

ABSTRACT

Lost in Transition: Evaluation of Telemedicine to Facilitate Patient Care Transitions

Transitions in health care, or changes in a patient's care from one health care practitioner to another, are a major source of communication breakdowns, medical errors and increased cost. Children are particularly vulnerable and experience a disproportionately high rate of transfer, many of which are potentially avoidable (20% to 39%). However, few studies have investigated pre-transfer hospital data in relation to the post-transfer outcome of being a potentially avoidable transfer (PAT). Furthermore, it is unknown if telemedicine (live-video conferencing) could improve care coordination between nurses at the different hospitals during these transfers. My dissertation aims to determine ways to improve pediatric transfer care coordination. First, I will investigate the association between pre-transfer emergency department pediatric readiness and the risk of a PAT. I have obtained data from the National Pediatric Readiness Project which quantifies an emergency department's ability (readiness) to provide care for a pediatric patient. This will be linked to large California databases on emergency department visits and hospitalizations. This study would be the largest study to date to analyze both pre- and post-transfer hospital and patient factors in relation to pediatric PATs. Next, I will evaluate the use of telemedicine in handoffs (as compared to telephone handoffs) to increase nurse preparedness to admit a transferred patient and to increase handoff quality. Data were collected through survey and electronic medical records. This study would be the first description of nurse handoff communication during between-hospital transfers and also the first documented implementation of telemedicine in nurse-to-nurse communication. My dissertation will use multi-level statistical modelling to provide much needed evidence that hospitals and care teams can use in creating policies and protocols for improving pediatric care. As health care costs continue to rise and health care becomes increasingly fragmented, it is crucial to determine ways we can improve care coordination.