Abstract:

Objective: To institute facility-wide Kamishibai card (K-card) rounding for central venous catheter (CVC) maintenance bundle education and adherence and to evaluate its impact on bundle reliability and central-line-associated bloodstream infection (CLABSI) rates.

Design: Quality improvement project.

Setting: Inpatient units at a large, academic freestanding children’s hospital.

Participants: Data for inpatients with a CVC in place for ≥1 day between November 1, 2017 and October 31, 2018 were included.

Intervention: A K-card was developed based on 7 core elements in our CVC maintenance bundle. During monthly audits, auditors used the K-cards to ask bedside nurses standardized questions and to conduct medical record documentation reviews in real time. Adherence to every bundle element was required for the audit to be considered “adherent.” We recorded bundle reliability prospectively, and we compared reliability and CLABSI rates at baseline and 1 year after the intervention.

Results: During the study period, 2,321 K-card audits were performed for 1,051 unique patients. Overall maintenance bundle reliability increased significantly from 43% at baseline to 78% at 12 months after implementation (P < .001). The hospital-wide CLABSI rate decreased from 1.35 during the 12-month baseline period to 1.17 during the 12-month intervention period, but the change was not statistically significant (incidence rate ratio, 0.87; 95% confidence interval, 0.60-1.24; P = .41).

Conclusions: Hospital-wide CVC K-card rounding facilitated standardized data collection, discussion of reliability, and real-time feedback to nurses. Maintenance bundle reliability increased after implementation, accompanied by a nonsignificant decrease in the CLABSI rate.

Reference: