Spine Surgery Handbook
Dear patient and family,

This handbook is written to help you learn more about your child’s scoliosis and treatment. We ask that you bring this handbook to the hospital and all doctor appointments. Feel free to add more information to your binder as needed. If you prefer to read this spine surgery handbook on your tablet or phone, visit us at choa.org/spinehandbook.

We hope that the information will help you understand what happens before, during and after your child’s surgery. We will guide you through the steps you will be taking on the path to recovery. For easy reading, we use the generic terms he or him, even if your child is a girl. You can find words in *italics* in the Glossary on Page 62.

This guide should not replace instructions given to you by your child’s doctor and healthcare team. It is not meant to be medical advice or a complete source of all information about this subject. Your child’s doctor is the best source of information about what is best for your child’s treatment and care.

**Call 911 or go to the nearest Emergency department right away in case of an urgent concern or emergency.**
Welcome

Thank you for choosing the Children's Healthcare of Atlanta Orthopaedics Program. Our goal is to:

- Provide your child with quality care.
- Support you and your family during your child’s care.
- Teach you about your child’s scoliosis and treatment plan.

According to *U.S. News and World Report*, Children's ranks among the top pediatric orthopaedic programs in the country. We offer care for babies, children and teens with:

- Bone, joint and muscle problems (*orthopaedic*)
- Nervous system problems that affect the muscles, bones and joints (*neuromuscular*)
- Problems that occur after accidents and injuries (*trauma*)
- Musculoskeletal tumors

We also offer these services:

- Physical and occupational therapy
- Braces and artificial limbs (*orthotic and prosthetic devices*)

Our program consists of many team members who all work together with a surgeon to help your child. This includes anesthesiologists, infectious disease specialists, rehab specialists and others who provide specialized care such as:

- Physical and occupational therapists
- Orthotists and prosthetists
- Certified athletic trainers
- Child life specialists
- Nurses
Satisfaction Survey

We are always trying to improve care and need your feedback. While you are at home, you will receive a satisfaction survey from Children's. Please complete the survey and mail it back to us as soon as possible. We value your thoughts on your family's experience at Children's.
Important Phone Numbers

Egleston hospital (main hospital number): 404-785-6000

Scottish Rite hospital (main hospital number): 404-785-5252

Visit choa.org/orthopaedics for more information about the Children’s Orthopaedics Program.

Orthopaedic surgeon (spine doctor): ________________________

Pediatrician or Family Doctor: _______________________________

Drug Store or Pharmacy: _____________________________

Emergency Phone Numbers

- In case of an urgent concern or emergency call 911.

Your nearest Emergency department is _________________________
Orthopaedic Team

Our healthcare team is here for you and your family. We work together with you to provide your child with quality care. You will meet many doctors and staff during your child’s stay with us. Some of them are included in the list below.

Orthopaedic spine surgeon: A doctor who is specially trained in conditions of the spine. They perform spine surgery on children and teens. The orthopaedic spine surgeon is also in charge of your child’s care after surgery in the hospital.

Pediatric orthopaedic fellow: A doctor who has finished medical school and orthopaedic residency and is now receiving advanced pediatric orthopaedic training.

Pediatric anesthesiologist: A doctor who is specially trained to give children and teens anesthesia. Anesthesia is the medicine that causes a deep sleep during surgery. This doctor also monitors your child during the surgery.

Physiatrist: A doctor who is specially trained in physical medicine and rehab. If your child needs to stay in the hospital for therapy, this doctor will oversee your child’s medical care and therapy.

Nurse: A registered nurse (R.N.) has special training to provide care for your child.

Physician assistant or nurse practitioner: Staff with advanced medical training who work closely with the surgeon to help manage your child’s care.

Registered dietician: A team member who checks your child’s food intake and overall growth. They can offer ways to help your child gain or lose weight, if needed. They may also be called clinical nutritionists.

Child life specialist: Staff with special training to help your child and family cope with the stress of being in the hospital. A child life specialist can give you and your child a tour of the hospital, teach about surgery, and offer ways to cope with fear or pain.

Social worker: A person trained to provide your family with guidance and counseling. Social workers can help with feelings of normal grief and coping skills while your child is in the hospital. They can also help you with resources you may need such as lodging, transportation, finances and support groups.

Physical therapist (PT): A team member who checks your child’s motor skills. Physical therapists plan and do therapy to help your child gain or regain strength and ability to move.

Occupational therapist (OT): A team member who can help your child be more independent in caring for himself after surgery. This can include dressing, brushing his teeth and combing his hair.

Orthotist: A team member who designs, builds and fits braces to support body parts. This includes the neck, back, arms and legs.

Prosthetist: A team member who designs, builds and fits artificial limbs.

Chaplain: Team members who provide spiritual support to your child and family. Chaplains also lead interfaith worship services in the hospital chapel.

Case manager: A registered nurse who helps to plan and coordinate your care needs for when you go home. This nurse also provides resources about insurance and payment issues.
Inpatient Care Team

Ask your hospital care team to print their names and phone numbers on the list below. Keep the chart in a handy place while you are in the hospital.

Orthopaedic surgeon (spine doctor): __________________________

Nurse: __________________________

Physical therapist: __________________________

Occupational therapist: __________________________

Child life specialist: __________________________

Case manager: __________________________

Other: __________________________
Patient Safety

Our goal at Children’s is to provide safe care for all of our patients. You are our partner in this process.

What should I do if I have a question about my child’s care?

- We know that you and your child are going through many new things. If you have a concern or question about anything, please speak up and ask a staff member.
- If you do not understand, please speak up and ask questions. This includes if you do not understand a consent form or any other part of your child’s care.
- It is your right to have things explained to you in a way that you can understand.
- If you think that your child is not acting normally or you have other concerns about how your child looks or feels, please speak up and tell us.

How can I help keep my child safe in the hospital?

To help keep your child safe, please do these 6 things regularly:

1. **Wash your hands** with soap and water or use alcohol hand sanitizer. Wash your child’s hands as well when needed.
2. Everyone who comes to see your child should wash his hands, including hospital staff. Please speak up if we do not do this.
3. Keep the identification (ID) band on your child. Let your caregiver know right away if it comes off.
4. Hospital staff should check your child’s ID band when giving medicines, collecting specimens and labs, or doing procedures. Please speak up if we do not do this.
5. To help prevent falls, keep your child’s bed or crib side rails up and the bed in its lowest position.
6. Please speak up. Ask a staff member whenever you have questions or concerns. Be involved in making decisions about your child’s care. Write down important facts and questions so you can remember them later.

Why does my child need an ID band while in the hospital?

All patients in the hospital must wear an ID band. This allows us to be sure that we treat the correct patient.

Even if the hospital staff knows your child, they should read the ID band.
- Sometimes this is inconvenient or wakes a child up, but safety comes first.
- Children with allergies also wear a separate red bracelet.
- If your child is allergic to latex, he will have a separate green bracelet.

Why do we need to use bed side rails in the hospital?

- When a child is sick and takes certain medicines, or undergoes certain procedures, his chances of falling are increased.
- If a child gets hurt, his hospital stay can be longer than it should be. This may add to the stress of being sick.

To keep your child safe:
- Keep the bed side rails up and make sure they lock. Please keep them up even if you lie down with your child.
- If you do not know how the bed side rails work, please speak up and ask a staff member.
If one of my child’s monitors beeps, what should I do?
Most medical equipment has an alarm, which helps us keep your child safe.
- When the alarm sounds, it lets the nurse know something needs to be checked.
- If someone does not come right away, please leave the alarm on and push the nurse call button or get a nurse. Please do not turn off alarms.

Other safety tips

Prevent falls
- Always let your child’s nurse or caregiver know if you are leaving the room. Do not leave your child alone.

Medicine safety
- Tell the doctors and nurses about any allergies or drug reactions your child may have.
- Keep a complete and current list of the medicines your child is taking. This includes prescriptions, over-the-counter medicines (like Tylenol) and herbs or supplements.
- Share this list with each of your child’s doctors.
- Be sure you know the name of your child’s medicine. Also know:
  - Why it is used
  - When and how to give it
  - Any side effects
  - Any other medicines, foods or drinks to avoid when taking it
- Ask your child’s nurse or doctor about any medicines that are different than usual. This includes how they look and when the nurse gives them to your child.

Know test results
- Know the results of your child’s tests. Do not presume tests are OK if you do not hear from your doctor.
- Please speak up. Ask for the test results and ask someone to explain them to you.
Preventing Infection

Preventing infection starts at home—before your child’s surgery. Be sure that your child wears clean clothes and uses clean sheets and towels before and after surgery.

