

Scoliosis Care Map

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Care Map Symbols

Links to more information or returns to a previous page.

Start of a Care Map Segment

Decision Point

Stop and Evaluate

Care Map Step
Blue underlined text is a hyperlink

Progression of care – Patient Improving



Source Reference



Education Module



Hospital Policy



Hospital Reference



Provider Information



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Suggested Inclusion Criteria for Idiopathic Scoliosis Care Map

- Adolescent patients undergoing posterior spinal fusion



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Potential Reasons to Avoid Scoliosis Care Map

- Anterior spinal fusion patients
- Neuromuscular scoliosis patients
- Patients undergoing PSF with congenital/genetic/developmental delay diagnoses or with confounding co-morbidities



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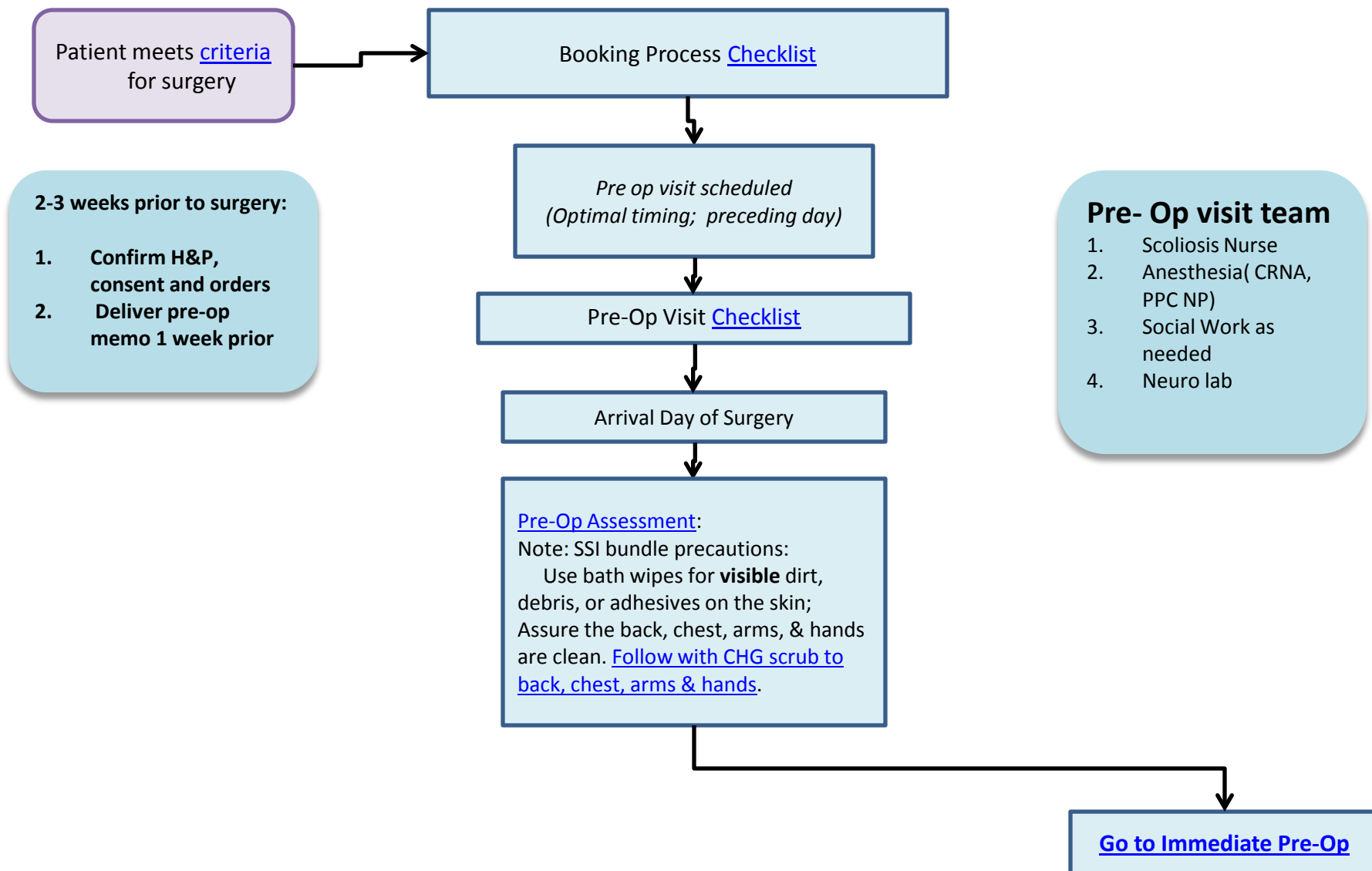
[Adolescent idiopathic scoliosis: Management and prognosis](#)



