

Computerized Anesthesia Information Management System (AIMS) initiated Quality Assurance (QA) Program aids to simplify the process.

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Introduction:

Based on a system originally reported by Posner et al,¹ we have set up a simple system of reporting QA events that can be initiated by any member of the anesthesia care team including the post operative follow up nurse practitioner. The reports are used to continuously improve the quality of practice.

Methodology:

The QA process can be initiated intraoperatively by checking the quality assurance field in the AIMS, and a QA question with a Yes/No option is required before the record is completed for printing. Once a QA event is indicated the anesthesiologist fills out an on line summary of the incident. If the QA was triggered in the postoperative period the individual reporting the event completes a QA form with a secure log on web address. The QA group reviews all events and decides if the event warrants a discussion at the monthly divisional QA meeting. At this meeting a discussion is held to decide if the events warrant a change in Practice or needs practitioners to be educated on any particular matter.

Results:

This process was initiated in December of 2004. In 20 month duration we have had a total of 39550 anesthetics. There were 1046 incident reports accounting for 2.64% of all cases. 284 (0.71%) of the incidents were Anesthesia related. Common events are indicated in the Table. Vomiting (greater than 6 times), continues to be the most common QA event at 0.20%.

Conclusion:

This system encourages practitioners to report events and near-events and allows departmental review of all reported incidents. Such an approach allows the department to take a proactive approach to managing the quality of anesthesia delivered. Aggregating data with multiple institutions may increase knowledge of the incidence of various complications of anesthesia in pediatric patients

Incident	Number	Percentage
Vomiting >6	81	0.20
Oxygen requirement after PACU	62	0.15
Laryngospasm needing medication	50	0.12
Equipment malfunction/ not available	37	0.09
Airway obstruction needing treatment	35	0.08
Delayed emergence	35	0.08
Croup	33	0.08
Laryngospasm – Extubation	33	0.08

Laryngospasm –LMA	28	0.07
Hypothermia	28	0.07

References:

1)Posner KL, Cheney FW et all

Linking process to outcome of care in a continuous quality of improvement program for anesthesia services. Am J Med ual 1994 Fall:129-37