Dear Patient,

We hope that this booklet, along with the Preoperative Spine Class, will provide you with the information you need to successfully guide you through your upcoming surgery.

By becoming an active partner with your Health Quest team before, during and after surgery, you give yourself the best chance for a full recovery. Of course, the long-range benefits of your surgery also depend on your continuing rehabilitation at home. It’s important to keep a positive attitude and practice what the team has taught you even after you have left us.

You and your home care helper(s) should carefully review this information and use it as a guide during your presurgical, postsurgical and recovery process. If you have any questions or do not understand any part of the process, please do not hesitate to contact someone from your Health Quest team.

Remember, every patient has different conditions and needs. This booklet should be used as a general guide and your physician, physician assistant, nurse or therapist may customize your recovery plan to meet your specific needs.

Please bring this booklet to the hospital with you. You will need it for reference and guidance.

Sincerely,

Your Health Quest Team

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Getting to know your spine

• It is important to understand how your neck and back function so you can protect your spine before and after surgery

• A healthy spine shelters the spinal cord and supports the body while allowing it to move freely

• It does this with the help of the three natural curves, strong and flexible muscles, and soft cushioning discs

• The spine is composed of 24 bones called vertebrae

• The vertebrae are separated by a shock absorber called a disc, and flexible joints that slide to allow movement

• Cervical vertebrae: 7

• Thoracic vertebrae: 12

• Lumbar vertebrae: 5

• The base of the spine is called the sacrum

• The tailbone or coccyx is attached to the bottom of the sacrum
The smallest vertebrae are in the neck, and the largest are in the lower back. Fractures can occur from strong forces such as a fall or blunt trauma. Acute, repetitive, prolonged stress or disease may weaken the vertebrae.

- The disc has a spongy, jelly-like center and tougher outer ring with nerve endings
- The discs are located between the vertebrae and act as a soft cushion to absorb shock
- As a disc degenerates, it loses its flexibility and causes the nucleus and outer ring to bulge
- Too much pressure on the outer rings of the disc causes the nucleus to squeeze through
PREPARING FOR SURGERY

YOU CAN START GETTING READY SEVERAL WEEKS AHEAD OF TIME

All preoperative testing will be done at the hospital on the day of your presurgical interview. All results will be faxed to your physician in time for medical clearance.

YOUR PREPARATION MAY INVOLVE GETTING A PHYSICAL EXAM

Your healthcare provider may give you a complete physical exam. He or she may ask about:

• Your health
• The health of your blood relatives
• Any medications you are taking (including over-the-counter medications, such as aspirin, vitamins and herbal supplements)
• Any allergies you may have (to food, medications, etc.)
• Any past experiences with surgery or anesthesia

BE SURE TO ASK ANY QUESTIONS YOU MAY HAVE. WRITE THEM HERE:
YOUR HEALTHCARE PROVIDER MAY ASK YOU TO:

• **Care for your skin:** Be sure to let your healthcare provider know if you have any rashes, sores or other skin problems.

• **Eat healthy foods:** Good nutrition is important to your overall health. After you leave the hospital, your diet will be one of the most important factors in the healing process. Three balanced meals and healthy snacks will help with the healing process.

• **Help prevent constipation:** Prior to surgery, during your hospitalization and post-operatively, you will be prone to constipation. It’s important to eat a high-fiber diet and drink at least six 8 oz. glasses of water each day. Walking is also an essential part of your recovery and will also help you avoid constipation.

• **Report any changes in your health:** Be sure to tell your healthcare provider if you get a cold, fever, sore throat, skin problem, or other infection or illness.

• **If you smoke, stop!** To promote a healthy lifestyle, Health Quest centers are smoke-free and there are no designated smoking areas. Studies have shown that smoking negatively impacts bone health, including the healing of spinal fusions. If you or a loved one smokes, you may want to consider stopping prior to your surgery.

