



Dear Patient,

Welcome to Michigan Medicine and thank you for choosing the Department of Neurosurgery for your upcoming spine surgery.

We know that making the decision to proceed with surgery can be challenging. The information in this folder is intended to provide a thorough overview of what you can expect before and after your surgery. Please read it carefully and refer to it frequently. It is our hope that this guide will provide answers to many of the questions you may have as you prepare for and undergo surgery, and will ultimately help ensure that your entire experience is a positive and successful one.

We want you to be an active participant in your treatment and recovery. As your spine surgery provider, it is our goal to partner with you to ensure the best surgical experience and outcome possible. For your convenience, our neurosurgery staff are available to assist you 24 hours per day at 734-936-7010.

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Pre-operative instructions for adult patients undergoing spinal fusion

Patient: _____

Surgeon: _____

NP/RN: _____

Surgery date: _____

Surgery: _____



Arrival time for surgery:

One business day before surgery, call 866-936-8800 between 7:30 a.m. and 11 a.m. Leave your name and phone number. This is a confidential voicemail.

Your call date: _____

A nurse will return your call between 7:30 a.m. and 4:30 p.m. and provide your: time of arrival, time of surgery, time of last solid food, time of last water, and place to arrive at the hospital.

Your arrival time for surgery: _____



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Pre-operative patient checklist

Attend

- Attend the spine patient education class.

Read

- Read “about your spinal fusion” educational folder/materials before surgery
- Bring this folder with you to the hospital, including the blue pre-admission type and screen information (given to you at your pre-operative history and physical appointment).

Plan

- Plan for a caregiver/coach and transportation for at least one week after being discharged home from the hospital.
- Arrange for transportation home after your surgery based on the estimated length of hospital stay that was discussed at your pre-op clinic visit.
- If you do not already have your first post-op visit scheduled before surgery, please call your surgeon’s office to arrange.

Stop

- One week before surgery, stop taking the over-the-counter medications listed on page 8.
- DO NOT stop taking your **prescription** medications unless instructed to do so at your pre-op appointment.

Call

- **One business day** before your surgery, call 866-936-8800 between 7:30 a.m. and 11 a.m. to learn what time to arrive at the hospital for surgery.
- If your surgery is on a Monday, call the Friday before your surgery.



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Pre-operative patient checklist (continued)

Bring

- Bring a small bag to the hospital on the day of your surgery.
 - It should include:
 - legal photo I.D.
 - insurance card
 - copy of your advance directive
 - list of all current prescription medications and over-the-counter medications (including dosages)
 - non-slip, flat, supportive shoes
 - eyeglasses (not contact lenses).
 - You may choose to include:
 - personal toiletries
 - cell phone/charger
 - book(s); magazine(s); and/or other items to occupy your time.
- If you have sleep apnea, please bring your CPAP device with you.
- Do not bring:
 - any medications (unless directed to do so by neurosurgery staff),
 - valuables (including jewelry)
 - credit cards

Wash

- To help prevent infection, please wash your entire body, especially your back, with antibacterial soap and water on the day of surgery.

Arrive

- Arrive at the hospital 15 minutes before your appointment to allow time for parking and getting to the surgery check-in area.



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How should I prepare for my surgery?

Start preparing several weeks ahead of time. This will help reduce risks and complications while improving your overall experience.

→ Find a support person and “coach”

Identify and ask a family member or friend to help you in the hospital and at home.

This person must be available to:

- Attend the pre-op class with you
- Bring you to the hospital on the day of surgery
- Learn about your discharge instructions
- Take you home from the hospital
- Help at home with everyday activities
- Drive you to post-op appointments

You may have more than one coach, if one person is not available for all of these activities.

→ If you smoke - stop

It is mandatory that you stop smoking before surgery. Smoking interferes with healing, increases the risk of infection, and can prevent the fusion process from occurring.

- This includes cigarettes and any type of nicotine replacement (gum, vape, patch, etc.)

→ Take action to reduce the risk for constipation after the surgery

Anesthesia, decreased mobility, and pain medications all increase the chance of constipation following surgery.

If you have trouble with constipation, please be sure to begin an over the counter stool softener prior to surgery. Ideally, you should have a bowel movement at least 24 hours prior to your surgery.

→ Obtain surgical clearance (if needed)

Depending on your medical history, you may need to see a specialist such as a cardiologist or pulmonologist before surgery. We will inform you if this is required. Some specialists will require an updated office visit with them if you have not been evaluated recently.



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How should I prepare for surgery? (continued)

→ Take care of your medical leave paperwork

If you are planning to take time off under the FMLA (Family Medical Leave Absence) or another form of a leave from work, ask your employer for the right forms. Bring or fax the forms to the Neurosurgery clinic before surgery at 734-936-9294.

