

Abstract:

Purpose: Pediatric patients are at high risk for peripheral intravenous infiltrations and extravasations (PIVIE) resulting in patient harm. Structured hourly rounding has demonstrated to improve quality outcomes. The purpose of this quality improvement project was to implement structured hourly rounding to decrease the median rate of moderate PIVIE rates from 3.13 to 2.58 per thousand patient days over a 6-month time period in pediatric patients with infusing continuous IV fluids.

Design and methods: A pilot was conducted to hardwire hourly assessments for peripheral intravenous lines (PIV) in pediatric patients with continuous fluids utilizing a structured hourly rounding process. Bedside nurses utilized the P.A.T.H. model to assess pain management (P), assess PIVs for early PIVIE recognition (A), address things patient and family may need (T), and reduce the occurrence in hospital acquired conditions (H). Data was collected on unit nurse sensitive indicators and compliance to hourly rounding.

Results: Structured hourly rounding using the P.A.T.H. model successfully hardwired hourly PIV assessments. The unit reduced their median moderate PIVIE rate to 1.83 per thousand patient days, an 41% improvement. The pilot also had positive unintended consequences of improved pain reassessment from 67% to 100%, increased patient satisfaction scores of 67% to 97% and reduced patient falls by 29%.

Conclusions: Structured hourly rounding using the P.A.T.H. model can positively hardwire hourly PIV assessments in pediatric patients.

Practice implications: Sustainability of hourly rounding requires leadership support and nursing commitment to impact quality metrics. Organizations should consider implementing focused hourly rounding to address PIVIEs.

Reference:

Garcia MG, Dutton H, Samuel K, Marusich J. Purposeful hourly rounding to decrease peripheral intravenous infiltrations and extravasations in pediatrics. *J Pediatr Nurs*. 2021 Mar 23;61:59-66. doi: 10.1016/j.pedn.2021.03.009. Epub ahead of print. PMID: 33770665.