Why is hand hygiene important?

We all carry germs everywhere we go. Good hand hygiene is one of the most important things that you and your family can do to stay healthy. Teach your family good hand hygiene. Insist that babysitters and childcare workers do the same.

Good hand hygiene helps prevent the spread of germs

- Hands can carry germs that cause colds, pinkeye, diarrhea and sometimes even serious illnesses.
- You and your child come in contact with germs each day when you touch things like doorknobs, toys, books, telephones and grocery carts.
- Germs can enter your bodies when you touch unclean hands to your nose, mouth, eyes, or an open cut or sore.

Five simple steps for washing yours and your child's hands:

1. **Wet**—use warm running water. Using warm water is a comfort measure but it does not kill germs.
2. **Lather**—use soap until you get lots of bubbles. If your child’s doctor tells you to use only antibacterial soap, check the bottle and make sure it is labeled that way.
3. **Wash**—rub hands together, washing the entire hand for at least 15 seconds. This includes all of the fingers, both thumbs, between and under fingernails, back of hands, palms and wrists. Slowly singing one verse of “Happy Birthday to You” is about 15 seconds.
4. **Rinse**—rinse hands well under running water. Rub your hands together as you rinse to remove all the soap, dirt and germs.
5. **Dry**—dry with a paper towel instead of rubbing with a cloth towel. In the hospital and public restrooms, use a dry paper towel to turn off the faucet.

Use an alcohol-based gel or foam when you cannot wash your hands. The alcohol-based gels and foams kill germs on your hands, but they do not remove dirt or grime.

You still need to wash hands to get them clean if you:

- See dirt or grime on your hands
- Handle uncooked meats
- Change diapers

Never use an alcohol-based gel before you:

- Prepare food
- Touch your eyes or put in or take out contact lenses
Clean your hands before you:
- Prepare food, eat or feed your child
- Drink
- Treat a cut or scrape
- Care for someone who is sick
- Give medicines

Clean your hands after you:
- Go to the bathroom or change a diaper
- Handle uncooked food
- Touch garbage or anything that might have germs
- Blow your nose, cough or sneeze
- Wipe your child’s nose
- Care for someone who is sick
- Play with or touch pets
- Come from any kind of public place

In the hospital, always wash your hands before you enter and before you leave your child’s room.
Spinal Deformity

Spinal deformity:

What is scoliosis?
Adolescent Idiopathic Scoliosis (AIS) is a sideways curve of the spine. Adolescent means children over the age of 10 and teenagers. Idiopathic means that we do not know what causes it.

The curve can make your child’s spine look more like an “S” or a “C” rather than a straight line.

What is kyphosis?
Kyphosis is a forward curving of the spine that causes a bowing or rounding of the back.

Causes of idiopathic scoliosis and kyphosis
Both tend to run in families, but there is no known cause. Things that do not cause scoliosis or kyphosis include:
- Bad posture
- Heavy backpacks
- Poor diet

Signs of scoliosis and kyphosis
Your child may have one or more of these signs:

When standing up:
- One shoulder blade sticking out more than the other
- Uneven shoulders
- Uneven hips

When bending forward:
- A rib hump, called a rib prominence
- A lower back hump, called a lumbar prominence

Scoliosis and kyphosis do not usually cause back pain. If you feel back pain, tell your doctor.

Medical tests to screen for scoliosis and kyphosis
Two common tests include:
- Scoliosis and kyphosis screening exam – this is done by a trained expert like a nurse, doctor or physician assistant.
  They are looking for signs of scoliosis or kyphosis.
- X-rays of the back and spine that can:
  - Show the doctor if your child has a curve in his spine.
  - Measure the amount of curve in your child’s back. The curve is measured in degrees.
  - Diagnose the type of scoliosis.
  - Tell the doctor approximately how much growing your child has left to do. Once the doctor knows this, he will be able to tell if the curve will get worse or not. If your child is still growing, the doctor may want to check the curve until he finishes growing.
Treatment of scoliosis and kyphosis
A bone and muscle doctor called an orthopaedic surgeon usually treats scoliosis and kyphosis. Treatment depends on the degree of your child’s curve and how much growing he has left to do. Sometimes, no treatment is needed.

If your child needs treatment, the doctor will talk with you about specific care for your child. Some general guidelines may include these 3 options:

- Observation—checking for changes in the curve with an X-ray 2 or 3 times a year.
- Bracing—wearing a form-fitting brace each day for a certain number of hours.
- Surgery—surgically manipulating the bones in the spine to keep the curve from getting worse and decrease deformity.

Different kinds of surgery are tailored to each child’s specific pathology.

- Growth modulation surgery uses the spine’s growth to improve the deformity.
- Curve modulation surgery is a sequence of procedures that decreases spinal deformity but allows spinal growth.
- Spinal fusion is a standard procedure that decreases spinal deformity and halts curve progression.

Spine surgery
Orthopaedic surgeons offer many options to meet the needs of children and teens with different spine conditions. When surgery is necessary, your child’s doctor will talk with you about the best surgical choice for your child. This could include:

- Spinal fusion
- Growing rods
- VEPTTR

What is a spinal fusion?
A spinal fusion is surgery that joins or fuses some of the bones of the spine. These backbones are called vertebra. Fusing the bones helps to prevent the curve from getting worse. It may not completely correct the curve.

In general, there are 3 ways to do spinal fusions.
1. Anterior—done on the front part of the spine through an incision in your child’s side.
2. Posterior—done on the back of the spine through an incision in your child’s back. This is the most common.
3. Anterior-Posterior—done on the front and back part of the spine through 2 incisions.

The time it takes your child to recover depends on:

- His general health and overall medical condition
- The amount of curve in your child’s back
- The type of spinal curve your child has and how flexible the curve is

All 3 fusion methods use pieces of bone, metal rods, screws and hooks to fuse the backbones together.

- The metal rods and screws help to keep the bones in the right place and hold them straight.
- The bone graft acts as a bridge, and grows into the spaces between the backbones. This fuses them together.
The bone graft can come from either:

- A piece of bone from your child’s own hip area. This is called an autograft.
  - Your child will have another incision over his hip area.
  - It should not affect your child being able to walk or run.
- A bone bank from someone who donated their bone—this is called an allograft.
- Your surgeon will talk with you about the best choice for your child.

Growing rod and VEPTR surgical procedures use specialized instrumentation to temporarily help with curve correction and control progression without fusion. Both of these procedures allow the surgeon to lengthen the instrumentation constructs to accommodate spinal growth.

A surgical procedure is required every six months to allow the construct length to maintain pace with spinal growth. Since these approaches require multiple surgical procedures they are only used when significant spinal growth beyond lengthening through deformity correction is expected. Your child’s doctor will discuss with you the best treatment options.

**What are growing rods?**

Growing rods allow for continued, controlled growth of the spine. Metal rods are attached to the spine and lengthened during a simple outpatient procedure. This is done through the back of the spine. The child returns about every six months to have the rods “lengthened” approximately one centimeter to keep up with the child’s growth. Some children will have to wear a brace to protect the instrumentation. When the child becomes older and the spine has grown, the doctor will remove the instrumentation and perform a formal spinal fusion operation.

**What is VEPTR surgery?**

Vertical expandable prosthetic titanium rib (VEPTR) surgery can help patients who have scoliosis and other spine conditions, such as thoracic insufficiency syndrome. This condition causes severe deformities of the chest, spine and ribs. Almost all children with this condition also have scoliosis or other spinal problems.

To correct these problems, the surgery involves the placing a curved metal rod along the child’s ribs, near the spine. This helps keep the spine straight and expands the ribs to allow the lungs to grow.

There is no set age for the surgery, but it is recommended between the ages of 18 months and 5 years.

**After the surgery:**

- Your child will stay in the hospital for a few days after the VEPTR insertion.
- Every four to six months, the metal rod will be expanded. This happens until your child’s skeleton stops growing. Expanding the rod helps the thorax grow. This is the area of the body that houses the lungs, heart and other body parts.
- Your child may be fitted for a brace to wear after surgery.
- Your child will be able to take part in physical activity in about a month.
Preparing for Spine Surgery

You can help prepare your child or teen for surgery. Preparing ahead of time can help:

- Calm your child’s fears.
- Make getting better easier and faster.
- Calm you as you focus on him, what to expect and how to care for him afterwards.