In addition to speaking to your healthcare provider about quitting options, you can contact the New York State Smokers Quitline at 1-866-NY-QUITS or at www.nyssmokefree.com
MORE THINGS YOU CAN DO TO GET READY

Plan for your recovery at home: If you’ll be facing a recovery period—even a short one—you may find it helpful to:

• Prepare and freeze healthy meals before your surgery
• Put commonly used objects within easy reach
• Ask a loved one to stay with you after surgery if you live alone (if you care for a loved one, arrange for someone to take over for you while you recover)
• Post emergency numbers by each phone
• Make sure your home is well lit and free of tripping hazards

PACKING FOR THE HOSPITAL

What to bring to the hospital:

• Hospital gowns are provided during your stay, but if you choose to wear your own clothing, loose-fitting athletic clothing or pajamas are the best options
• A short robe
• Sneakers or shoes with flat bottoms and nonskid soles
• Walker or cane if you currently use one
• POA, Healthcare Proxy or Living Will
• This educational booklet
What you should leave at home:
• Jewelry (you may wear a plain wedding band)
• Large amounts of money
• Other personal valuables

REDDUCING ANXIETY

It’s natural to feel nervous and anxious when you are facing surgery. Taking steps to relax may help reduce the risk of complications and aid healing. Here are some tips:

Know what to expect
• Remind yourself why you are having surgery and the benefits you hope to gain
• Clearly understand your role in preparing for, and recovering from, surgery

Relaxation methods
• Visualization
• Listening to quiet music
• Progressive muscle relaxation—tensing, and then releasing, muscle groups in your body from head to toe
• Distraction—focusing on your pain alone may make the sensation seem more intense
WHILE IN THE HOSPITAL

PAIN MANAGEMENT

Importance of controlling pain.
Your nurse will assess your pain when you arrive on the unit and throughout your stay. It is important to control your pain as soon as it starts. If not treated, pain can affect many different areas of your body, such as the heart, stomach and lungs. Sometimes patients try to deal with pain after surgery by taking short breaths or holding back coughs to avoid hurting their incision sites. These actions can cause postoperative complications such as pneumonia. Also, under-treated pain may result in increased fear, anxiety or lack of sleep.

As a Health Quest patient, we expect that you will:
• Assist your healthcare professional in assessing your pain; your nurses will ask you to “rate” your pain on a numeric scale
• Discuss pain-relief options with your healthcare professional to develop a pain-management plan
• Ask for pain relief when pain first begins
• Tell your healthcare professional about any concerns you may have related to taking pain medications
Your safety is our top priority and we want to provide you with the information you need to manage your journey to recovery. From time to time, patients may get a surgical site infection (SSI) after a procedure. Most patients do not develop infections, but we want you to be aware of the possible symptoms:

- Redness and pain around the surgical area
- Drainage of cloudy fluid or foul-smelling fluid from your surgical site
- Fever

If you have any of these symptoms, please be sure to alert your healthcare provider. Most infections are treated with antibiotics.
IN THE HOSPITAL

WHAT CAN I DO TO PREVENT AN SSI?

Before surgery

• Tell your physician about other medical problems/conditions you may have (allergies, diabetes or obesity may affect surgery and treatment)

• Quit smoking—research has shown that patients who smoke may acquire more infections

• Do not shave near the site of your surgery (shaving with a razor can irritate the skin and make it easier to develop an infection)

• Shower prior to arrival at the hospital

• Wash/change your bed linens in preparation for your arrival home after surgery

After surgery at home

• Your physician or nurse will explain how to care for your wound when you return home

• Always wash your hands before and after caring for your wound

• If you have any symptoms of an infection, call your physician immediately

• Keep your pets away from your incision

What is Health Quest doing to prevent SSIs?

• Healthcare providers clean their hands before and after caring for each patient

• We administer antibiotics before your surgery starts and again postoperatively (antibiotics are typically stopped within 24 hours of surgery)

• Nasal swabs are used preoperatively to screen for methicillin-resistant staph aureus (MRSA) and methicillin-susceptible staph aureus (MSSA)

• We clean the skin at the site of the incision with a special soap that kills germs
DAY OF SURGERY

ADMISSION

On the day of admission, report to the Admitting Office at your scheduled time.

AMBULATORY SURGERY UNIT (ASU)

• Your family (1 or 2 adults) will be allowed to stay with you until you go to surgery, while the nurse will answer any questions you and your family may have and will instruct your family where to wait during your surgery

• When you arrive at the ASU, you will be asked to change into a hospital gown and your hair will be covered with a paper hat, like those worn by the operating room staff

• Your vital signs (blood pressure, temperature and breathing rate) will be taken at this time

• A needle called an intravenous line or IV will be put into your vein to give you fluids and medications before, during and after surgery

• You will be asked to verify your surgical site and the surgeon will mark the site with his/her initials using a surgical pen

• Dentures, partial plates, contact lenses, glasses and hearing aids may be removed before going to surgery

• An anesthesia provider will talk with you and ask you to sign a consent form for anesthesia
IN THE OPERATING ROOM

- Upon arrival in the operating room, your care will be provided by the surgical team, who will explain things as they work with you.
- After you have received anesthesia, a catheter may be placed in your bladder to drain urine until you are able to use the bathroom on your own — however, not all spine surgery patients will receive a catheter.
- **NO** surgery begins until the surgical team reverifies the correct surgical site.

