Background:

• As part of an effort to contain ever rising health care costs, tasks previously performed by physicians are being delegated to nonphysician providers. Although delegation is becoming increasingly common throughout health care in the US, few studies have evaluated the safety and efficacy of this practice.

• We previously demonstrated that a NP assisted preoperative evaluation program for children maintained patient safety, timeliness and a high level of patient satisfaction. Staff satisfaction with the preanesthetic evaluation process was increased and significant cost savings were realized. (1)

Objective:

To evaluate whether specifically trained nurses (RNs) can safely and effectively assist in the preanesthetic evaluation of healthy children undergoing ambulatory surgery.

Methods:

Observational study during the year after the introduction of Nurse assisted preanesthesia evaluation alongside our already existing NP assisted preanesthesia evaluation process. This result was collected by surveying 6 anesthesiologists and 12 preoperative clinic nurses at baseline and every 3 months over the 1 year study period.

• Time needed for the NP or RN to complete the preanesthesia evaluation process:  very helpful, somewhat helpful, not very helpful, not at all helpful

Question 1: How well the anesthesia staff explained the anesthesia process: very helpful, somewhat helpful, not very helpful, not at all helpful

Question 2: How well the anesthesia staff answered questions and concerns: excellent, very good, good, fair, poor.

• Physician anesthesiologist satisfaction and preoperative clinic nurse satisfaction with the preanesthetic evaluation process. This data was collected by surveying 6 anesthesiologists and 12 preoperative clinic nurses at baseline and every 3 months over the 1 year study period.

• Preoperative clinic nurses were surveyed.

Study population: 993 children undergoing outpatient surgery, 442 parents, 6 anesthesiologists and 12 preoperative clinic nurses were surveyed.

Results:

The incidence of postoperative respiratory complications did not increase significantly with the implementation of the Nurse assisted preanesthetic process. This result suggests that Anesthesia RNs did not miss important findings of acute illness or ongoing airway and respiratory illness during the preanesthesia history and physical examination evaluation.

Methods (continued):

Indicators of quality included:

• Postoperative respiratory complications defined as apnea/hypopnea requiring bag mask ventilation, laryngospasm (requiring positive pressure ventilation > 20 cm H2O or succinylcholine), bronchospasm requiring albuterol, or oxygen requirement to keep oxygen saturation > 92% for more than 2 hours in PACU.

• Parent satisfaction as measured by two questions on a parent satisfaction survey: 1) How helpful was the process of your child’s preanesthesia evaluation? 2) How helpful was the explanation of the process of your child’s preanesthesia evaluation during the preanesthesia evaluation?

• Assessments were reviewed and completed for this study.

Conclusion:

Trained Anesthesia RNs (NPs) can safely and effectively assist in the preanesthetic evaluation of healthy children undergoing ambulatory surgery. Quality, safety and timeliness were maintained. By adding Anesthesia RNs to our preoperative process, we were able to reallocate Anesthesia NPs to evaluating more complex patients in the main hospital, resulting in cost savings and improved efficiency for our preanesthesia evaluation process across the entire Anesthesia department. Thoughtfully implemented delegation of parts of the preanesthetic evaluation process can offer operational advantages and add value while maintaining quality and safety.

Reference: