

## The economics of anesthesia for pediatric hernia repair

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**Introduction:** Reimbursement for anesthesia care is based on the use of codes developed by the Current Procedural Terminology (CPT) Committee of the American Medical Association. Historically these codes have contained a basic code with modifiers and qualifiers added to adjust for increased complexity of certain patients. Government payors such as Medicaid in many states and Medicare do not recognize these adjustments. New codes were developed with the intention of including the increased complexity of the anesthesia work/risk, and were accepted by CPT. These new codes became effective in 2003. The impact of these new codes was tested by measuring the incidence of specific cases during a short period of time prior to introduction of these codes and comparing them to a similar period of time after introduction.

**Methods:** At a pediatric hospital both the surgical hernia repair codes (49491, 49495, 49500 and 49505) and the corresponding anesthesia code (00830) were tracked for the six month period from March through September of 2002. The existing surgical codes are already age linked. These same codes plus the new anesthesia codes (00834 and 00836) were then tracked for the same six month period for 2003. Anesthesia base unit charges were then calculated for the existing codes for 2002 and predictions for the use of the new codes were made. The actual base unit charges for 2003 were then calculated.

### Results:

49491 Repair inguinal hernia, preterm infant (< 37 weeks gestational age, up to 50 weeks postconception age	00836 Anesthesia for hernia repairs on lower abdomen, preterm infants (<37 weeks gestational age) up to 50 weeks postconception age	Base Units 6
49495 Repair inguinal hernia, full term infant under age 6 months	00834 Anesthesia for hernia repairs on lower abdomen, under 1 year of age	Base Units 5
49500 Repair inguinal hernia, age 6 months to under 5 years	00830 Anesthesia for hernia repairs on the lower abdomen	Base Units 4
49505 Repair inguinal hernia, age 5 years or over	00830	

Surgical Code	Anesthesia Code	March-September, 2002		Total Base Units	Anticipated Units	March-September, 2003		Total Base Units
		# of Cases	% of Total			# of cases	% of Total	
49491	00836	4	2	16	24	1	1	6
49495	00834	65	29	260	325	54	29	270
49500	00830	77	34	308	308	69	37	276
49505	00830	78	35	312	312	63	34	252
<b>Total</b>		224		896		187		804
					8% Increase			(748 in 2002) 7% increase

**Discussion:** New age-related anesthesia for hernia codes increased the average base unit/case from 3.9 to 4.3, a 10% increase at this pediatric hospital. The development of anesthesia codes specific for not only the surgical procedure but also complexity and risk factors is a successful means to eliminate the need for modifiers and qualifiers and improve reimbursement. Strict adherence to these new codes and, possibly, the further development of codes for other instances of inequality of base unit charges will improve the financial performance for pediatric anesthesiologists. We believe the 10% improvement we demonstrated to be low due to inaccurate recording of procedure performed and indicates a need for education on the appropriate use of these codes that will lead to further increased base unit recovery.

### Refs:

1. ASA, Relative Value Guide, 2003.
2. AMA, CPT 2003.