

The use of a standardized communication tool to increase documentation of X-ray verification of enteral feeding tubes in the Intensive Care Nursery

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Purpose

The purpose of this evidence-based practice project is to increase compliance with the documentation of tip position of indwelling enteral tubes, both NG and OG in accordance with the revised hospital policy and procedure and to increase the number of indwelling tubes used the ICN. PICO question: In the Intensive Care Nursery, does the use of a standardized communication tool increase documentation of X-ray verification of enteral feeding tubes?

Background

The Intensive Care Nursery is a 51 bed Level III unit caring for critically-ill neonates with a variety of diagnoses, many of which prevent the neonate from orally feeding. Enteral nutrition must often be provided via either an orogastric tube or nasogastric tube. Recently the Children's Hospital changed the nasogastric tube enteral feeding policy and procedure. This policy revision reflects the new CCRN evidence-based practice guidelines for adult and critical care units which show that existing practices of tube placement verification such as air insufflation are not always safe or reliable and often place the patient at risk for aspiration due to malposition. In my unit, documentation of enteral tube placement varied, compliance with revised policy directives for placement verification was inconsistently documented, and there was no consistent communication back to the bedside RN of tube position.

Methods

Baseline data was obtained by auditing the nursing kardex for documentation of X-ray verification of proper tube placement, compliance with policy and procedure requirements of tube marking and documentation of insertion length on kardex as well as demographic data (age, weight, type of tube, size of tube and respiratory support). An orange colored sticker matching the enteral feeding tubes used was created containing all the required documentation elements and was affixed to each kardex. A multi-method education blitz was done, providing staff with the evidence-based rationale for change. Following the education, an audit was completed and included the same data elements.

Results

Post audit results demonstrated 70% improvement in verification (and documentation) of X-ray, 22% improvement in Kardex documentation (pre-intervention kardex was a simple yes or no for presence of tube), 24% improvement in the number of marked tubes, and an increase in the number of preterm infants < 2 kg with an long-term enteral tube placed.

Conclusions

The colored sticker served as a visual cue, making it easier for the nurse to comply with the required documentation of enteral tube placement in the ICN population. The sticker also provided the nurse with a quick reference for hand-off information as well as the ability to confirm ongoing verification of tube placement. Our unit may adopt a similar sticker for all indwelling tubes and lines.

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Key Words:

Neonatal nonoral feeding practices, indwelling nasogastric tube verification, documentation compliance