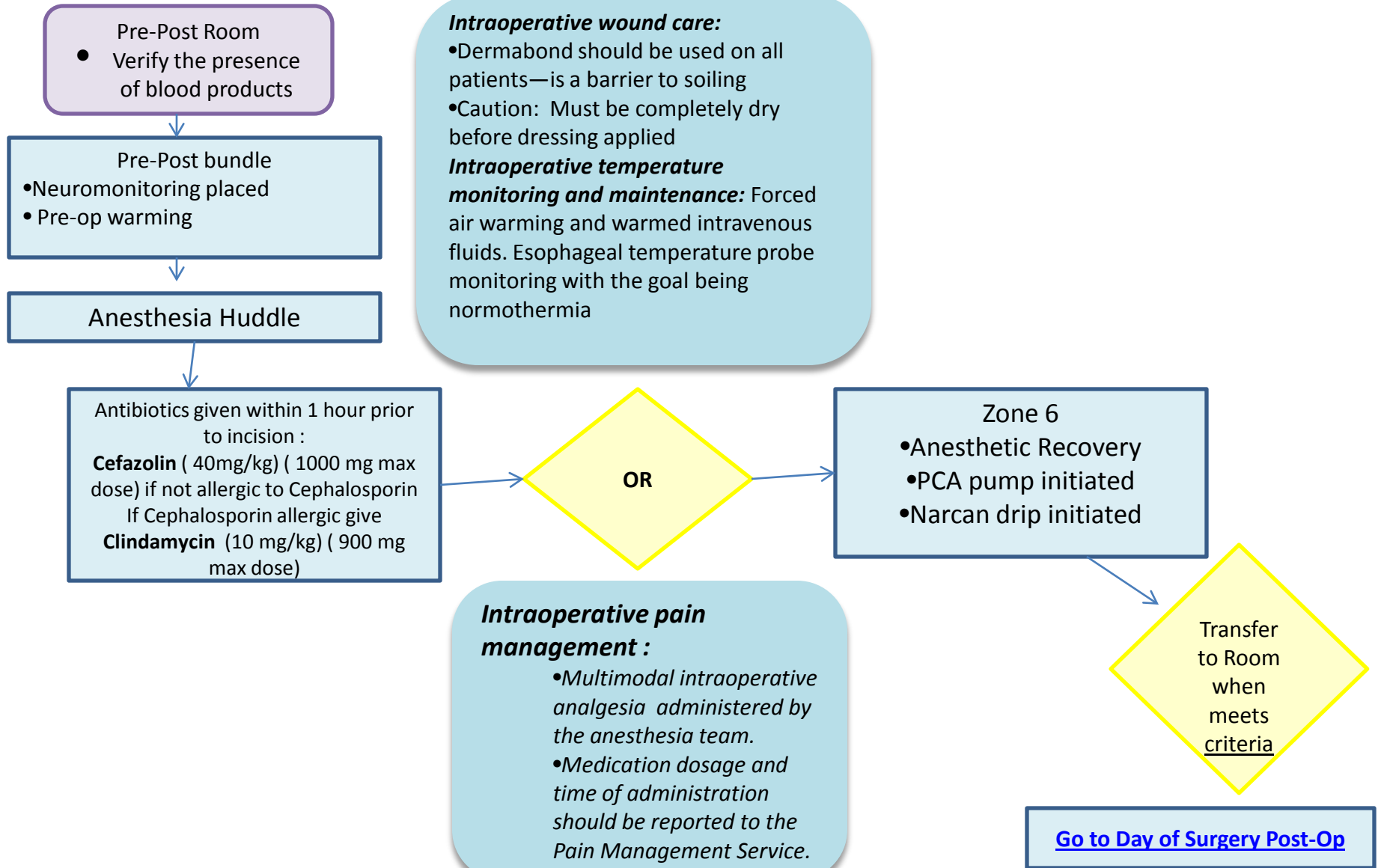
[Patient Scoliosis Pre – op Education Booklet](#)



