

The California Pacific Neuroscience Institute has developed this handbook to help you through your spinal stenosis surgery, both before and after surgery. We hope this handbook will answer your questions and help you maintain continued spinal health. Please note: this booklet is only a guide and not meant to replace the advice or directions given to you by your doctor. We encourage you to keep an open dialog with your doctors about any questions you may have.

## CALIFORNIA PACIFIC NEUROSCIENCE INSTITUTE

The California Pacific Neuroscience Institute combines the expertise of neurosurgery, neurology, and neuroscience specialists with state-of-the-art diagnostic equipment and surgical technology, bringing advanced treatment options to our patients. Our neuroscience experts are at the forefront of treating patients with neurological disease, delivering treatment options and performing microsurgery for the full range of neurological conditions.

Our commitment to research makes some of the newest technology and therapies available to our patients through clinical research trials. With advanced technologies, we strive to improve our patients' health and quality of life. The depth and breadth of our neuroscience research underscores our commitment to provide leading-edge neurological care.

Through excellence in neuroscience health care services, education, and research, the Institute provides quality care when it is needed most. At California Pacific Medical Center, we believe in the power of medicine. We look closely at each individual and treat the whole person, not just the illness. We believe medicine can transform a body, but going beyond medicine can transform a life.

For more information on our Neuroscience Institute services or programs, please call 888-637-2762.

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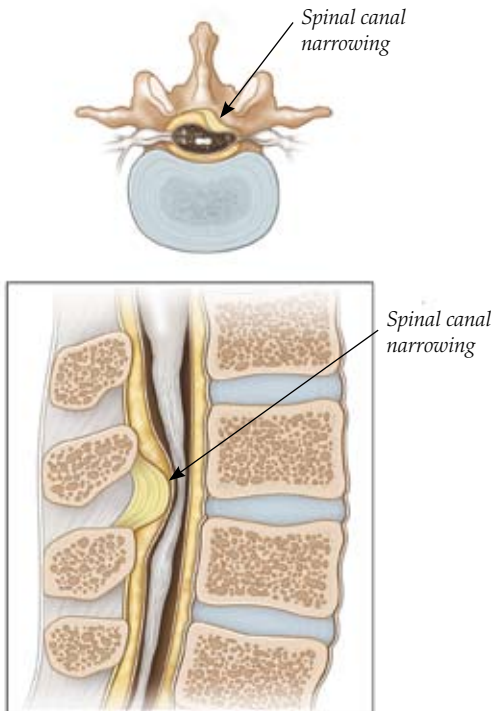
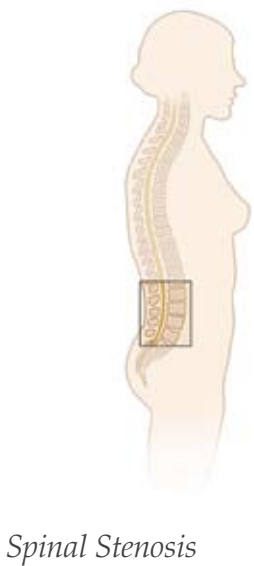
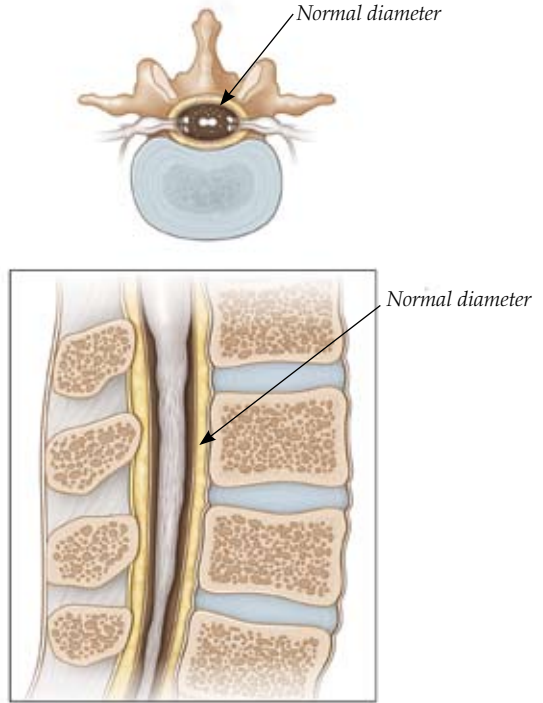
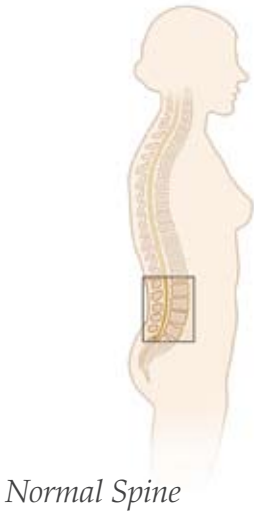
## *What is Spinal Stenosis?*