- Please plan ahead and allow up to seven (7) business days for paperwork to be completed.
- Your paperwork will not be filled out while you are inpatient.

→ Make arrangements for accommodations

If you do not live in the area, you may want to make plans to stay locally the day before surgery, or for your coach while you are hospitalized.

- Our Patient & Visitor Accommodation Program can help patients and their families make area hotel reservations at a discounted rate. Available 7 a.m. – 11 p.m. at 800-544-8684.
- The Med-Inn, a hotel attached to the hospital, is also an option, but rooms fill up quickly. Med-Inn's contact number is 734-936-0100.

→ Consider your post-surgery care options

Ideally, we would like you to go home with the support of your coach(es) after surgery.

- If you cannot find a support coach, or if you are having difficulty moving and completing basic tasks and your insurance permits, a brief stay in a short-term rehabilitation facility (also called a Skilled Nursing Facility or SNF) may be beneficial.
- If your planned surgery is very large, your surgeon may tell you that going to a rehabilitation facility would be safest for your recovery.



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Seven (7) days before surgery

Stop taking:

- Herbal supplements, vitamins, and weight loss products.
- All recreational drugs (e.g., heroin, cocaine, marijuana, LSD, methamphetamine, etc.).
- All medications listed in the table below (these medications may cause you to bleed more easily).

Continue taking your other medications (unless your doctor tells you to stop).

Actron®	Cope®	Indocin®	Oruvail® (Ketoprofen)
Advil® (Ibuprofen)	Daypro® (Oxaprozin)	Lodine® (Etodolac)	Pamprin - IB®
Aleve® (Naproxen)	Disalcid® (Salsalate)	Meclomen®	Pepto-Bismol®
Anaprox® (Naproxen)	Dolobid®	Medipren® (Ibuprofen)	Percodan®
Anacin®	Doan's®	Meloxicam® (Mobic)	Ponstel®
Ansaid® (Flurbiprofen)	Easprin®	Motrin® (Ibuprofen)	Ralfen® (Nabumetone)
Aspirin	Empirin®	Nalfon® (Fenoprofen)	Rufen® (Ibuprofen)
Ascriptin® (Coated Aspirin)	Ecotrin®	Midol® (Ibuprofen)	Salfex®
Arthrotec® (Diclofenac)	Etodolac	Naprelan® (Naproxen)	Suprol®
Bayer Aspirin®	Excedrin®	Naprosyn® (Naproxen)	Tolectin® (Tolmetin)
Bufferin®	Feldene® (Piroxicam)	Naproxen	Trilisate® (Salicylate)
Butazolodin®	Fiornal®	Nuprin® (Ibuprofen)	Vanquish®
Cataflam® (Diclofenac)	Haltran® (Ibuprofen)	Orudis KT®	Voltaren® (Diclofenac)
Clinoril® (Sulindac)	Ibuprofen	Orudis® (Ketoprofen)	

Seven (7) days before surgery (continued)

Prescription blood thinners

You will receive specific instructions at your pre-operative history and physical appointment about how and when to stop these blood-thinning medications, such as:

- Coumadin® (Warfarin)
- Plavix®
- Aggrenox®
- Pradaxa®
- Fondaparinux® (Arixtra)
- Eliquis® (Apixaban)
- Xarelto® (Rivaroxaban)
- Lovenox®
- Aspirin prescribed by your doctor
- Any other prescription blood thinners

Tylenol®

To help manage your pain before surgery, you may take Tylenol® (Acetaminophen). Tylenol® does not thin your blood. Some recommended ways to take Tylenol® are listed below. Choose **one** of the following:

- 500 mg (1 tablet every 4 hours or 2 tablets every 8 hours)
- 325 mg (2 tablets every 6 hours)
- 650 mg (1 tablet every 6 hours)

Tylenol® will also be an important part of your pain management after surgery.

Do not take more than 3000mg of Tylenol (Acetaminophen) daily.

Warning: Some opioid pain medications also contain acetaminophen in addition to the opioid; check the label to see if your medication contains acetaminophen. Exceeding 3000mg daily can cause serious injury to your liver and kidneys.



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What can I expect during my hospital stay?

- The inpatient Neurosurgery team will see you between 6 a.m. and 8 a.m.
- If you have a Foley catheter in place, it will be removed as soon as possible. Removing the catheter, drinking fluids, and walking, decrease the risk of developing a urinary tract infection.
- You will use your Incentive Spirometer as directed to prevent pneumonia (will be provided when you get to your hospital room).
- To help prevent blood clots, you will start taking a blood-thinning medication (heparin). You will also have Sequential Compression Devices (SCDs) placed on both legs after surgery. They help circulate your blood.
 - Please remind staff to put your SCDs back on when you return to your bed or chair.
- You will be encouraged to sit up at the side of the bed. Always use your call light to ask for assistance to get up from bed, a chair, or to go to the bathroom.
- You will start walking as soon as possible. This will improve your recovery and help avoid complications.
- A physical therapist may evaluate you during your hospital stay. They will work with you on walking and activities to ensure a safe and timely discharge. They will also recommend therapy needs at discharge (i.e., walker, outpatient therapy, or inpatient rehabilitation).