The time it takes for your surgery is estimated. Your surgery may take more or less time than you and your family were originally told. After surgery, the surgeon will go to the waiting area and speak with your family.

POST ANESTHESIA CARE UNIT (PACU)

- After your surgery, you will be moved onto a bed and taken to the PACU.
- While coming out of anesthesia, PACU nurses will monitor you closely and take your vital signs frequently.
- You may get oxygen through a mask or via a tube in your nose.
- You may have pain and the nurses will assess your pain level and medicate accordingly.
- A device called a patient-controlled analgesia (PCA) may be attached to your IV for pain relief, and your nurse will instruct you on how to use it.
- You may be in the PACU for more than one hour before being taken to your room.
- Your family will be able to see you once you are transferred to your room in the Inpatient Unit.
WHAT TO EXPECT AFTER SURGERY

The length of stay in the hospital varies according to the type of surgery you have. A lumbar fusion patient may be in the hospital for up to three days after surgery, whereas a cervical fusion patient may be discharged the following day.

ACTIVITY AND DIET

• Depending on the type of spinal surgery you had, your doctor may order you to sit on the edge of your bed and perhaps get up out of bed to walk on the night of your surgery
• Physical Therapy will assist you in getting out of bed and walking on postoperative day one
• You may start out on a clear liquid diet and progress to a regular diet
• A side effect of your pain medication is constipation; you are encouraged to eat small, frequent amounts of food and to drink up to six glasses of water daily in addition to stool softeners to facilitate bowel activity
• Discuss any dietary concerns with your healthcare provider, and be sure to tell your nurse if you are experiencing any nausea

The hospital staff will ask you questions about your home situation to help plan for discharge. You may also be seen by an Occupational Therapist to help you increase your independence in activities of daily living. Together, the Physical and Occupational Therapists will continue to work with you during your hospital stay to obtain goals and prepare for discharge.
AFTER SURGERY

PAIN MANAGEMENT

• We will ask you about your pain level and discuss measures to safely keep you as comfortable as possible
• Possible side effects of pain medication include breathing less deeply and becoming too sleepy, so the nurses will be monitoring your vital signs closely

MEASURES YOU CAN TAKE TO HELP CONTROL YOUR PAIN

• You may start on IV medications, including a PCA, and will transition to oral medications when you are tolerating food well
• Once on oral medications, you will need to request these medications—generally, you can request pain medications every four hours (it is a good idea to request medication prior to working with physical therapy)
• Be aware of common side effects of narcotic pain medications, including nausea, vomiting, dizziness, constipation, rash, itching, dry mouth, decrease in appetite and decreased respiration/breathing
• Work with your nurses to know which pain medications or other measures have worked well for you in the past
• Control your breathing; concentrate on deep breathing throughout your position change and avoid holding your breath
OTHER EQUIPMENT MAY INCLUDE:

- An IV for fluids and a PCA pump
- A drain (hemovac) to help prevent clots near your wound
- Leg “wraps” while in bed to aid your circulation and prevent blood clots
- A Foley catheter to drain your bladder
- Oxygen delivered to your nose to assist your recovery from anesthesia and related medications
- An incentive spirometer to exercise your lungs and help prevent complications, such as pneumonia
- An abdominal binder (an elastic, corset-type brace to provide abdominal support in moving after surgery) is used for lumbar spine surgeries
- A hard cervical collar to provide stability and facilitate healing after cervical spine surgery

**Hard cervical collar** for cervical spine surgery

**Abdominal binder** for lumbar spine surgery
GOING HOME AFTER SURGERY

GETTING INTO A VEHICLE

- You may sit in the front passenger seat when riding in the car; recline the seat for comfort
- Use pillows behind your back for comfort
- To sit down, use the back of the seat and the door for support as you slowly lower yourself to the seat, then bring legs into the vehicle one at a time as you rotate your head and shoulders toward the front, moving your shoulders and hips as a unit
- If you have a high vehicle, use a small step stool or have the vehicle pulled up to the curb to increase stability of getting in and out
- Riding in the car should be limited to essential travel over short distances and may be more comfortable with the seat slightly reclined
- On long trips, you should get out of the vehicle and stretch at least once every hour to relieve the stress of prolonged sitting
- Do not drive until your surgeon gives you the okay to do so
NO BENDING, LIFTING, TWISTING (B, L, T)