Spinal stenosis is a common back condition caused by the wear and tear that usually occurs with age. It affects about five of every 1,000 Americans by the time they reach their mid-fifties. As the discs and ligaments between vertebrae (back bones) age, they become less flexible, lose fluid, thicken, and harden. This causes compression (narrowing) of the spinal canal. The result is pain or aching in buttocks, back of the thighs, calves and shins, and sometimes the feet, followed by numbness and weakness in these areas.

Patients with spinal stenosis are usually uncomfortable when standing and walking and more comfortable sitting down or lying in the fetal position.



*Peter Weber M.D. with a patient*



## *Evaluation and Diagnostic Testing*

Before beginning treatment, you are thoroughly checked to make sure you receive the best care possible. Your doctor reviews your symptom history and does a physical exam.

The spine is like a chain with many links. Each link, called a “motion segment,” is made of two vertebrae and the disc and joint between them. The narrowing of the spine may involve one or more motion segments. Your doctor uses imaging tests to identify damaged or unstable segments. These imaging tests include MRI (magnetic resonance imaging), CT (computed tomography) and X-ray (radiography).

- MRI uses a powerful magnet, computer, and radio waves to take pictures of your bones, discs, nerves, fat and muscles. MRI is painless, and you do not receive any radiation.
- CT scan, or “CAT” scan, uses X-rays and a computer to take pictures inside your body (for example, muscles, organs, and bones). This helps your doctor find the cause of your illness.
- X-rays take snapshots of your spine from the front and sides in both standing and bending positions. These pictures help your doctor evaluate the alignment of your spine.



*Brian Andrews M.D. with a patient*

## *Treatment Choices*

You and your doctor will review these treatment choices together. After discussing your questions and concerns, you and your doctor choose the one that will give you the best possible outcome.

### **NON-SURGICAL CHOICES**

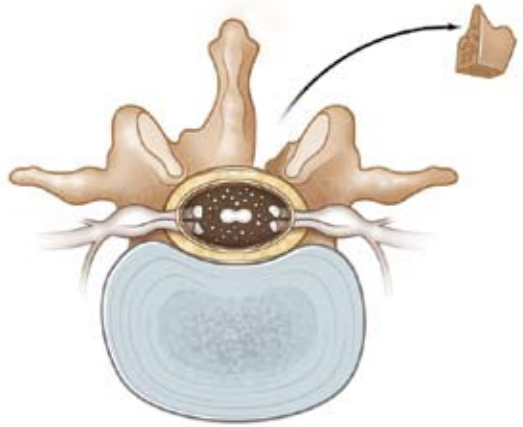
You may find it helpful to try non-surgical treatments before considering surgery. Please note that these choices do not cure spinal stenosis. Non-surgical treatments include:

