

## **Air-Assisted Transfer Device (AATD) Use for Pediatric Spinal Fusion Patients: Improving Care**

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**Background Information:** Spinal fusion patients require imaging while in the post-anesthesia care unit (PACU), a reportedly painful process. Prior to this practice change, imaging required five or more staff to safely lift the patient and maintain patient flat time. Despite using multiple staff, it was often difficult to lift the patients high enough to prevent potential shearing near the incision from the imaging board. An AATD had not been previously utilized in the surgical pediatric population at SFCH. This practice change was based on the author's experience with use of this device in other patient populations and active participation in a Safe Patient Handling committee. There is no known literature about AATD use with pediatric spinal fusion patients.

### **Objectives of Project:**

- Educate staff on proper AATD usage
- Develop workflow and process for use
- Staff will use proper ergonomics during postoperative imaging to enhance staff and patient safety
- Reduce postoperative pain related to imaging lift
- Reduce number of staff exposed to potential injury
- Improve efficient use of staff

**Process of Implementation:** Formed an interdisciplinary group of surgeons, radiology staff, and perioperative nurse leaders to discuss risks and benefits. Approval received for trial utilization. Education, demonstration, and simulation were provided to all perioperative staff prior to implementation and evaluation.

**Statement of Successful Practice:** By using the AATD to lift the patient, the number of staff exposed to potential injury was reduced from five to zero per spinal fusion patient. The process, which previously took five staff, can now safely be done with two, increasing staff efficiency. Despite pain score data being inconclusive, there has been a slight decrease in opioids administered during PACU stay. Additionally, staff report that patients now appear more comfortable and sleep through postoperative imaging.

**Implications for Advancing the Practice of Perianesthesia Nursing:** Use air-assisted transfer devices to facilitate lift in order to protect staff from potential injury, create more efficient use of staff, and increase patient comfort.