without incline
- Ankle pumps, 20 times every hour while awake (toes up, heels up)

Exercises to avoid

- Do not run or do high-impact activities.
- Do not do high-risk sports such as downhill skiing, sky diving or mountain biking, etc.
- Golf should be okayed by your spine surgeon.

Activities of daily living

Using a walker

- Many spine patients do not need to use a front-wheeled walker. Occasionally your spine surgeon or therapist will recommend a walker for safety.
- Front-wheeled walkers are the only walkers safe for this surgery.
- Before walking, make sure you are balanced and not light-headed.

Step 1: Move the walker one step in front of you.
Step 2: Step forward with one leg.
Step 3: Follow through with your other leg.

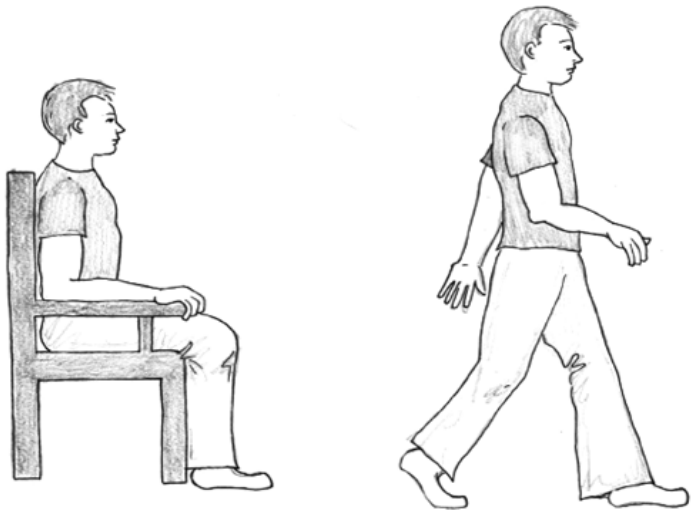
Tips

- Allow your arms to take some of the weight off when you are standing on one leg.
- Keep your home safe for walker use: remove rugs, have well-lit rooms, minimize electrical cords and move unnecessary furniture.
- Be sure to search for a front-wheeled walker appropriate to your height and/or weight:
  - Patients 5'4" or less, use a junior walker.
  - Patients 5'4"-6'5," use an adult walker.
  - Patients greater than 6'5" or greater than 300 pounds, use a bariatric walker.
- Keep your body positioned between the back two legs of the walker.

Spine precautions

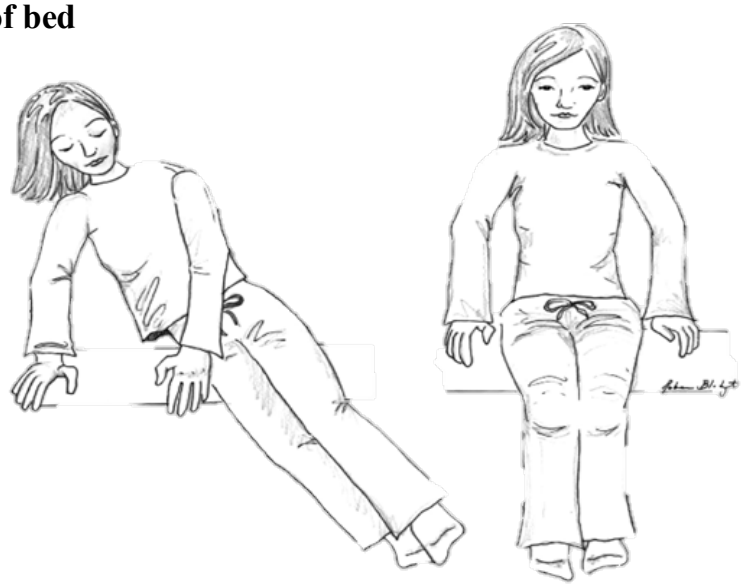
Avoid **b**ending, **l**ifting, **t**wisting, **p**ushing and **p**ulling. (**BLT** with double side of **P**ickles)

Change position every 45 minutes



Log Roll

Getting in and out of bed



Tip

If needed, raise the surfaces you sit on using a toilet riser or chair riser, so your hips are above your knees. The lower the seat, the harder it is to stand up.