- Physical therapy
- Water-based exercise
- Back stabilization brace
- Oral medications - non-steroidal anti-inflammatory medication (ibuprofen or prescription medications of the same type)
- Spinal epidural steroid injections (a steroidal medication is injected into the area of your spine that is causing you pain)

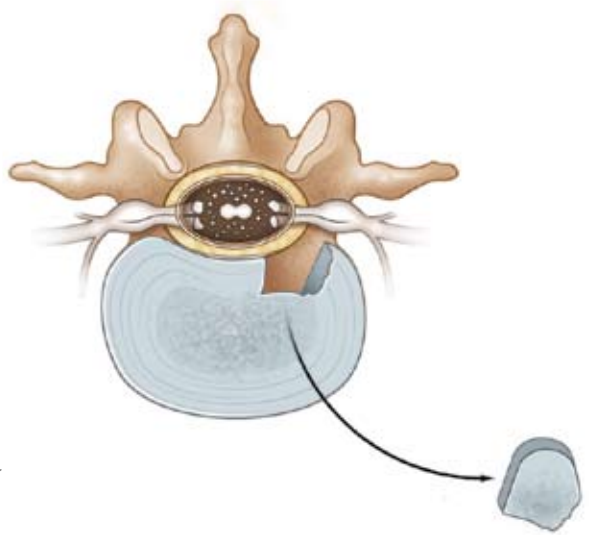
### **SURGICAL CHOICES**

If your pain is not relieved through non-surgical treatments, surgery is usually effective. Surgical treatment choices vary depending on many factors, such as the degree of your pain, the alignment of your spine, and how much of your spine is affected by the stenosis.

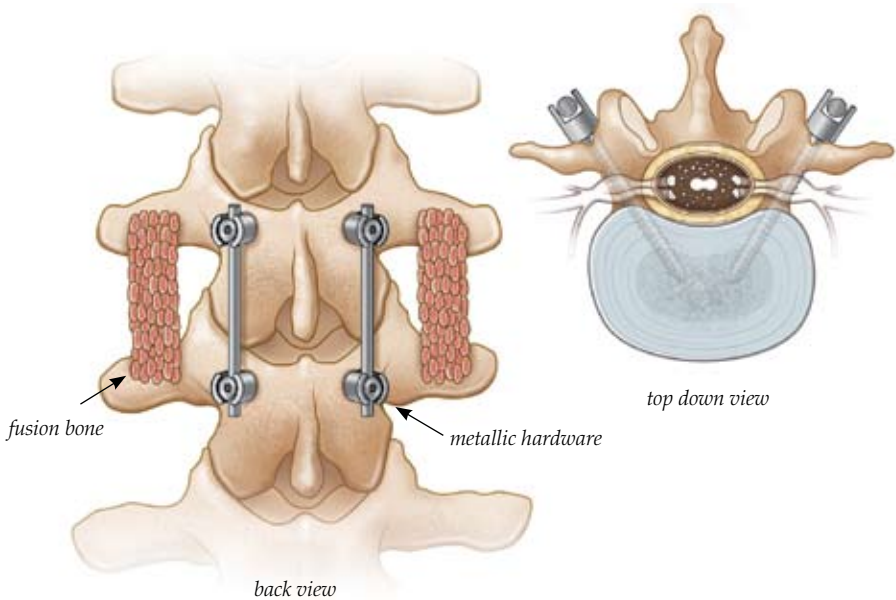
**Laminectomy and Laminotomy** are surgeries in which your surgeon removes structures that compress your spinal cord and nerve roots. This helps relieve symptoms of pain and/or numbness, tingling, burning, and weakness. Choosing laminectomy or laminotomy depends on the location and severity of your stenosis.