Like all people, children and teens are sometimes afraid of certain things. Below are some common fears your child may have about surgery:

- Being away from school and friends
- His body image, including what he looks like before and after surgery.
- What others will think about him being sick or in the hospital
- Loss of control and independence
- Not having privacy
- Needles and shots
- How surgery might affect what he can do in the future
- Pain
- Surgery and its risks
- Waking up during surgery, or not waking up after surgery
- Death

Talk with your child

This list of tips below can help you when you talk with your child about surgery.

- As soon you and your child decide to have surgery, sit down with your family and make a game plan.
- Allow your child to have as much control as possible. Give him choices when possible.
- Have your child make a list of questions to ask the medical team.
- Talk about fears and be honest. Children need truthful information to build trust.
- Let your child know that many other people have had the same type of surgery.
- Make a plan for distraction tools, visits from friends and comfortable PJ’s.
- Offer praise, positive comments and support.
- Talk with your child and the medical staff often. This helps everyone stay in touch and feel more at ease.
- Let your child know it is OK to be afraid and cry. He might need to know that you have the same worries that he does. Let him know that you are there to support him.
- Let your child know that you will be waiting close by during his surgery and will see him as soon as he gets back to his room.

Take care of yourself

- Make sure that you know about your child’s surgery and know what to expect. This can help reduce your fears about it.
- Make sure you, your child and your family are well rested.
- Take care of yourself. Your child can sense and react to your stress level.
What to do before Surgery

Follow the doctor’s advice to help get your child ready for surgery. He may need:

- A pre-op (before surgery) visit to meet with members of his medical team which includes:
  - A member of the anesthesia team who will ask lots of questions about your child’s medical history.
  - A child life specialist who will walk your child through the steps of surgery and give a tour of the area.
- Blood
- CT scans or MRI
- X-rays
- A pre-op visit with his doctor or with a nutritionist to talk about nutrition concerns. This could include being overweight or underweight, recent weight loss or weight gain, and poor eating habits.
- You can find a pre-op checklist in the Resources section of this handbook on page 51.

Note to parents: If your child receives tube feedings, talk with the doctor or nutritionist to review feeding regimen is adequate to prepare your child for surgery.

One month before surgery

- Your child should eat foods with lots of iron and protein for one month before surgery. This includes foods like meats, nuts, eggs and green, leafy vegetables. Check with the doctor to see if you need a multivitamin with iron.

One to two days before surgery

- Your child’s doctor may suggest taking an over-the-counter laxative like Miralax for 1 or 2 days before surgery. This can help to prevent constipation (hard bowel movements) after surgery.
- Your child should drink lots of fluids a few days before surgery so his body is well hydrated. This will also help prevent constipation.
- Pack your child’s belongings. Be sure to include a robe or loose fitting shorts and T-shirts. Your child may also wish to bring an MP3 player, books or DVDs. You will find a ‘What to Bring’ handout in the Resources section of this handbook on page 52.
- If your child has long hair, wash it and put up in a metal-free pony tail holder.
- Your child should bathe or take a shower the night before surgery.
  - He should pay close attention to areas like under the arms and groin area.
  - The night before surgery, your child’s skin should be washed with the CHG wipes the nurse gave you at the Pre-op clinic. Use them just like the nurse taught you to do.
- Read the ‘Cleaning with CHG cloths’ handout in the Resources section on page 58.
- Your child should not take a shower or eat the morning of surgery.
- Your child should not wear contact lenses, makeup, jewelry or nail polish to the hospital on the day of surgery.
- Familiarize your child with the pain scale he will be using after surgery.
- If 10 is the worst pain you have ever felt and zero is no pain, what number best describes your pain right now?

- If the sad face is the worst pain you have ever felt and the happy face is no pain, which face seems the most like your pain right now?
Your child will be able to go home when he is able to:

- Eat a regular diet
- Control pain with medicines taken by mouth
- Walk without help
- Tell the nurse or therapist what things he can and cannot do at home

Most patients are discharged 2 to 3 days after surgery.

We invite you to learn more about your child's care for a spinal fusion. This Plan for Recovery can give you general information about what to expect during your child's hospital stay. The exact course and treatment will be based on your child's needs. If you have questions or concerns about your child's care, ask your child's doctor or our staff questions at any time.

The Day of the Surgery

When your child arrives at the hospital, our nurses will:

- Check your child's vital signs (blood pressure, pulse, breathing rate and temperature).
- Use the CHG cloths to wash the back
- Take your child to the operating room for surgery
Your child’s plan for recovery
Idiopathic spinal fusion
Recovery for: ____________________________

<table>
<thead>
<tr>
<th>Right after surgery</th>
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<tbody>
<tr>
<td><strong>Diet</strong></td>
<td>• May be allowed ice chips and clear liquids as tolerated</td>
</tr>
</tbody>
</table>
| **Activity**                 | • Use the incentive spirometer about 10 times an hour while awake to help keep the lungs clear  
                             | • Make a log-roll turn about every 2 hours around the clock with help from staff |
| **Medicines**                | • Through the Intravenous (IV) line:  
                             |   − Fluids  
                             |   − Antibiotics to help prevent infections for about 24 hours  
                             |   − Pain medicine with a patient-controlled analgesia (PCA) pump  
                             |   − Medicine for an upset stomach, if needed |

**Pain Management**
- Pain management goals for Day of Surgery:  
  - Rest  
  - Sleep  
  - Participate in turning in bed  
  - Deep Breathe

<table>
<thead>
<tr>
<th><strong>Pain Management Plan today:</strong></th>
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</table>
| • Valium through the IV line for tight muscles (spasticity) as needed  
| • Pain medicine with a patient-controlled analgesia (PCA) pump  
| • IV pain medicine if the PCA pump does not control pain well enough  
| • Position for comfort  
| • Support relaxation techniques |

**Patient Plan:**
- Tell your nurse if your pain is not relieved or you have muscle spasms  
- Tell your nurse if you are itchy  
- Tell your nurse if your stomach is upset or hurts  
- Use your PCA as directed  
- Use your relaxations skills to help relax  
- Use the comfort measures you learned about such as pillow positioning and music

**Other care**
- Check vital signs, circulation and movement regularly **around the clock**
- **Tell your nurse if your child has:**  
  - Numbness or tingling in the arms or legs  
  - Decreased feeling in the arms or legs  
  - Dressing soaked with blood  
- Hemovac drain to collect fluid from wound if present  
- Oxygen as needed  
- Pulse Oximeter to check blood oxygen level  
- Catheter to drain urine
### Day after surgery (post operative day 1)

<table>
<thead>
<tr>
<th>Diet</th>
<th>Clear liquids to regular diet, depending on what your child can eat</th>
</tr>
</thead>
</table>
| Activity | - Use the incentive spirometer often to keep the lungs clear  
- Will be seen by physical therapist (PT)  
- Make a log-roll turn about every 2 hours with help from staff  
- Move from bed to chair several times with help from staff  
- Begin walking with staff and family  
- You may help your child with moving around |
| Medicines | Through the IV line:  
- Fluids—may be stopped if able to take liquids by mouth without an upset stomach  
- Medicine for an upset stomach, if needed  
- Medicine for constipation, if needed |
| Pain Management Plan today: | - Stop PCA pump  
- Begin pain medicine by mouth every 4 hrs around the clock  
- Begin an anti-inflammatory medicine  
- Valium for tight muscles as needed  
- IV pain medicine if needed for more severe pain  
- Time PT visits with pain medicine  
- Help with getting patient out of bed  
- Position for comfort  
- Support relaxation techniques |
| Patient Plan: | - Tell your nurse if your pain is not relieved or you have muscle spasms  
- Tell your nurse if your stomach is upset or hurts  
- Move in bed often using a logroll  
- Get out of bed with help  
- Rest between therapy visits  
- Use your relaxation skills to help relax  
- Use the comfort measures you learned about such as pillow positioning and music |
| Other care | - Check circulation and movement regularly around the clock  
- **Tell your nurse if your child has:**  
  - Numbness or tingling in the arms or legs  
  - Decreased feeling in the arms or legs  
- Pulse Oximeter to check blood oxygen level if PCA pump is still being used  
- Foley catheter may come out  
- Blood work if needed  
- Fever is common in the first day or two – you may receive acetaminophen  
- Continue to help your child move |
| **NOTE:** | Teenage girls may start their period after the surgery |
Your child’s plan for recovery
Idiopathic spinal fusion
Recovery for: _________________________