What symptoms might I have after surgery?

Nausea

- Medications are available to relieve nausea.
- Eating slowly and drinking plenty of fluids are helpful to relieve nausea.

Constipation

- Constipation is common after surgery due to a decrease in physical activity and use of pain medication.
- We will give you stool softeners while in the hospital and a laxative if requested.
- Continue the stool softener (and laxative, if needed) after discharge as long as you are taking pain medications.



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What symptoms might I have after surgery? (continued)

Pain

It is normal to experience post-operative pain. You may still have some of the pre-operative pain immediately after surgery as well. Our goal is not necessarily to relieve all your pain, but to make your pain tolerable. We will likely use multiple types of medication in the hospital to help control your symptoms.

- Your nurse will monitor your pain frequently. Our staff will repeatedly ask you to rate your pain on a scale of 0–10 (0 is no pain; 10 is the worst pain you can imagine).
- You may start out receiving pain medication in your I.V. line, then transition to medication in pill form.
 - Other medications may also be used to treat nerve pain or muscle spasms.
- Use ice frequently to decrease pain and swelling.
- Change your position in bed frequently, as tolerated.

When will I be discharged from the hospital?

Most patients are discharged 3–5 days after undergoing a lumbar fusion. This can vary depending on the extent of your surgery.

What is the home discharge criteria?

- Tolerate your diet.
- Meet mobility goals.
- Tolerating pain on oral pain medication.

Your support coach will need to be at the hospital during your discharge home so they can learn about your restrictions and how to help you move safely and apply your brace (if you have one). Your support coach will take you home on your discharge day.

What is my home care plan?

Our nurse case manager may meet with you and discuss your home care needs. This will be arranged prior to your discharge. If ordered, the home care agency will call you at home and let you know when a visiting home nurse, home health aide, and/or home physical therapist will be arriving at your house.

- Typically, patients are visited once or twice weekly.



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When will I be discharged from the hospital? (continued)

What if I'm discharged to a rehabilitation/extended care facility?

As mentioned in the “Preparing for Surgery” section earlier in this folder, you may not be able to go home when you're ready to be discharged from the hospital. The reasons for this are varied. Our case manager will contact your insurance provider and make all of the arrangements for your transfer. If your surgeon has already discussed the possibility of a rehabilitation facility, you should visit and tour a few facilities before your surgery. Before admission, write down your first and second choices as there must be a bed available for your transfer. You may also want to contact your insurance company to confirm the facility is in your network.

- To find facilities near you online, visit: www.medicare.gov.
 - Click on the link on the left side of the page titled “Finding Nursing Homes.”
 - Enter your zip code.
 - Facilities in that area will appear.

Michigan Medicine also has an inpatient Physical Medicine and Rehabilitation Unit in our hospital. There are specific criteria for admission, including a patient's ability to participate in physical therapy multiple times a day and your insurance approval.

What are my post-operative instructions?

- ⊗ Do not lift, push, or pull anything over 10 lbs.
- ⊗ Do not bend repetitively or twist your spine.
- ⊗ Do not bend over at your waist, use your knees.
- ⊗ Do not drive for at least two weeks after surgery (longer, if you're on pain medications). You may be a passenger at any time.
- ⊗ Do not use any ointments or creams over the incision site.
- ⊗ Do not soak your incision in water. No baths, pools, or hot tubs. You may take a shower.
- ✓ Walk around every 1-2 hours when awake.
- ✓ Clean incision daily:
 - ✓ Clean using a mild liquid soap. Do not use bar soap, which can contain bacteria and is often shared among family members.
 - ✓ Gently wash your incision first, then the rest of your body.
 - ✓ Use a clean towel each time you shower after surgery.
 - ✓ When drying, pat your incision dry first, then dry the rest of your body being careful not to re-touch your incision.



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What are my post-operative instructions? (continued)

Contact us immediately if:

- Your incision becomes red, painful, or hot.
- You have any drainage from your incision.
- Your incision is open.
- You develop a fever over 101 degrees.
- You develop any new leg symptoms (e.g., swelling, pain, and/or weakness).

Our contact information is on page 16 of this booklet.

How will I manage my pain at home after discharge?

It is important you have accurate expectations about your pain management.

- With large surgeries, it is not unusual to have increased pain temporarily.
- Even with pain medications, you may still have considerable pain.

Before we give you instructions for managing your pain at home, here are some general guidelines you should know about:

- We do not prescribe pain medication prior to surgery.
- According to Michigan Law, we cannot provide more than a 7-day supply of pain medication at discharge.