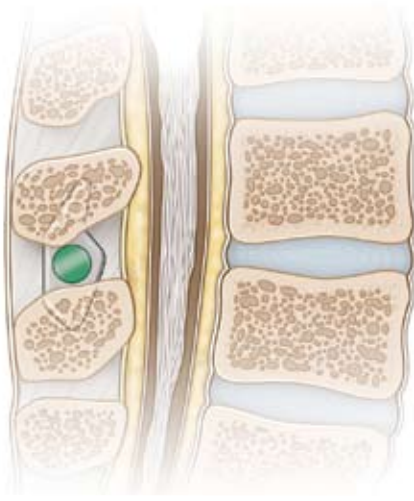
**Microdiscectomy and Discectomy** are surgeries that involve trimming or removing part of a disc that touches the spinal nerve(s). The surgeon makes a small incision (cut) of 1 – 2 inches on your back and operates using a microscope and microsurgical techniques. Microdiscectomy is very effective in relieving leg pain associated with lumbar disc herniation (rupture, tear).



**Spinal Fusion** is a surgery that locks two or more back bones together using a bone graft or metal implant. The bone graft can come from your own body (often your pelvic bone) or from a bone bank. Spinal fusion stops abnormal or excessive motion of the back bones in the areas that cause your symptoms. This eases your pain and may limit how much you can bend your back.







**X STOP®** is an implant that your surgeon puts between the bony ridges at the back of the vertebrae. The implant helps to open the spinal canal, relieve pressure, and ease your pain. Please ask your surgeon for more information on this treatment.

## *Blood Transfusion*

Blood loss from surgery sometimes leads to the need for a blood transfusion. If you have any personal concerns regarding blood transfusions, speak with your doctor before surgery. Other choices may be available.

## *Anesthesia*

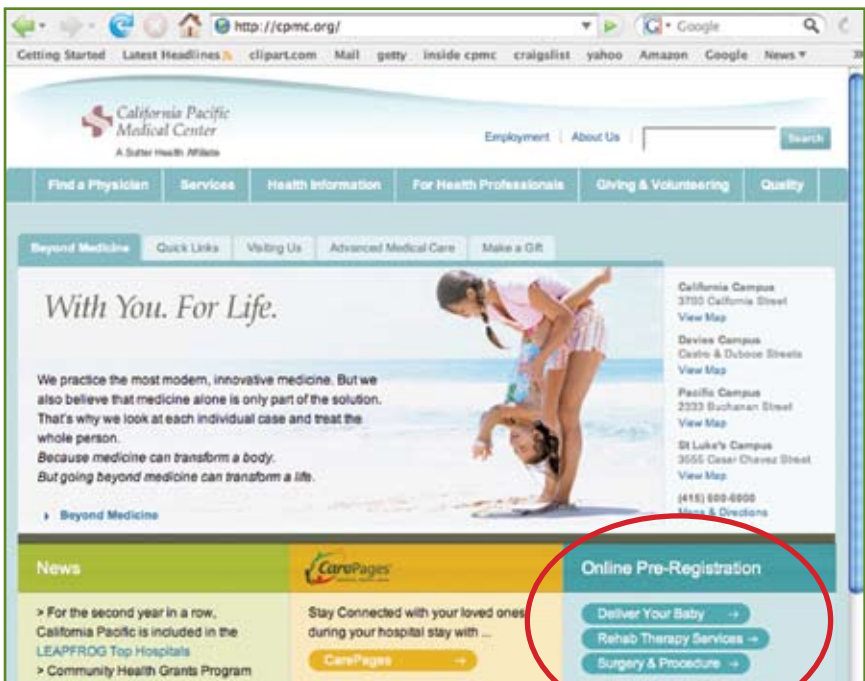
Before surgery, the anesthesiologist works with you and your surgeon to choose an anesthetic. For lower back surgery, this is often a spinal block, also known as spinal anesthesia. A spinal block numbs you from the waist down. In some situations, your doctors may use a general anesthesia.

## Pre-Registration for Surgery

Pre-registration is a two-step process that you must complete before having a surgery or procedure at California Pacific Medical Center.



