DECREASING MISLABELED SPECIMENS IN PAEDIATRIC CRITICAL CARE BY USING A POSITIVE DEVIANCE METHODOLOGY AND STANDARD WORK AUDITS

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**Introduction:** Mislabeled specimens are a high risk patient safety concern in acute care. The rate of mislabeled specimens in the Critical Care Unit (CCU) at The Hospital for Sick Children was persistently higher than the organizational goal. A team of front line staff was formed to understand contributing factors and brainstorm innovative solutions.

**Objectives:** To engage front line staff in creating a solution for a high risk but low prevalence event and to understand the current process and contributing factors to mislabeling in a critical care environment and to see a 50% decrease in mislabelled specimens by December 2014.

**Methods:** In January 2014, the implementation team utilized a positive deviance methodology to gain front line staff engagement. Staff were encouraged to brainstorm ways to fail at specimen collection and then asked to adjudicate how many of those failure modes existed in our current process. Front line staff felt that too many individuals were involved in specimen collection and that this was the major contributor to mislabelling specimens in the critical care environment. Thus, they chose to implement the “One Person Process” when collecting specimens, where one individual completes the entire process to minimize error. One to one coaching, marketing signage and peer/self audit cards were utilized. Pre and post audits of specimen collection were completed by the implementation team and University of Toronto graduate healthcare students.

**Results:** Comparing pre and post data, one person completed specimen collection 75% of the time, up from 52%. However, audits indicated that patient identification (ID) verification was not consistent at 30%. Staff then chose to implement a second rapid improvement cycle where patient ID labels were placed on IV access where blood draws occurred to improve the healthcare providers work flow and ability to rapidly locate the patient ID and check it against the specimen labels. This resulted in improved compliance of ID verification from 30% to 70%. As a sustainability measure, the quality team created standard work audits of the "One Person Process" every other day. This has helped maintain behaviour and cultural change and promoted front line staff understanding of risk. These audits also allow for one to one coaching regarding risk and processes at the bedside for maximal retention and uptake by front line staff. Finally, the unit tracks success with this measure by publicly tracking a "days since last" on the improvement boards in the hallways, allowing staff to visualize their success as well as promote accountability.

**Conclusion:** Staff engagement in solutions is imperative to successful quality improvement. Theoretical underpinnings of Just Culture are inherent in the standard work audit by enabling staff to visualize success and promote accountability. Audit/feedback mechanisms are pivotal to ongoing cultural change and sustained improvements. Bedside coaching for risk is important to engage with staff and garner their feedback. The CCU has seen a sustained decrease of mislabeled specimens by 50% since implementation.

**References:** Gardem et al, (2011) Reducing the transmission of methicillin resistant staphylococcus aureus and clostridium difficile in the canadian healthcare system by enabling