Kathryn Tetreault

“Comparing the features and functionality within the pediatric electronic health record”

Abstract
The Institute of Medicine (IOM) (2007) estimates that medical errors transpire at a rate of 1.5 million per year. The IOM (2000), approximates 7,000 deaths per year are related to preventable medication errors, which are the leading cause of medical errors. Adverse drug events (ADE) occur due to medication errors, which are 100% preventable. Annually, approximately $21 billion dollars are spent to care for patients’ who experience ADE due to medication errors (IOM, 2007). This doctoral project evaluates the current features and available functions for pediatric medication administration within the electronic health record (EHR). This comparison explored the EHR functionalities across all pediatric services and compared those tools to the features utilized in pediatric anesthesia. The electronic charting systems evaluated include: neonatal intensive care unit (NICU), emergency department (ED), post anesthesia care unit (PACU), operating room (OR), nursery, pre-operative, general pediatric floor and anesthesia departments. The EHR evaluation determined the department with the greatest differences in the EHR and medication administration record (MAR) is the anesthesia environment. The pediatric weight-based medication dosage was available for all other departments; therefore the same feature should be accessible to anesthesia providers.