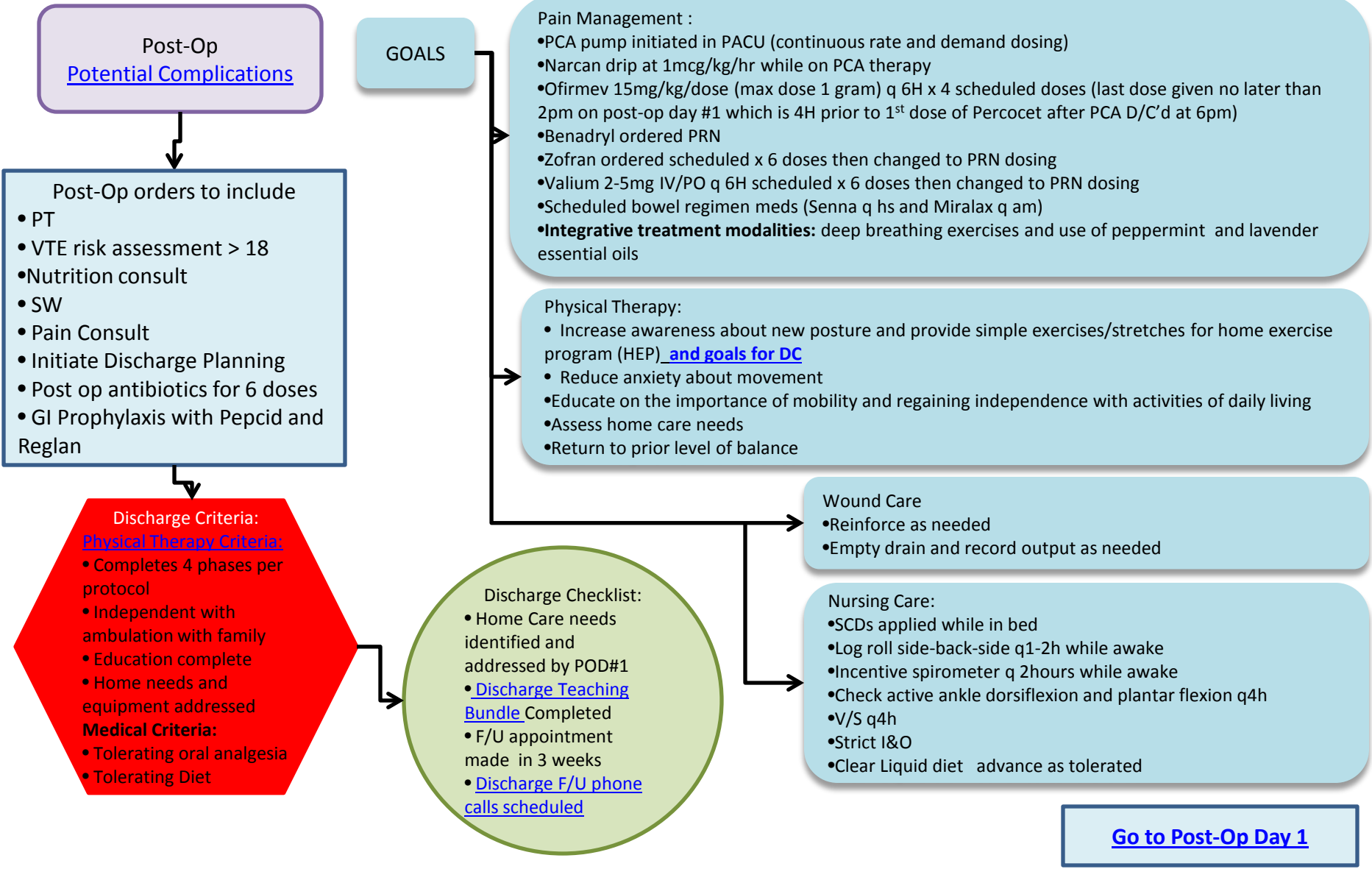
Booking/Pre-Op



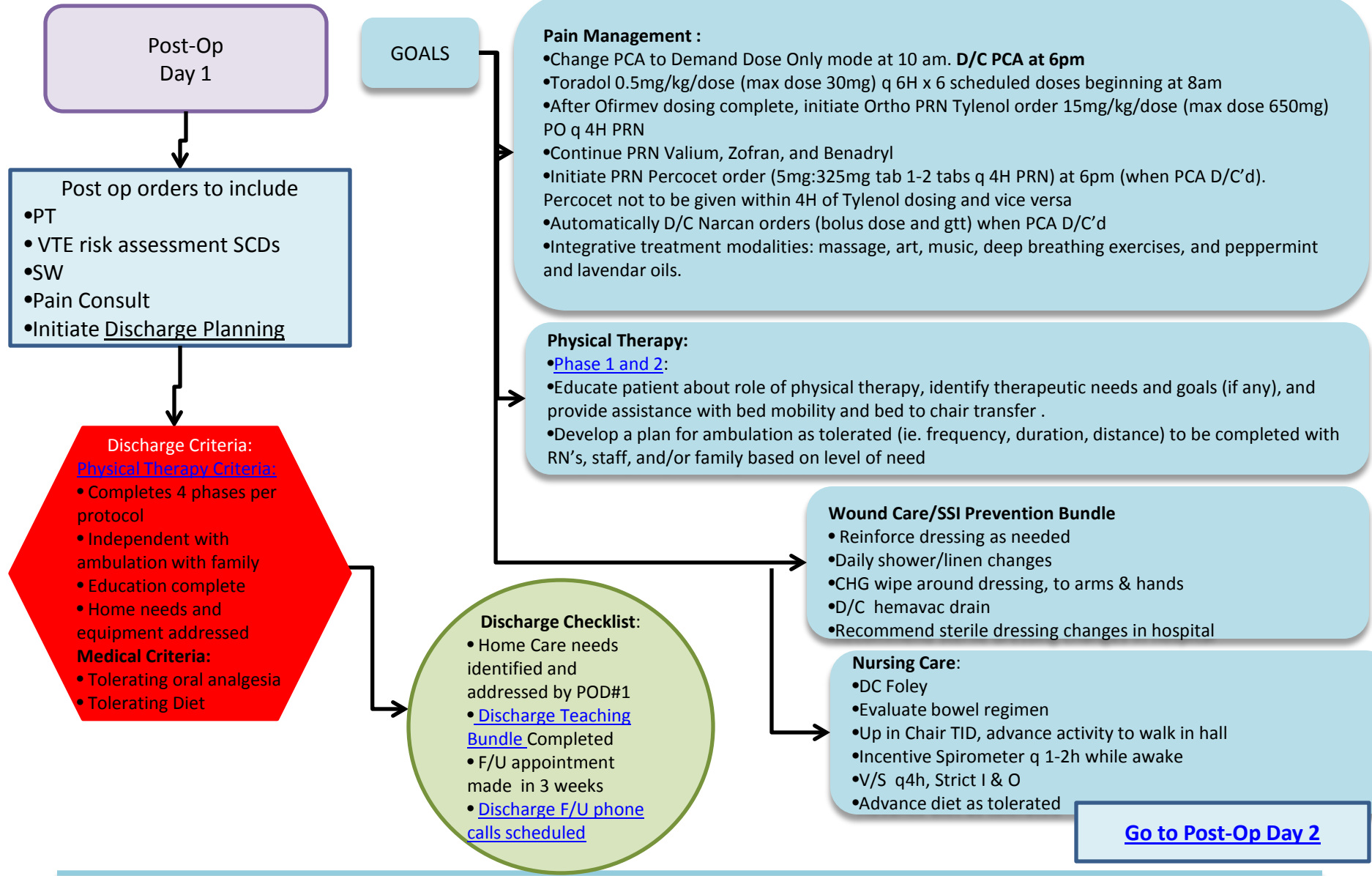
Immediate Pre-Op



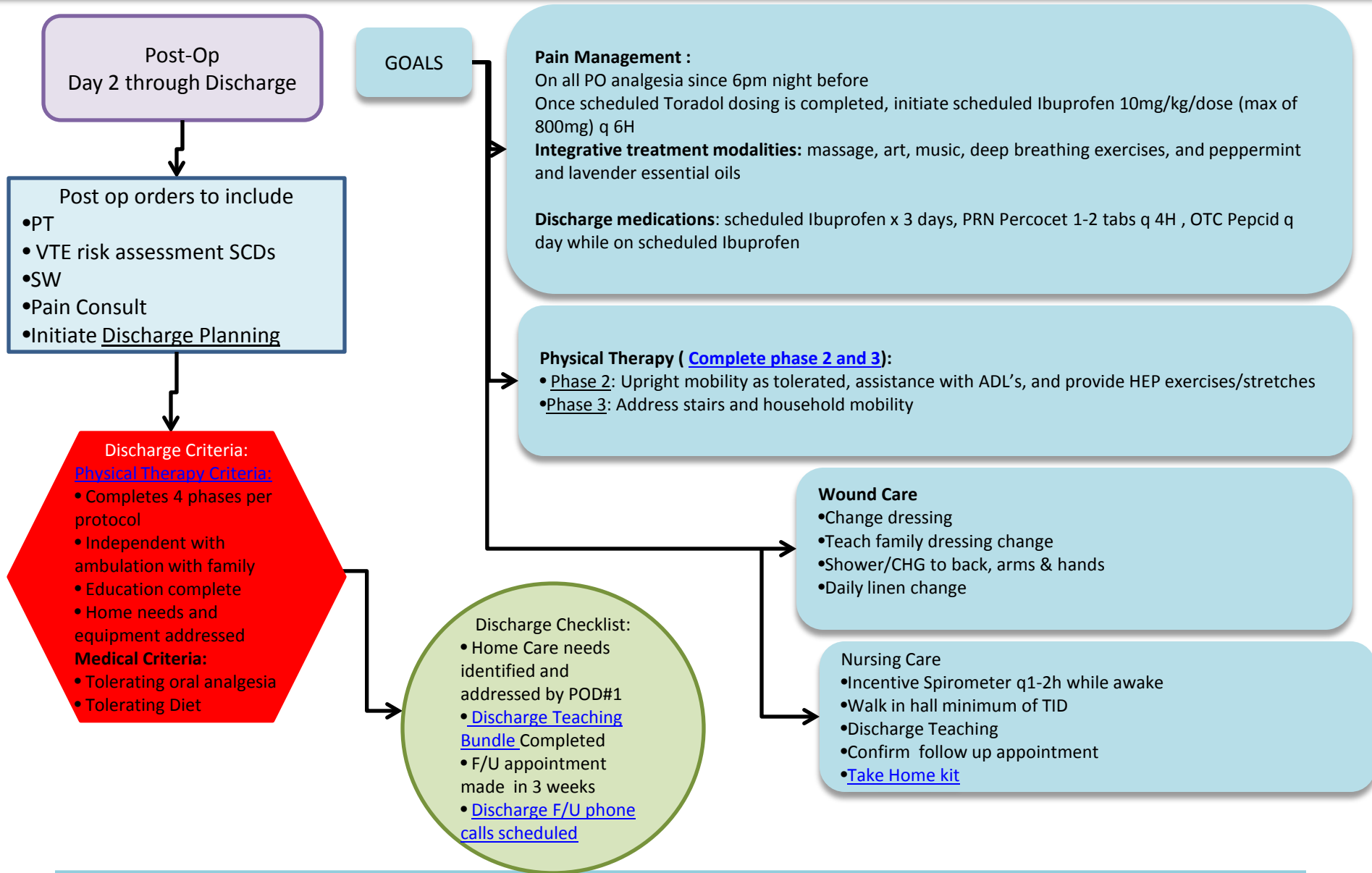
Day of Surgery Post-Op



Post-Op Day 1



Post-Op Day 2



Booking Checklist

- Received confirmation of booking
- Confirm correct contact information/booking sheet complete
- Schedule Pre-op visit
- Notify Anesthesia
- DOS a Tuesday ,Wednesday , or Thursday
- Scoliosis pre op packet mailed
- Obtain PMH and pre op records
- Social work assessment
- Pre op agenda created 1 week prior to surgery
- Agenda delivered to admitting, lab (orders placed), and neuro lab

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Pre Op Check List

- Meet with : Scoli RN, Anesthesia, Pain team , Social work as needed , and neuro lab