<table>
<thead>
<tr>
<th>Post operative day 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet</td>
<td>• Regular</td>
</tr>
</tbody>
</table>
| Activity            | • Walk at least 3 times a day around unit and begin stair training  
                    | • Get out of bed with assist of family |
| Medicines           | • Stop IV fluids but IV remains  
                    | • Pain medicines by mouth  
                    | • Medicine for constipation, if needed |
| Pain Management     | Pain Management Plan today:  
                    | • Valium by mouth for muscle tightness as needed  
                    | • Pain medicine by mouth every 4hrs as needed  
                    | • IV pain medicine if needed for more severe pain  
                    | • Continue anti-inflammatory medicine  
                    | • Assist with walking and moving  
                    | • Position for comfort  
                    | • Support relaxation techniques  
| Take part in your bath and ADL’s | | | |
| Take part in physical therapy including stairs | | | |
| Take part in occupational therapy | | | |
| Continue turning in bed | | | |
| Deep breathing | | | |
| Rest and sleep | | | |
| Other care | • Check circulation and movement regularly  
             | **Tell your nurse if your child has:**  
             | – Numbness or tingling in the arms or legs  
             | – Decreased feeling in the arms or legs  
             | • Hemovac drain removed, if not already done  
             | • Remove Foley catheter, if not already done  
             | • Chest and back X-rays  
             | • Continue to help your child with moving and sponge bathing |
Your child’s plan for recovery
Idiopathic spinal fusion

**Recovery for:** ______________________

### Post operative day 3 or discharge day

<table>
<thead>
<tr>
<th>Diet</th>
<th>Regular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Your child should be able to walk and get in and out of bed with minimal or no help</td>
</tr>
<tr>
<td>Medicines</td>
<td>Pain medicines by mouth, Medicine for constipation, if needed, A staff member will remove IV on day of discharge</td>
</tr>
</tbody>
</table>

#### Pain Management

**Pain management goals for Post Operative Day 3 and/or Discharge:**
- Walk by yourself
- ADL’s with parent help
- Rest and sleep
- Discharge home

**Pain Management Plan today:**
- Valium by mouth for muscle tightness as needed
- Pain medicine by mouth every 4hrs as needed
- Stop anti-inflammatory medicine
- Review home pain management plan

**Patient Plan:**
- Ask for pain medicine before an activity or if you begin to hurt
- Tell your nurse if your pain is not relieved or you have muscle spasms
- Tell the nurse or doctor what you will do to control pain at home

#### Other care

- Incision care
  - Keep incision clean and dry
  - Other home care as your child’s doctor directs

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Your child will be able to go home when he is able to:
- Eat a regular diet or is receiving full tube feeds
- Control pain with medicines taken by mouth
- Walk with minimal to no help
- Tell the nurse or therapist what things he can and cannot do at home

**Most patients are discharged 2 to 3 days after surgery.**
After Surgery: In the Hospital

Your child will go to the PACU (Post anesthesia Care Unit or Recovery Room). When he is ready, our staff will move him to a patient care area. Your child may look a little pale and have a puffy face for 1 or 2 days. This is normal and is due to the way your child was positioned during surgery. If your child’s doctor thinks you need to have special care overnight, you will go to the Intensive Care Unit (ICU). Our staff will check on him often through the night.

The next few sections will also be covered with a Child Life Specialist during your child’s pre-op visit.

Monitors and checks

- Your child may need oxygen to help him breathe easier as he wakes up. If so, a plastic face shield will blow an oxygen mist into your child’s face. A machine called a pulse oximeter will check his oxygen level. A wire connects the machine to a bandage on your child’s finger and does not hurt.
- A machine called a cardiac monitor will check your child’s heart rate and breathing rate. Thin wires connect the monitor to 3 electrodes on your child’s chest. These electrodes feel like stickers and will not hurt.
- Our staff will check your child’s temperature, heart rate, blood pressure and breathing rate often, even at night.
- Our staff will also check the feeling and movement of your legs and feet often, even during the night. This is to help make sure the nerves and blood vessels in your legs are working well. Be sure to tell your doctor or nurse about any changes in the way your legs or feet feel.

IVs, Drains and Tubes

You will have 1 or 2 I.V.s. I.V. stands for intravenous (in your vein). You will get an antibiotic (a germ-killing medicine) through your I.V. You will also get fluids through your I.V. until you can eat and drink.
- Once you can drink well, the I.V. may be turned off.
- The I.V. will remain in place until you are ready to go home.

A small, soft tube called a Foley catheter will drain urine from your bladder. A nurse puts it in place during surgery while you are sleeping. The tube goes into the same opening through which you urinate (pass water).
- A bag connected to the tube collects urine. Our staff will empty the bag 2 or 3 times a day. This helps your nurse and doctor keep track of your body fluid level.
- The tube is usually removed 1 or 2 days after surgery. After they remove the tube, your nurse or patient care tech will help you get up to the bathroom.

You may also have a drain in your wound called a Hemovac. It drains extra fluid from the incision into a small container. Your doctor will remove it 1 or 2 days after surgery.
Pain management

Pain management is a vital part of your child's stay. At Children’s, we work as a team with your child to decrease pain when possible. You know your child best. Please tell us when your child is in pain or if there is anything else we can do to help decrease your child’s pain.

- Our staff will check your child's pain often using a pain scale.
- The pain scale contains a pain rating from 0-10 (0 is no pain, 10 is the worst possible pain). Our goal is to lessen the pain as much as possible.

See the Discomfort After Surgery section of this handbook on page 43 for more information.

What is a Patient Controlled Analgesia (PCA) pump?

Pain after surgery can make it hard to take a deep breath, move and walk. Managing your child’s pain will make it easier for him to take part in his care and recovery. One of the ways to manage pain is to use a PCA pump.

The PCA pump is a small, battery-operated machine that gives pain medicine (analgesia) to your child. The pump controls a syringe that contains the pain medicine ordered by your child’s doctor.

How does it work?

- Your child can push a button that connects to the PCA pump when he begins to feel pain.
- He can also use it before an activity that might cause pain.
- A small dose of pain medicine goes into your child’s vein through his IV catheter when he pushes the button. From there, it goes into his bloodstream.
- A PCA pump enables your child to decide when to take pain medicine. He is the only one that should press the button unless his doctor orders otherwise.
- The nurse sets the pump so he cannot take too much medicine or use the pump too often, even if he pushes the button.

Why should my child use a PCA pump?

- When a child has pain, he may be afraid to ask for pain medicine. Some children feel that a pain "shot" is worse than the pain itself.
- A PCA pump is already connected to an IV line, so an extra "shot" is not needed. The pump works well for children because they are not afraid to say that they have pain.
- Please let your child’s nurse know right away if you think your child’s pain is not being well controlled.

How safe is the PCA pump?

- The pump has a computer in it that is set to prevent too much medicine from being delivered.
- It also has a "lockout" period that prevents your child from getting a dose of medicine too soon, even if he pushes the button.
- Your child’s nurse and other caregivers watch him closely for signs of sleepiness (too much pain medicine) or pain (not enough medicine).

When should I call the nurse?

Pain medicine can cause stomach upset and constipation. Please let your child’s nurse know if you notice side effects from the pain medicine such as:

- Warm, flushed face
- Feeling sleepy or groggy
- Feeling grouchy
- Nausea
- Itching and scratching

Also tell your child’s nurse right away if you think your child’s pain is not well controlled.

If you do not have a PCA pump, your nurse can give you pain medicine through your IV. Once you are cleared by the doctor to eat and drink, the nurse will turn off the PCA pump. You can then take your pain medicine as a liquid or pill by mouth.

Other things you can do to help your pain include:
- Tell us what has helped you in the past
- Breathe deeply and slowly
- Watch videos or TV
- Listen to music
- Imagine you are in your favorite place
- Ask your nurse to call the Child Life Specialist for more tips to help reduce your pain

**Moving after a spinal fusion**

- *Physical therapy* will begin the morning after surgery. A physical therapist will teach you and your parents the safe way for you to move.
- You can give yourself a dose of pain medicine from your PCA pump before or after your therapy session to help decrease any pain.
- Moving and turning in the right way can help you heal better, get stronger and have less pain.
- It is very important that you change positions often, even at night. This helps keep your lungs clear and prevents soreness and skin problems. You will be sore after surgery but your nurse and family can help you. As you begin to feel better, you will be able to change positions yourself.

**Turning in bed**

When turning, keep your body and back in a straight line like a log. A physical therapist and nursing will help you and teach you how to roll in one continuous motion. This is called a logroll. As you start feeling better, you can help turn yourself.