### STEP 1: PRE-REGISTRATION



#### Online

To get started, visit us on the Web at [www.cpmc.org](http://www.cpmc.org) and look for “Online Pre-Registration” on our home page.

Select the campus where your surgery is scheduled and complete the Surgery Pre-Registration form. This should take about 15 minutes. You must complete all steps of the process to ensure that you are registered.



*Davies Campus*



*Pacific Campus*



*St. Luke's Campus*

Be sure to have your insurance information with you when you begin.

### *By Phone*

If you do not wish to pre-register online, please call 415-600-2500 to speak with an admitting representative. Call us as soon as your surgery or procedure is scheduled by your doctor. The admitting staff will help you complete all necessary forms.

Be sure to have your insurance information with you when you call.

## STEP 2: HEALTH HISTORY ASSESSMENT

All patients must complete this step. Based on your health status, the nurse may schedule an appointment for you to come in before the date of your surgery or procedure to complete any required testing. This appointment should take 15-30 minutes. The nurse will tell you where to go for your test(s).

If a pre-procedure appointment is scheduled, please bring the following information with you. If you pre-register by phone, bring this information with you on the day of your surgery.

- Any paperwork from your doctor.
- Your insurance card.
- A list of medications that you are currently taking. Include the dose, frequency and route of each medication.
- Durable Power of Attorney for Healthcare (Advance Healthcare Directive).
- Guardians/Conservators: Guardians of a child under the age of 18 or conservators acting as the legal representative of an adult patient who is unable to consent on his/her own behalf must bring the documentation that establishes them as the person authorized to make health care decisions for the patient.

# Medication List

Please complete this medication list form. Bring this medication list to your pre-registration appointment or on the day of surgery.

Name: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 (Last Name) (First Name) (Middle Initial)

Date of Birth: \_\_\_\_/\_\_\_\_/\_\_\_\_

Medication	Dose	Frequency	Route <i>(for example - by mouth, eye drops, or by injection)</i>
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

**Note:** If you have diabetes or are taking blood-thinning medicines, please tell your doctor.



## *Preparing for Your Surgery*

### THE WEEK BEFORE YOUR SURGERY

- Arrange for transportation. You may not be able to drive for a few days to a few weeks after spine surgery.
- Note: You may not go home alone in a taxi or on public transportation.
- Arrange for someone to stay with you at home on the night of your surgery.
- If you have children in your care, arrange babysitting for at least 24 hours after your return home.
- Ask for help from friends and family. They can help with things like transportation, food preparation, and other chores.
- Buy slip-on shoes with closed backs that are easy to put on without bending.
- Have a button-up shirt and slip-on pants to wear after surgery.
- Move things you will need after surgery -- such as toiletries, dishes, or pet food -- to waist level. This will help you avoid lifting from a low surface or bending.

### THE DAY BEFORE YOUR SURGERY

- Call your surgeon's/doctor's office to confirm the time of your surgery and when you should arrive at the hospital.
- Before midnight (12:00 a.m.), drink plenty of fluids to make sure you are hydrated.
- After midnight, do not eat or drink anything. This includes coffee, water, hard candy, and chewing gum, unless your doctor tells you otherwise. If you do have something to eat or drink, please tell your surgeon.
- Do not shave before surgery. This helps prevent infection at the site of the surgery.
- You are strongly encouraged not to smoke or drink alcohol for 24 hours before your surgery.

## *At the Hospital*

### THE DAY OF YOUR SURGERY

- Patients are generally asked to arrive 1-2 hours before the scheduled surgery, test, or procedure. Confirm the arrival time with your surgeon's office.
- Your care, comfort and privacy are our primary concerns. Our goal is to make sure that your surgery is on time (within 30 minutes of the scheduled time). Sometimes there are delays. We will keep you informed if delays occur.
- Take only the medicines that you were told to by the nurse or surgeon – with a sip of water.
- Wear loose, comfortable clothing. Bring cases for glasses, contact lenses, and dentures. You need to remove them before your surgery.
- Do not wear or bring wedding bands, other jewelry or body piercings, or valuables such as cash, credit cards, or checkbooks. Pack a small overnight bag with your personal items, if needed.
- If you are staying overnight after your surgery, our standard discharge time is 11 a.m. Make sure you have safe transportation home. Your doctor or nurse will tell you if there is a medical reason for you to stay later.