- LABS: CBC with platelets, BMP. UA and urine pregnancy test per protocol
- PMH to include screening for bleeding disorders, metal allergy, and previous spine surgery
- Type and Cross match
- Instruct in incentive spirometry technique
- Pain assessment complete/ Pain assessment protocol
- Patient and family instructions given by teach back
- Pre-Op SSI bundle initiated
- PT/OT information provided
- Discharge needs identified.
- Consent signed and updated H&P on chart.

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Preoperative Pain Assessment Protocol

- **Past Medical History:** drug allergies, chronic illnesses, routine medications (including pain meds), developmental level (i.e., normal, any delays/disabilities).
- **Expectation concerning post-op pain:** What is the worst pain you've experienced to date? What did you do to help alleviate it? Specific fears, concerns?
- **Pain Scale review** (i.e., 0-10, faces, etc).
- **(+) Chronic Pain History:** duration, location, quality of pain (i.e., dull/achy, sharp/stabbing), frequency, any associated signs/symptoms, things that may exacerbate the pain, therapies to relieve it (i.e, medications, heating pad, ice, distraction, deep breathing, any other complimentary therapies).
- **Review post-op PCA/analgesia information:** uses, medications used, side effects (i.e., itching, nausea/vomiting, constipation, etc). Medications/interventions used to counteract side effects (i.e, Narcan gtt, Zofran, Benadryl, bowel regimen meds).