- Roll so that your hips, knees and shoulders stay in line and move together. Do this anytime you change positions in bed.
- Avoid any twisting and bending motions.
- When lying on your side, place pillows between your knees and behind your back to help you feel better. You can also place a pillow under your top arm.
- When lying on your back, place pillows under your knees and arms.

**How to sit on the side of the bed**

A physical therapist will teach you the proper way to sit up. You can also follow these steps to help sit up on the side of your bed:

- Keep your back straight.
- Bring your knees up so that your feet are on the bed.
- Log roll onto your side.
- Push up to sitting by pushing against the mattress with your elbow and your hand.
• Push up with your arms at the same time that you lower your feet.

**How to get out of bed**

Your physical therapist will help you get out of bed and walk the first morning after your surgery. The therapist and your nurse may also have you sit in a chair for at least 45 or 60 minutes three times per day beginning the morning after your surgery. Your physical therapist, nurse and family can help you get out of bed and walk at least 3 times a day while you are in the hospital.

**Helpful hints with daily activities**

• Sit in a chair for at least 45 to 60 minutes. Do this at least 3 times starting the day after your surgery.
• Walk in the hallways at least 3 times per day with assistance.
• The sooner you begin moving, the quicker you will get better. It is never easy to get up the first time after surgery, but it will help reduce your risk of problems.
• Each day, move around more than you did the day before.
• As you progress, your physical therapist will teach your family how to help you with mobility and exercises. If you have stairs at home, your physical therapist will help you practice going up and down stairs.

**Care of your lungs**

Our staff will give you a small device called an *incentive spirometer* after surgery.

• Your nurse or respiratory therapist will teach you how to use it to do breathing exercises. This will help prevent pneumonia and other lung problems. Hugging a pillow while you cough puts less strain on your back and can help reduce pain.
• Many patients have a slight fever after surgery. Using your incentive spirometer often can help your temperature return to normal.

**Feelings**

You may go through many mood swings while in the hospital. You may become withdrawn and not want to talk or answer questions. There are times when you may need to be alone. All of these are very normal feelings.

Some tips to help you deal with your feelings:

• Stay connected with your friends.
• Make time for visits, phone calls, Facebook and Twitter.
• Each day, remind yourself of what you did that you could not do the day before. Stay positive and aware of your progress.

Some tips for your parents include:

• Be patient and understand your child may not feel like himself.
• Ask friends to send cards or letters during the hospital stay or healing time at home.

As your activity level increases and you begin feeling better, your feelings and mood will improve. Once you can sit in the chair and walk to the bathroom, you may feel better if you take a sponge bath, comb your hair or put on makeup.

Many times, teenage girl’s menstrual periods will be irregular after surgery. This is very common. Your period should return to normal in 1 or 2 months.
Eating and drinking
Right after surgery, you may only be allowed to have a small amount of ice chips or sips of clear liquids. After this, your doctor will increase your diet until you are able to eat and drink as you normally would. If you like to chew gum, pack some in your suitcase. Chewing gum after your surgery may help your bowel function return to normal more quickly.

If you feel nausea, (a queasy, sick feeling), let your nurse know. She can give you medicine to help you feel better.

Once you are able to drink clear fluids and eat small amounts of food, you can begin to take your pain medicine by mouth.

Constipation, trouble having a bowel movement (BM), sometimes occurs due to the effects of the pain medicine and being less active. To help prevent this, drink plenty of fluids and begin to move around as much as you can.

If you have problems eating or drinking, tell your nurse. Your nurse can call a nutritionist to talk with you. You need to be able to take in enough fluids, protein and vitamins to heal well.

Note to parents: If your child received tube feedings before surgery, it is best to restart them as quickly as possible. The feedings may not be the same as you used at home, as your child may need increased calories and protein for healing.

Preparing to go home after spinal fusion surgery
Occupational therapy (OT) can help you be more independent when caring for yourself after surgery. Your therapist can help you:

- Learn how to bathe, dress, groom and toilet yourself better and easier. Your therapist calls these things ADL’s or activities of daily living.
- Try new ways of doing things that can help keep you and your back safe.
- Your therapists will see you after surgery on day 2. They will have you practice ADL’s.

Some OT tips to help are listed below.

Getting dressed
- To put on pants, socks and shoes, bend at the knee to lift your legs and feet. Do not bend over at the waist to reach your legs and feet.
- Keep your back straight when putting on button-up shirts and coats. Do not twist at the waist. To tie your shoes, bend your leg at the knee and place your foot on your opposite leg rather than bending down.

Brushing your teeth
- Keep your back straight when you brush your teeth.
- Use 2 cups – 1 for rinsing and 1 for spitting. Bring each of them to your mouth instead of bending over to a low sink.

Going to the bathroom
- Bend at the knees to sit down and stand up from the toilet. Getting up and down from the toilet can be hard. Have someone help you at first if needed.
- Face forward when you clean yourself after going to the bathroom. Do not twist or bend at the waist.
Getting around at home

- Pick things up by bending at your knees, not your hips.
- Move household items that are too high or too low to reach. Make sure that you can easily reach all of the things you need in your bedroom, bathroom, and kitchen.
- Sit in firm chairs with good support. Add an extra cushion to raise the height of the seat if needed. Avoid low or soft sofas and chairs that are harder to stand up from.

You can help prepare for OT by doing these things:

- Bring a change of clothes for ADL’s like loose fitting pants, under garments, a buttonup shirt, socks and shoes.
- Bring items for grooming like a toothbrush and hair brush.
- Think about your home and bathroom setup. This includes things like the type of shower you have, the height of the toilet, and how you usually get in and out of bed. Work with your therapist to plan a good way for you to get around in your bathroom, bedroom and home.
After Surgery: At Home

The goal for you is to recover from surgery as quickly and safely as possible.

Care of your incision
Keeping your incision clean and dry is an important step in preventing an infection. Clean your hands with an alcohol hand sanitizer before changing your dressing or touching and cleaning the incision site.

- If you have a bandage when you go home, your doctor will let you know how and when to change it. You will also have to change it if it has a large amount of drainage on it.
- You may have Steri-strips, which are small strips of tape, over your incision. These usually fall off on their own in 1-2 weeks. You can keep the edges trimmed if needed. Clean the scissors you use to trim them with alcohol first.
- Stitches are usually on the inside. This means the doctor does not need to remove them.
- If the doctor used skin glue, it may cause your skin to look a purplish color.
- Change into clean clothes or change bed linens if they get soiled or wet from body fluids until your incision fully heals.

Pain control
You may need pain medicine during the first 1-3 weeks that you are at home. Your doctor will give you a prescription. You will be able to gradually stop taking it over the next 2-3 weeks.

- Do not take any over-the-counter medicines unless your doctor tells you to.
- Change your position often, so you don’t get sore from staying still too long. Walking often will help your soreness go away over time.
- Even 3-4 weeks after surgery, you may still feel tired.
- Think about and do things you enjoy like TV, music, a good book or a game with your friends. This helps to take your mind off your discomfort.

See the Discomfort After Surgery section on page 43 for more information on managing pain.

Activities of Daily Living

Washing your hair
You can wash your hair as often as you like. There are several ways to do this until you are allowed to shower.

- If the bathroom sink is short enough, place a chair in front. Sit facing away from the sink and tilt your head back (like you do when you have your hair washed in a salon).
- Place a chair with the back facing the kitchen sink. Kneel on your knees (with the front of your thighs pressed against the back of the chair). Tilt your head forward and use the sprayer hose. Make sure that you keep your back straight to maintain spinal precautions.

Taking a shower
Keep your incision clean and dry until the doctor tells you that you are allowed to shower. Until then, give yourself a sponge bath. This helps to keep water away from your incision.

Once you can shower, pat your incision dry with a clean towel to dry off.

- At first, you may feel dizzy or faint when you shower. To help with this:
  - Have someone nearby for the first few times you shower.
  - Place a waterproof chair in the shower. Sit on it during the shower.
- Use lukewarm, not hot water.
- Use a mild soap around your incision.
- Your doctor will let you know when you may take a tub bath or go swimming.

**Sleep and rest**
You can sleep in your own bed at home. Use pillows for support like you did in the hospital. Take rest breaks often during the day, but increase your activity and walk more each day.