### SURGICAL WAITING AREA

During surgery, your family and friends may wait in the waiting area. The staff will keep your family and friends well-informed.

## *After Surgery*

### DURING YOUR HOSPITAL STAY

Many patients go home from the hospital on the day of surgery. However, some patients may stay in the hospital for 1-3 days. While you are in the hospital:

- You receive pain medications intravenously (through a tube inserted in your vein). Within a day or two, when the pain decreases, you receive pain medication by mouth.
- You will be taught the logrolling technique for getting out of bed or rolling over.
- You may be walking with help from your nurses and therapists on the day of your surgery.
- Physical and occupational therapists help you move safely when getting in or out of bed, walking, bathing and dressing.
- If you have to use a brace after surgery, you are taught how to use it before you go home.



## Our Concern for Your Comfort

Although there may be some discomfort after a surgery, keeping your pain under control speeds your recovery. When you are comfortable, you are better able to walk, breathe deeply, and cough.

- Tell your nurses and doctors if you have pain.
- Do not wait until the pain is severe (very bad) before you ask for pain medicine.

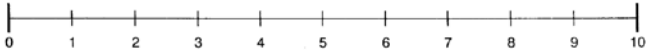
You can help your doctors and nurses “rate” your pain using the pain scale below.

*0 on the scale means no pain.*

*10 on the scale means the worst pain you can imagine.*

### 0-10 Numeric Pain Intensity Scale

Choose a number between 0 to 10 that best describes your pain.



English:	No Pain	Mild	Moderate	Severe	Very Severe	Excruciating
Spanish:	Sin Dolor	Leve	Moderado	Severo	Muy Severo	Intolerable
Tagalog:	Walang Sakit	Bahagya	Masakit Ngunit Natitlis	Matindi	Sobra ang Tindi	Matinding-Matindi
Chinese:	無痛	微痛	中等痛	劇痛	非常劇痛	極度劇痛
Russian:	Никакой боли	Слабая боль	Умеренная боль	Сильная боль	Очень сильная боль	Мучительная боль



## *Preparing to Go Home*

You will receive instructions for your home care before leaving the hospital. Make sure you understand these instructions and follow them carefully. Speak with your doctor if you have questions or concerns. Ask your doctor about:

- All of the medicines you will be taking. Make sure you get a complete list of your medicines before going home.
- Warning signs for when to call your doctor.
- Your follow-up care appointment.
- Safe activities you can do (climb stairs, exercise, lift weight, etc.).
- Any special equipment needs.

## *Caring for Yourself at Home*

### **Pain Control**

**Ice packs and medications help control your pain after surgery. Your doctor gives you medication choices and a prescription before surgery or when you leave the hospital.**

- **Fill your prescriptions before surgery so they are available when you get home.**
- **You can use heat/ice packs to ease the mild muscle spasms in the back and legs if you experience them.**
- **Remember, your pain level may change from day to day and even throughout the day. Pace your activities according to your comfort level and schedule plenty of time to rest.**

**If your pain becomes uncontrollable, call your doctor immediately. You can help your doctor by using the pain scale on page 18 to rate your pain.**

## CARING FOR YOUR INCISION AND DRESSING

After surgery, your incision is covered with a shower-proof dressing. Your doctor or nurse will speak with you about the care for your incision and dressing. Please note that this care can vary from patient to patient, so make sure you understand your instructions clearly before leaving the hospital. Keep the dressing dry and clean for seven days after your surgery to prevent infection.