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Discharge Teaching Bundle with teach back tool

- Daily shower, clean clothing daily
- Daily CHG wipes to back (around dressing), arms & hands
- Change dressing if it becomes loose or soiled ([Job Instruction Sheet](#)), or if it comes off
- Teach hand hygiene—wash hands with soap & water or hand sanitizer prior to touching dressing or incision. Teach Back
- Signs & symptoms of infection
- Ambulatory patients: Clean towel or baby blanket under incision daily, or daily linen changes

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Idiopathic Scoliosis

- CHG wipes X 7 days
- Dressings for one change
- 8 oz hand sanitizer
- Gloves X 7
- Thermometer

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Discharge F/U Phone Calls

- Within 24 hours
- 3 days post discharge
- 7 days post discharge
- 1 month post discharge

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Physical therapy short-term goals

- Independent with bed mobility and bed <-> chair transfers, observing appropriate precautionary movements
- Ambulate 150 feet independently with no loss of balance
- Independent with home exercise program (including stretches or any therapeutic exercises needs identified)
- Requires SBA or lower level of assistance with stairs mobility, 1 flight ascend/descend
- Independent with ADLs and self care routine such as dressing, bathing, toileting

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Physical Therapy Phases

- Phase 1:
 - Educate patient about role of physical therapy, identify therapeutic needs and goals (if any), and provide assistance with bed mobility and bed to chair transfer
 - Develop a plan for ambulation as tolerated (ie. frequency, duration, distance) to be completed with RN's, staff, and/or family based on level of need

- Phase 2:
 - Upright mobility as tolerated, assistance with ADL's, and provide HEP exercises/stretchers

- Phase 3:
 - Address stairs and household mobility

*If the patient does not have independence with upright mobility prior to surgery, this protocol will be modified to meet their specific needs, including adjusting or modifying their current home mobility and bathing equipment.

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Post OP Complications in order of Likelihood

<p>Perioperative intra-operative to 7 days post-operative</p>	<ul style="list-style-type: none"> • Gastro-intestinal — ileus • Respiratory — pleural effusions, respiratory distress, pneumonia, pneumothorax, prolonged intubation • Excessive bleeding — (> 1500 cc's) • Urinary — UTIs • Technical — rod breakage, etc. • Neurologic — (0.32 - 0.69%) — thecal penetration, nerve root injury, spinal cord injury, blindness • Superior Mesenteric Artery Syndrome • Visceral injury
<p>Early post-operative 8 days post-operative to 30 days post-operative</p>	<ul style="list-style-type: none"> • Gastrointestinal — Ileus • Respiratory — pleural effusions, respiratory distress, pneumonia • Urinary — UTIs • Wound Complications — hematoma, seroma or dehiscence • Wound infection — (0 - 9.7%; meta 3.6%) • Superior Mesenteric Artery Syndrome
<p>Late post-operative 30+ days post-operative</p>	<ul style="list-style-type: none"> • Wound infection — (0 - 9.7%; meta 3.6%) • Implant Failure • Curve Progression — (1.1%) • Failure of Fusion

Common themes amongst those who have neural complications include: significant curve correction producing neural stretch and the use of sublaminar wires. Most often, neural injuries are not permanent (i.e. thecal penetrations, neuropraxia). A few factors noted to significantly increase the rate of complications include a history of renal disease, increased operative blood loss, prolonged posterior surgery time, and prolonged anesthesia time.

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References

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- [SPS surgical site prevention bundle](#)
- Variability in Spinal Surgery Outcomes Among Children's Hospitals in the United States :Mark A. Erickson, MD,*w Elaine H. Morrato, DrPH, et al. JPO 2013
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- [Novel Prevention Bundle to Reduce SSI in Spinal Fusion Patients. 2016](#)

Physician Disclaimers: Scoliosis Care Map

Medical Disclaimer

Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required.

The authors of this Care Map have checked with sources believed to be the most current and reliable in their efforts to provide information that is complete and generally in accord with the standards accepted at the time of publication.

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