**Eating**
The doctor does not want you to lose more than 10% of your body weight. Eating a well balanced diet and drinking enough fluids can help you to:
- Heal quicker
- Maintain your weight
- Regain strength

A balanced diet means that you eat meals that contain protein, whole grains, vitamins, minerals and fiber.
- Choose foods high in protein, iron and calcium such as peanut butter, eggs, meat, cheese, milk, yogurt and green, leafy vegetables.
- Get extra calories and protein by drinking a nutritional supplement like Ensure or Boost, as directed by your doctor or nutritionist.
- Eat high fiber foods such as whole-grain cereals, whole-grain bread, fruits and raw vegetables.
- Drink six 8 ounce glasses of water a day to help prevent constipation.

To keep from feeling too full, eat 5 or 6 small meals a day. This also can help you to get all the calories and nutrients your body needs.

**Note to parents:** If your child received tube feedings before surgery, continue them at home. If the doctor or nutritionist changed the feedings in the hospital, keep your child on the same feedings at home as directed. This allows for increased calories and protein for healing. Talk with your child’s doctor before making any changes to your child’s tube feedings.

**School**
Your doctor will let you know when you can return to school. This is usually 2-3 weeks after surgery. The doctor can give you “Home Bound” paperwork that allows you to do your school work at home. When you return to school, you may want to begin with half-day sessions for the first week.

School books are heavy to carry. A couple tips include:
- Ask a friend to carry your books from class to class.
- Keep a set of books at home and at school so you do not have to carry them back and forth.
- Use a rolling backpack.

**Physical Activity**
Your doctor will let you know:
- When you drive, always wear your seatbelt.
- When you are able to attend physical educations (PE) classes. Let the doctor know what sports you take part in so he can let you know when you may begin again. You may be able to begin some light exercise, such as swimming in 2 to 3 months.
- Do not lift anything over 10 pounds until your doctor says it is OK.
• Do not swim in lakes, oceans, streams and rivers until the incision is fully healed.

Other tips include:
• Walk, walk and walk! This will help you get better faster. You can go up and down stairs, but use a railing to help you feel more secure.
• It is often easier to sit in a higher, firm chair rather than in a low, soft chair.
• Bend at the knees and hips if you need to pick something up off the floor. Do not bend or twist at the waist.

When to call your surgeon
You or your family will need to call your surgeon if you have:
• A temperature of 101 degrees and do not also have a cold, flu or other illness
• Increased redness, swelling, tenderness, pain or warmth at your incision sites
• Drainage or bad smell at your incision sites
• Open areas along the incision line
• Pain that does not get better with pain medicine
• Numbness or tingling in your arms, legs or feet
• Change in bowel or bladder control
• Vomiting
• Any questions or concerns about how you feel
Discomfort After Surgery

Pain Management

Pain management is very important. The doctors and staff will work with you to help prevent or decrease your pain and discomfort when possible. Since discomfort is a normal part of spinal fusion surgery, we will use several methods to help you manage pain. These include medicines, activity, rest, comfort measures and diet.

We will work with you to ensure you get enough relief to sleep, turn or walk as needed. Let your nurse or doctor know if you are not any better after using these methods.

A note to parents about pain management

You are a vital part of your child’s treatment, including pain management. See below for more information and tips to help your child.

Your child has the right to:
- Receive care that will reduce or prevent discomfort
- Be told the truth about his discomfort
- Tell others if he hurts and what he thinks will help make it better
- Cry or object when anything hurts or upsets him
- Have questions answered in words he can understand
- Keep his bed a safe place, when possible
- Watch during a procedure if he wants to
- Be with a parent when in pain, if possible

What you can do to help us help your child:
- Tell us as soon as your child is uncomfortable
- Ask your child’s doctor or nurse what to expect
- Ask about the plan to treat your child’s discomfort
- Tell us what has helped your child in the past when he has been uncomfortable
- Tell us what you think we can do to help your child
- Tell us if what we are doing is not working
- Work with staff to try new methods make your child more comfortable
- Let us know if you have any questions

We learn about your child’s pain by:
- Listening to what your child says
- Watching what your child does
- Noting changes in your child’s body
- Talking with you about what you see

To help your child tell us about his pain, we use different “scales” to measure pain. Please reference page 24. Your child is the best person to talk about what hurts him. While you can assist us in keeping your child as comfortable as possible, he is the expert on how his pain is. Please ask your nurse to show you the tool we use for your child.

We also ask you to help us look for changes in your child's behavior such as:
- Crying or fussing
- Holding, touching, guarding or rubbing the painful area
- Talking less or being quiet
- Sleeping more or less
- Eating less
- Does not want to move
- Making a pain face (grimace)
- Sweating

**What can we do to help?**

**Medicines**

There are many medicines that help relieve pain and they are given in different ways. Your child’s doctor will talk with you about the medicine that is best for your child. Let your child’s nurse or doctor know if you have concerns or questions about your child’s pain medicines.

**Play and Relaxation**

There are also other ways to help your child not think about their discomfort. Our staff is trained in how to use play, distraction and relaxation with children. Here are some ideas you might want to try:

**Babies**
- Rocking or holding
- Singing and music
- Listening to soft words or sounds
- Gentle massage
- Pacifier
- Favorite toy

**Toddlers and Preschool-age Children**
- Rocking or holding
- Singing or listening to music
- Telling stories
- Watching videos or TV
- Blowing bubbles
- Pop-up books and toys

**School-age Children and Teens**
- Talking about what has helped in the past
- Knowing what to expect, having a plan for difficult situations
- Breathing deeply and slowly
- Watching videos or TV
- Playing electronic games or listening to music
- Imagining he is in his favorite place
- Visits with friends
- Massage

See the handout ‘Making Needles Hurt Less’ in the Resources section of this handbook. You know your child best. Please tell us if there is anything else we can do to help decrease your child’s pain.
Inpatient Rehabilitation

If your child’s doctor wants him to stay at the hospital for therapy after surgery, you may go to the Children’s Comprehensive Inpatient Rehabilitation Unit (CIRU). A team of pediatric-trained staff, led by a physiatrist or rehabilitation doctor, and a case manager, will:

- Support you, your child and your family during your rehab stay.
- Teach your child to be as independent as possible.
- Teach you to care for your child at home.

This can be a very stressful time for your family. Feel free to talk with our social worker and/or chaplain, take part in support groups and connect with family and friends.

Team Meetings

Your child’s team meets weekly. The meetings are an important part of your rehab stay. Team members include you, your child if he is able, your doctors, therapists, nurses and others. The purpose of the meeting is to:

- Discuss your child’s treatment plan, his progress, needs and challenges
- Find out about your goals for your child
- Help prepare you for going home
- Answer your questions

Your case manager or social worker will let you know when your child’s first team meeting will be. Make plans to attend the first meeting. Each patient has a 5 to 10-minute time slot. If you cannot attend a meeting, your CIRU case manager can give you an update. The caregiver attends only the first meeting unless the child/adolescent or the parent requests to attend another meeting. The child’s case manager updates you after every team meeting.

You or your child may feel uncomfortable asking questions at the full team meeting. Tell your case manager if you would rather meet with a smaller group. Tell us how we can help you be as comfortable as possible. Ask your nurse or therapist if you have any questions about your child’s team meeting or treatment plan.
Your Child's Rehab Schedule

Our rehab team will work to create a program to meet your child's needs. Some of your child's rehab activities may be the same as other patients on the unit. Others may be different.

- Therapy sessions are one hour, 45 minutes, or done as two half hour sessions.
- Therapy is provided seven days a week, including holidays.

A sample schedule is listed here:

- 7 a.m. to 8:30 a.m. Activities of daily living, medicines and tube feedings (if needed)
- 8 a.m. to 8:30 a.m. Breakfast
- 8:30 a.m. to noon Individual or group therapy sessions
- Noon to 1 p.m. Lunch group or break time in your child’s room
- 1 p.m. to 4 p.m. Individual or group therapy sessions
- 4 p.m. to 5 p.m. Group time or break time in your child’s room
- 5 p.m. to 6 p.m. Dinner in your child’s room
- 6 p.m. to 8 p.m. Family time, evening programs
- 10 p.m. Lights out

Therapy sessions may include:

- Activities of daily living, such as washing, dressing and brushing teeth
- Transfers into and out of bed
- Transport to and from room when needed
- Diaper changing or bathroom visits
- Caregiver training
- Your child also may take part in activities, such as exercises, cooking, study time, pet therapy, community outings, and craft and peer groups.

The evening before therapy, your child usually will receive his schedule for the next day. Have your child ready on time. Bring him to the assigned area for his therapy. This will allow him to be treated on time and for the full session. Parents can participate when available and only if they have been trained to transfer their child.

