Technology-Mediated Adverse Events Taxonomy

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Problem Statement: Information technologies such as electronic health records, computerized order entry, and mobile communication devices are playing an ever-increasing role in the delivery of healthcare, and there is a growing body of evidence that suggests these technologies contribute to better patient outcomes. However, early research has also identified the potential for information technologies to contribute to adverse events. Little is known about the relationship between information technology and adverse events in clinical practice. To date, no research has examined the relationship between types of technology involved in a technology mediated event and degree of harm incurred. In order to enhance the delivery of sustainable, high-quality health services, it is imperative to understand the potential threats to patient safety that advancements in information technology may inadvertently introduce. **Methods:** This research aims to examine the relationship between information technology and adverse events in healthcare. The research objectives are to: 1) Identify and analyze adverse events related to the use of information technology, including the antecedent factors and degree of harm incurred, and 2) Develop a classification of antecedent factors related to the use of information technologies that contribute to adverse events. **Results:** Analysis for phase one of this study will be complete in April 2016 and findings that will be reported include descriptive statistics on the adverse events, the interrater reliability coeffecient from the classification process, and the resulting taxonomy of technology-mediated adverse events.