Discharge planning

Discharge planning is an important part of your education. The hospital provides a safe place for patients. Going home may lead to feelings of fear or doubt. To look after your home needs, your medical team will follow your improvement and help with all the arrangements needed, including guiding you to the right equipment. You may think about staying at a helper's home or a hotel for the first week if you have an outdoor bathroom, numerous stairs or do not have running water or electricity.

Depending on your spine surgeon, you may need to have outpatient therapy or home health therapy after discharge. If your spine surgeon directs you to set up outpatient therapy, you **must** do so. You may choose a therapy location close to your home.

Our team will help make your discharge and move back home as smooth as possible. **Most patients will go directly home after discharge.**

The nursing and therapy staff will give you verbal and written discharge instructions before you leave the hospital. These instructions will cover activities, follow-up appointments and home medications. Please ask your nurse and therapists any questions you may have about the discharge instructions. It is important you and your helper read over the written instructions word for word.

After your spine surgery, it is essential to follow up with your surgeon on a regular basis.

Tip

Nutrition is very important for wound healing. It is recommended to drink a nutritional shake, with increased levels of protein, twice a day for one week before surgery and one week after surgery. A few choices include Ricochet, Nestle IMPACT Advanced Recovery, and Ensure Surgery Immunonutrition Shakes.

Be on the look out

1. **Tell your spine surgeon if:**
   - You have a fever greater than 100.4 F.
   - You have new pain in the calf of your leg (this can be a sign of a blood clot).
   - You have persistent, severe pain or swelling at the operation site after using pain medications or pain reduction methods.
   - You observe a change in the surgery site: increased or persistent drainage, change in color and odor of drainage, or incision site opens up.
   - New or worsening numbness or tingling, pain or weakness.
   - Loss of bladder or bowel control.
   - Chest pain, difficulty catching your breath (call 911).

2. **Prevent blood clots** with walking and ankle pumps. Do 20 ankle pumps every hour you are awake. If your spine surgeon orders, you may be required to wear compression socks after surgery.

3. **Take the prescribed pain medication as directed** by your spine surgeon. If you are extremely sleepy, have shallow breathing, a slow heartbeat, or feel lightheaded like you might pass out, seek help and do not take more pain medication. Write down when you take medications. Remember, pain medication can take 30 to 45 minutes to start working. As the pain lessens, take less pain medication.
   Use ice for pain control, no longer than 20 minutes per spot each hour.

4. **Avoid constipation** by eating foods high in fiber, by drinking plenty of fluids and walking. Foods high in fiber include prunes, fruits, vegetables, whole grains and beans. Pain medications can cause constipation so you may use over the counter stool softeners or laxatives as needed. You may not feel hungry. Drink plenty of fluids such as water, juice, milk, protein shakes and light soups to keep from getting dehydrated. Your appetite will return.

5. **You may have difficulty sleeping**. This is common. Avoid sleeping or napping too much during the day. You may have lower energy levels for the first month. Do not take sleeping medication **within six hours** of taking a pain medication. This can make you too sleepy, causing a medical emergency.

Medication log

Use a medication log after surgery to prevent medication errors. You may not have been prescribed a medication for each category listed below. Use the 'Other' columns to fill in any over-the-counter or routine medications you take.

Medication type	Example	Blood clot prevention (if ordered)	Antibiotic (if ordered)	Pain management	Stool softener/ laxative	Other	Other
Medication dose frequency	Oxycodone 5-10 mg As needed, Every 6 hrs						
Date time	5/25 8 a.m.				Start evening on surgery day		
	5/25 8 p.m.						
	5/26 3 a.m.						
	5/26 12 p.m.						

Notes from the spine surgery class

Thank you for trusting us with your care.

Northern Arizona Healthcare