- Do Not bend at the waist; bend at the hips and knees
- Do Not lift objects heavier than a gallon of milk (10 lbs.)
- Do Not twist your trunk

The only aerobic exercise prescribed by your surgeon immediately after surgery is walking. You will be expected to TRY to walk each day, increasing the distance over time.

BODY MECHANICS PRINCIPLES AFTER SURGERY

Sleeping
- Use a firm mattress
- Sleep on your back, side or stomach
- Use pillows for positioning
  - Under knees when lying on back
  - Between legs and behind back when side-lying

Sitting
- Avoid chaise lounges, soft sofas and chairs on wheels or with movable supports
- Avoid low, deep chairs; it is difficult to rise from this type of furniture without forward bending
- Adjust chair for proper height
- Use a chair with arm rests and back support
**Standing**
- Maintain toned abdominal and buttock muscles
- Change position by weight shifting, walking or putting foot on low stool
- Wear comfortable shoes with good support
- Adjust work heights to avoid bending and reaching

**Pushing/Pulling**
- Push, rather than pull
- Keep back straight and head up
- Have knees and elbows slightly bent
- Have center of gravity below mid-mass of load

**MOBILITY**

**Bed mobility**
When rolling to your side, move as a unit, with hips and shoulders moving simultaneously to avoid twisting. You will hear your patient care team refer to this as a “Log Roll.” You will also be asked to tuck your chin down and brace your abdominal muscles for added stability.

**Getting in and out of beds and chairs**
To get into bed, sit on the edge, then lower your upper body sideways, using your arms for support. At the same time you are lowering your upper body, bring your legs and feet up onto the bed.

To get out of bed, the process is reversed. Avoid twisting by using the arm closest to the bed for support, eliminating the need to reach across your body. Before standing, scoot as close as possible to the edge of the bed and place your feet on the floor. If you are sitting on a chair without arms, push with your hands against your thighs, keeping your head up and your back straight. Move slowly to avoid injuring your back.
**DRESSING: UPPER BODY**

You may be instructed by an Occupational Therapist on dressing techniques. These approaches are designed to follow the spinal fusion precautions, which help to protect your back during the healing process. Remember to follow these same procedures while at home. Fasten bras in front and then turn them around to back.

**DRESSING: LOWER BODY**

You should put your pants, shoes and socks on while sitting in a chair with back support. If you are unable to sit, you will receive special instructions for dressing. The Occupational Therapist can show you adaptive equipment that may help you in your activities of daily living.
TOILETING

- Use your raised toilet seat to avoid bending when trying to sit on the toilet; bend at your knees and use safety grab bars or a cane/walker for balance
- Don’t let yourself fall to the seat
- Be sure toilet paper is easy to reach and doesn’t require a twisting motion to grasp it
- If you have trouble reaching for hygiene after toileting, a toilet tissue aide may be needed that will extend your reach

INCREASING EASE AND SAFETY FOR BATHING

- Until you feel safe showering, have someone close-by
- Your brace may be removed for showering (cervical fusions DO NOT bend your neck backward when showering without your collar)
- Use the following while bathing:
  - Long-handled bath brush
  - Soap-on-a-rope or liquid soap in a hanging bottle
  - Shower caddy that hangs over the shower head
  - Nonskid mat in the tub
  - Nonskid rug/mat on tile floor outside the shower
  - Grab bars (available at home building supply stores)
  - Handheld shower
ORGANIZING YOUR HOME ENVIRONMENT

Housekeeping
- Avoid housekeeping duties for the first two months
- Do not carry anything heavier than a gallon of milk
- Cook foods that can be frozen and used during your recovery or purchase prepared foods from the grocery store to ease cooking tasks

Childcare
- Do not lift and carry children weighing more than 10 pounds
- Children can climb up and sit on your lap
- Use high chairs, elevated changing tables and strollers
- Do not carry heavy diaper bags

Energy conservation and work simplification
- Pacing
- Change in position
- Planning
- Prioritizing
- Alternating light and heavy activities