We do our best to keep your child’s daily schedule the same during the week. There may be times when this is not possible. Some reasons why your child’s schedule may change include:

- Special tests or procedures
- Visits from doctors
- Nursing care or medicine schedules
- Patient illness
- Therapeutic leaves of absence (TLOA)
- Special events

There are times when more therapy does not equal better therapy. After a lengthy hospital stay, your child’s energy level may be lower than normal. The rehab team may find that he needs more rest breaks. If so, we will give your child breaks during the treatment day. This can help him gain the most benefit from therapy sessions.
Weekend schedules
Your child also will have therapy during weekends and holidays. There may be a few changes from the weekday schedule:
- The day begins later, which allows you and your child to sleep in.
- Your child also may have group or individual therapy sessions during the day.
- We offer special events and activities during weekends and holidays:
  - Pet therapy visits occur every other weekend.
  - Chapel services are offered Sundays.
  - Movies may be shown Saturdays.

Evening programs
All hospital patients are invited to take part in evening activities when they occur. A list of “Hospital Happenings” is posted in the playroom.

Therapy After Discharge
Your child’s therapy will continue after his inpatient rehab stay. Your child’s case manager can help you find services near your home. Children’s is proud of the scope of care that we offer.
- Day Rehabilitation Program: Children’s offers a full day program of physical, occupational and speech-language therapy. It also provides school, nursing, case management and social work services.
  - The therapy day is structured like a child’s school day, 9 a.m. to 3 p.m., Monday to Friday. This allows your family to spend the evening at home.
  - Someone from Day Rehab can meet with you to tell you more about the program.
- Outpatient Rehabilitation Program: There are nine locations around Atlanta to help your child continue therapy.
- Sports Medicine Program: There are 12 locations around Atlanta to help your athlete return to sports following spine surgery.

Rehabilitation Physician Follow-Up
Your child may be scheduled for follow-up visits at the Children’s rehab clinic. This may occur six to eight weeks after discharge. Your child will be seen by his doctor, who will talk with you about further treatment.
Resources

Presurgery Checklist

One month before surgery
- Get approval for surgery from your child’s primary care doctor and orthopaedic specialist
- Check with your child’s school about home teaching and begin paper work
- Schedule a 2 week pre-op visit with your doctor
- Schedule pre-op CT scan and/or MRI, if required
- Schedule pre-op anesthesia visit and tour

Two weeks before surgery
- Pre-op visit with your doctor
- Pre-op CT scan and/or MRI, if required

One week before surgery
- Pre-op anesthesia visit
- Hospital tour and child life visit

Day before surgery
- Pack—find a list of what to bring on the next page
- Nothing to eat or drink after midnight
- Use the CHG wash as taught in Pre-op clinic
What to Bring

We want you to be as comfortable as possible during your stay. To bring some comforts from home, here is a checklist of items you might want to pack.

- Comfortable, loose clothing or PJs*
- Bathrobe*
- Extra underwear
- Comfortable shoes or slippers
- Socks
- Favorite towels and washcloths*
- Favorite pillow or body pillow*
- Favorite blanket*
- Laptop or iPad (the hospitals have free Wi-Fi)
- iPod or CD player and headphones
- Favorite movie (each patient room has a DVD player)
- Toothbrush and toothpaste
- Mouthwash
- Hairbrush or comb
- Soap or skin care items
- Make-up
- Deodorant
- Feminine supplies
- Lotion
- Hair ties or headbands
- Stuffed animals*
- Chewing gum

*Only bring items that can be washed before coming to and after leaving the hospital to reduce your risk of infection.
Traveling Families and Visitors
We know having a child in the hospital is a stressful time. That is why we do everything we can to help patients, parents and visitors feel comfortable, safe and secure.

Below are area hotels that offer special hospital rates to patients' families at Egleston.

Cheshire Moon Inn, 1865 Cheshire Road - 404-872-9628
*Courtyard by Marriott, 1236 Executive Park Drive - 404-321-4174
*Emory Inn, 1641 Clifton Road - 404-712-6700 (Free shuttle to Egleston)
*Hampton Inn, 1975 North Druid Hills - 404-320-6600
*Courtyard Marriott/Decatur, 130 Clairmont Avenue - 404-371-0204
*Holiday Inn Express at Emory, 2183 North Decatur Road - 404-320-0888
Quality Inn/Northlake, 2155 Ranchwood Drive - 770-491-7444
Towne Place Suites by Marriott, 3300 Northlake Parkway - 770-938-0408
*University Inn, 1767 North Decatur Road - 404-634-7327

*Identifies accommodations nearest the hospital

Below are area hotels that offer special hospital rates to patients' families at Scottish Rite.

Comfort Suites – Perimeter Center, 6110 Peachtree Dunwoody Road – 770-828-0330
Microtel Inn & Suites by Wyndham, Atlanta Perimeter Center, 6280 Peachtree Dunwoody Road NE – 678-781-4000

Talk with your child’s social worker or call the Family Support Services office from a hospital phone.
• Egleston hospital: 404-785-6250 or dial ext. 5-6250 from a hospital phone
• Scottish Rite hospital: 404-785-2010 or dial ext. 5-2010 from a hospital phone

Visit choa.org/visitors to find more information. This includes visitor guidelines, transportation and lodging resources.

Parking Passes
You can buy parking coupon booklets from the parking booth attendant for $5. Each booklet contains 5 tickets. Each ticket allows 1 vehicle in and out.

Family Library
The library offers:
• Medical and health information for patients and families
• Library staff to help you find what you need
• Access to the Internet, e-mail and medical databases
• Books and DVDs that you can check out
• Help making your CarePages page (see Carepages section below)

The Egleston Family Resource Library
404-785-1611 or ext. 5-1611 from a hospital phone

The Children’s Max Brown Family Resource Library at Scottish Rite
404-785-2192 or ext. 5-2192 from a hospital phone
CarePages

For patients and families, CarePages™ is a free Internet tool that you can use to post updates about your child’s status. It also allows you to receive well-wishes and messages from others outside of the hospital. It can help you create a base of support with your family and friends.

Making a page takes about 10 minutes.
- Visit carepages.com/choa.
- Register and follow a few simple steps to complete the page.
- Invite friends and family to visit the site for news and updates.
Making Needles Hurt Less

Patient and Family Education

This teaching sheet contains general information only. Talk with your child’s doctor or a member of your child’s healthcare team about specific care of your child.

You play a very important role in helping your child through painful procedures. At Children's Healthcare of Atlanta, you and your healthcare team can work together to help your child learn about and better manage needlesticks.

PREPARE Use simple words to tell your child what is going to happen on a level he can understand.

USE SOFT LANGUAGE Avoid using words that might frighten your child like shot, burn, or sting. Use softer words with a slow, calm voice. You might say “The nurse will gently slide a small tube into your arm” or “It’s time to get medicine in your arm. You may feel a pinch.”

BE HONEST Avoid making promises you can’t keep, such as, “I promise it won’t hurt.” Children need truthful information to build trust in you and others.

TELL Tell the hospital staff what has helped or not helped your child in the past. (Also, tell your child it is not his fault that he is going through something painful. Young children can see pain as a form of punishment.) Tell your child his job is “to hold his arm still”– this may help your child feel more in control.

REQUEST Request the use of cold spray or local anesthetic cream which numb the skin before needle-sticks. You may also request that your child be taken to the treatment room (if one is available) for needle-sticks so that he can rest and relax in his bed.

OFFER CHOICES Give your child a sense of control by offering choices before and/or during the procedure. You may ask, “Would you like to watch or look away?” or “Would you like to count or take some deep breaths when it’s time to start?”

BE AWARE Try to remain calm. If you are upset, your child may become more fearful. If you are not able to support your child through a painful procedure, it is ok to ask for help or leave the room.

COMFORT Hold your child’s hand or hold him in a comforting position if possible.

PRAISE When giving praise, avoid saying “good boy or girl.” Instead, comment on your child’s positive behaviors, such as “You did such a good job holding still!” or “I like the way you let us know how that felt!” If you label your child as being a good boy or girl for not crying, the next time your child cries, he may think he has failed in some way.
Making Needles Hurt Less, Continued

SUPPORT
Tell your child that crying or being mad is ok. Sometimes crying or expressing emotions is what a child needs to do to get through painful events.