- You may take a sponge bath or shower, but the incision must be kept dry. Covering the incision with plastic wrap is a good way to keep it dry.
- The Steri-Strips® (incision tape) may be removed seven to 10 days after surgery.
- The staples or sutures will be removed seven to 14 days after surgery during your first post-operative doctor visit.

## ACTIVITY AND BODY MECHANICS

Ask for help from friends and family for household chores, laundry, gardening, and food preparation for the first month after your surgery. Before you try to resume household activities or exercise, you need to know and understand proper body mechanics and activity restrictions to maintain your spine health.

### General Body Mechanics

- Do not bend at the waist, twist your back or stoop. If you must reach for an item on a low shelf, squat at the knees or kneel down on one knee.
- Do not sit in soft chairs or sofas that allow your back to curve. Be sure to stand straight and sit straight using a straight-back chair. Sitting may be uncomfortable, so limit your time sitting in a chair.

- Do not jog. Frequent short walks wearing sturdy walking shoes are better than long walks.
- Do not lift, do housework, or garden during the first month or until allowed by your doctor. Think before you lift – if it feels too heavy, do not pick it up. When lifting even the smallest items, always hold them close to your body.
- When getting out of bed or rolling over, use the logrolling technique. While lying on your back, bend the knees up, keeping feet flat on the bed. Roll over on your side in one movement. To sit up, use your elbow and hand to push your torso up into a sitting position, keeping your back straight.

### Guidelines for Physical Activity

- Most importantly, increase your activity level slowly. Gradually increase your activity level by alternating activity with rest.
- Plan short walks with rest periods.
- Walk a little farther every day.
- Start your exercises **ONLY** when your doctor tells you.
- Begin your physical therapy program as ordered by your doctor.
- Discuss returning to work or school with your doctor during your first follow-up appointment.

## Call Your Doctor Immediately if You Have Any of These Symptoms:

- If you have a temperature of 101 °F or 38.5 °C or above.
- If you have increasing redness and swelling at the incision site.
- If you notice changes in the amount, look or smell of drainage from your incision.
- New or increased changes in sensation or numbness in your legs or feet.
- Severe pain that is not relieved by medication and rest.
- If you have any questions about spinal stenosis and your surgery.

## *Follow-up Care*

Before surgery, your doctor's office staff arranges for a follow-up appointment. Usually, follow-up appointments occur within one or two weeks after surgery or after you leave the hospital.

### PHYSICAL THERAPY

Physical therapy (PT) usually begins after the first post-operative office visit or during your hospital stay. Your doctor gives you a prescription for PT and talks to you about where, when, and how often it is available.

## *To Do Checklist*

### **BEFORE SURGERY**

- Pre-register at [www.cpmc.org](http://www.cpmc.org) or by calling 415-600-2500.
- Write down any questions you have and bring them to your pre-operative doctor appointment.
- Make a list of your medications and bring it to the hospital (see pg. 14).
- Fill and pick up your post-operative prescriptions.
- Organize your house to make it easy to move around.
- Make sure you have slip-on shoes and clothes that are easy to put on.
- Arrange transportation.
- Ask for help from friends and family.
- If you smoke, stop smoking as soon as possible.
- Be prepared to verify surgery site with nursing staff and to sign a consent form prior to surgery.

### **AFTER SURGERY**

- Confirm or schedule your post-operative office visit with your surgeon.
- Schedule a PT appointment when you receive your doctor's orders (pre-register and schedule this appointment online at [www.cpmc.org](http://www.cpmc.org)).
- After your doctor tells you, set up an exercise schedule to maintain your back health.

## *Long-Term Spinal Maintenance*

A healthy back can improve your quality of life. After surgery, there are many ways you can maintain your spinal health. It is important to increase your activity level slowly.

- Plenty of walking
- Water-based exercise
- Avoid a lot of bending and lifting
- Use anti-inflammatories as directed by your doctor
- Do not smoke