You may need less depending on your condition.



Acute pain is the result of an injury or surgery and typically resolves within the healing period.



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How will I manage my pain at home after discharge? (continued)

- If you are taking prescription pain medication before surgery, **do not** increase the amount you are taking.
 - Keep pain medication to a minimum, otherwise it will be very hard to manage your pain after surgery.
- If you are currently seeing a pain management clinician, make sure the clinician knows that you will be having surgery, especially if you've signed a narcotic contract with them.
 - You are responsible for setting up a follow-up visit with your pain management clinician for continued pain control.
- If you do not see a pain management clinician, you will also be discharged with a **7-day** supply of pain medication.
- If you need a refill, you must call during open clinic hours (8 a.m. – 4 p.m., Monday through Friday).
 - We do not provide refills after hours.
 - We will only prescribe pain medications up to a maximum of six weeks after surgery.
 - We will run a MAPS (Michigan Automated Prescription System) report with each refill. If you obtain opioids from another provider during this time, we will no longer be able to prescribe medications.
- Refill requests should be made before you run out of medication. Refills may take 48 hours to complete.

Pain management instructions

- When you get home, take your prescription as directed. As you get further along in your recovery, begin reducing your pain medication intake. For example:
 - If you are taking two tablets every six hours, decrease to one tablet. Then, increase the time between pain pills.
- Avoid all NSAIDS (non-steroidal anti-inflammatories) like Motrin[®], Advil[®], Ibuprofen, Aleve[®], and Mobic[®] for three (3) months following your fusion surgery.



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Pain management instructions (continued)

- **Remember** - Frequent walking, changing positions, icing, Tylenol[®], and other alternative pain control methods (breathing exercises, distraction, relaxation techniques, etc.) are also very important in helping reduce your pain.

Important:

- If your pain is manageable, avoid taking opioids.
- Never take more frequent or higher doses than prescribed

Visit <http://michmed.org/ea93D> to learn more about taking opioids safely.

Where should I store opioid medications?

- Store opioids out of sight and reach of children, teens, and pets.
- Store opioids in private areas rather than common rooms like bathrooms.
- Lock up the pills if possible.
- Keep a count of how many pills you have left.

How should I dispose of unused opioids?

The safest way to dispose of old medications is to take them to an authorized “Take-Back” program. Visit <http://michmed.org/5LWpZ> to find a location in your area.

**For your convenience, there is an opioid take-back box located in the
Taubman Neurosurgery Clinic.**

If you are not able to find a program in your area follow these steps as a last resort:

- Mix opioids (do not crush) with used coffee grounds or kitty litter in a plastic bag and put in your household trash.
- Scratch out personal information on the prescription label and dispose of the original container.
- Do not flush opioids down the toilet.



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What is my follow-up after discharge?

You can expect to have several follow-up visits at your surgeon's office in the two years following surgery. These visits are important to evaluate your progress, both physically and with spine imaging.

Our spine nurse will see you at the two-week post-op visit to remove your surgical staples and assess the healing of your incision.

If you do not already have your first post-op visit scheduled before surgery, you must call your surgeon's office to schedule it.

Additional follow-up visits vary slightly depending on the patient and the surgery, but the usual schedule is:

- 2 weeks
- 1 month
- 3 months
- 6 months
- 1 year
- 2 years

Additionally, as part of Michigan Medicine's commitment to quality, we participate in a statewide program called the Michigan Spine Surgery Improvement Collaborative (MSSIC), which measures spine surgery quality and patient outcomes. MSSIC surgeons and hospitals track patients' progress over time by collecting information from patients before surgery and at several time points after surgery.

You will be asked to complete a patient-focused questionnaire by phone, email, or in clinic before surgery, as well as 90 days, 1 year, and 2 years after surgery. The information you provide both before surgery and after surgery helps us to assess your surgical outcome and post-operative progress; it also helps us to ensure that you have the best outcome possible, and improve patient care in the future. We appreciate your time and participation in these patient questionnaires. To learn more about MSSIC, please visit <https://mssic.org>.

Please notify us right away if you have a change of address or telephone number.



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What is the contact information?

- To schedule an appointment, request a prescription refill, or ask a medical question, call 734-936-7010, Monday - Friday, 8 a.m. – 4:30 p.m.
- You may also use the patient portal (<http://myuofmhealth.org>) to send a message to the spine team; however, please do not use the portal for urgent issues. Instead, please call us directly at 734-936-7010.
- If you are experiencing a medical emergency, call 911 or report to your closest Emergency Room.
- For new symptoms or concerns after hours call 734-936-7010 and you will be routed to the Hospital Operator, who can connect you with the neurosurgery resident on call.

Disclaimer: This document contains information and/or instructional materials developed by the Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

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