OFFER IDEAS
You can talk to your child about different ways to help him get through a painful procedure such as:

- **Breathing** with slow, deep breaths or using bubbles
- **Squeezing** someone’s hand if he feels something
- **Counting** before or during the needle stick
- **Looking** at something that he likes (TV, a book, magic wand, etc.)
- **Imagining** his favorite place or doing something he likes
- **Listening** to his favorite music or singing
- **Talking** to the people around him about something he enjoys
- **Remembering** to hold still during the needle-stick

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.
Spinal fusion surgery  
Cleaning with CHG cloths  

Patient and Family Education

This teaching sheet contains general information only. Talk with your child’s doctor or a member of your child’s health care team about specific care for your child.

What are CHG cloths?
CHG (chlorhexidine gluconate) is a special kind of skin cleaner.
- You will use it at home to wash your skin the evening before surgery (pre-op).
- It can be used in children and teens, but cannot be used for babies less than 2 months old.

Why do I need to wash with CHG wipes before surgery?
- CHG removes more germs from the skin than regular soap and water. This means that there is less chance of infection during and after surgery.

NOTE: Do not use CHG cloths if you:
- Are sensitive to CHG
- Have skin problems such as burns, rashes, eczema, or open wounds or dressings that you cannot remove

How do I use the CHG cloths?
Use CHG cloths to wash your skin the evening before you come to the hospital. Our staff will wash your skin again just before you go into surgery. To help prevent infection and prepare your skin for surgery, follow these guidelines:

Before you use the CHG cloths:
1. Remove all jewelry such as earrings, necklaces and bracelets. Keep it off until after the surgery. Talk with your nurse if you are worried about taking any jewelry off for cultural or religious reasons.
2. To help reduce germs, clean and trim your fingernails and toenails. Also remove any nail polish.
3. Wash first with regular soap and shampoo. Rinse and dry well using a clean towel.
4. Do not apply any lotions, moisturizers or makeup after your shower or bath. These products may attract dirt to the skin.

NOTE: Do not use the cloths on your face, ears, eyes, nose, mouth or private parts (genital area). If the cloths do touch these areas, rinse them well with clean, warm water to prevent irritation.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.
To use the CHG cloths:
1. Using the CHG cloths, wipe your skin in a back-and-forth motion over the surgical area. The picture below shows your surgical area.
   Wash this entire area.
2. Use 1 cloth to wash your neck, shoulders and back. Use the second cloth to wash your buttocks and thighs.
3. Wash with each cloth for 3 minutes.
4. Do not rinse the area with water unless a rash or redness occurs.
   Your skin will feel sticky for about 3-5 minutes after washing.
5. Let your skin air dry – do not use a towel to dry the skin.

After using the CHG cloths:
1. Do not flush the cloths down the toilet. Throw them away in the trash.
2. Dress in clean, washed pajamas.
3. Make sure your bed linens are clean and washed before going to bed.
4. Wash any comfort items such as blankets or stuffed animals that you may bring to the hospital.
5. Do not take a bath or shower the morning of surgery.
6. Our staff will wash your skin again just before you go into surgery. We will also give you a clean hospital gown and surgical hat to wear after your wash.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.
Video On-demand TV Channel

For patients and families at the hospital, the on-demand system has videos to help you take care of your health or illness. All videos are free.

You can watch videos about health topics such as:

- Baby and child care
- Child safety and CPR
- Health topics to help care for your child in the hospital and at home, such as asthma, diabetes, cast care and surgery
- Nutrition, bottle feeding and breast-feeding
- Parenting topics such as how to talk with and discipline your child

The system also contains videos for children and teens. Many videos are available in Spanish.

To watch a video:

- Turn on the TV
- Tune the TV to the first open channel between 15 and 21
- Use your phone to dial extension 1-5015
- At the room number prompt enter 02 and the last two digits of your child’s room number
- Follow the voice prompts on the phone. The menu contains a list of on-demand videos for you to view

If you want to pause or cancel a video, simply dial back into the system, reenter your room number and follow the voice prompts. If you have questions, ask your child’s nurse.

Emergency Family Assistance

If you need emergency help with needs such as meals, lodging or transportation, talk with your child’s social worker or go to the Family Support Services office. You may need to fill out a form for assistance. The form also needs to be reviewed by someone outside of Children’s.

- The Family Support Services office at Egleston is open Monday to Friday, 8:30 a.m. to 5 p.m. The phone number is 404-785-6250 or dial 5-6250 from a hospital phone.
- The Family Support Services office at Scottish Rite is open Monday to Friday, 8:30 a.m. to 5 p.m. The phone number is 404-785-2010 or dial 5-2010 from a hospital phone.

If you need help right away when the office is not open, ask your child’s nurse to page the evening or weekend social workers.

Financial Assistance

If you need help with insurance matters or have other questions about your child’s hospital bill, please see the chart below.

<table>
<thead>
<tr>
<th>For questions or concerns about</th>
<th>Talk with:</th>
<th>Contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Insurance coverage</td>
<td>A financial counselor</td>
<td>Patient Registration</td>
</tr>
<tr>
<td>2. Medicaid applications</td>
<td>A Medicaid caseworker</td>
<td>Patient Registration</td>
</tr>
<tr>
<td>3. State and federal programs such as Supplemental Security Income (SSI—disability for children)</td>
<td>Your child’s social worker</td>
<td>Ask your child’s nurse or see the social worker for your child’s unit</td>
</tr>
</tbody>
</table>
HeLP Onsite Legal Assistance Program

The Health Law Partnership (HeLP) is a program sponsored by Children’s, Georgia State University School of Law and Atlanta Legal Aid Society. It provides free legal help to qualified patients and families with legal issues that impact the patient’s health. This program can address housing, education, denial of benefits and many other issues.

For more information, call 404-785-2005 or dial ext. 5-2005 from a hospital phone.

Helpful Websites

You may find this list of websites helpful when searching for more information about scoliosis and spine surgery.

Orthopaedic-related sites:
The Children’s Orthopaedics Program
choa.org/orthopaedics

American Academy of Orthopaedic Surgery
aaos.org

American Physical Therapy Association
apta.org

The Pediatric Orthopaedic Society of North America
posna.org

Scoliosis Research Society (SRS)
srs.org

Nemours Foundation – information for teens
http://kidshealth.org/teen/diseases_conditions/bones/scoliosis.html

Nemours Foundation – information for parents
http://kidshealth.org/parent/medical/bones/scoliosis.html

Others:
Children’s Healthcare of Atlanta
choa.org

Atlanta Hotel Guide
atlanta.hotelguide.net

Centers for Medicare and Medicaid Services
cms.hhs.gov

Georgia PeachCare
peachcare.org

Medicare
medicare.gov

MedlinePlus
nlm.nih.gov/medlineplus/medlineplus.html
Glossary

**Allograft:** The transplant of a bone from one person to another.

**Anesthesia:** Medicine that causes a deep sleep during surgery.

**Autograft:** Bone taken from one part of the body to another in the same person.

**Bone graft:** Surgery to place new bone or bone substitutes into spaces around a bone defect.

**CT scan:** A CT scan uses advanced X-ray technology to take cross-sectional images, sometimes called “slices,” of the body.

**Foley catheter:** A small tube used to drain urine from the bladder.

**Hemovac:** A drain placed in the incision area during surgery. It removes blood or other fluids that might build up in this area.

**Idiopathic:** No known cause.

**Incentive spirometer:** A breathing device that helps patients take a deep breath in order to keep the lungs healthy.

**Incision:** A cut made in the skin for surgery.

**Intravenous (I.V.):** In the vein; refers to a small needle or plastic catheter placed in the hand, foot or arm to give fluid and medicine.

**Kyphosis:** A curving of the spine that causes a bowing or rounding of the back.

**Magnetic resonance imaging (MRI):** A test that uses large magnets, radiofrequencies and a computer to produce detailed images of parts of the body.

**Neuromuscular:** The system of the body dealing with the nerves and muscles.

**Occupational therapy (OT):** A type of therapy used to improve basic movement and self-care abilities, called activities of daily living or ADLs.

**Orthopaedic:** The type of medicine and surgery that focuses on injuries and diseases of the body's bone and muscle system.

**Pathology:** The branch of medicine concerned with the cause, origin and nature of disease, including the changes occurring as a result of disease.

**Patient-controlled analgesia (PCA) pump:** A device used to help manage pain. It gives a patient control over his own pain relief.

**Physical therapy (PT):** A type of therapy used to improve movement, strength, coordination and balance.

**Scoliosis:** A sideways curve of the spine.

**Vertebra:** Any of the bones in the back that make up the spinal column.

**X-ray:** A picture of the inside of the body made with special radioactive rays.