To examine cannulation practice and effectiveness of a multi-modal intervention to reduce peripheral intravenous cannula (PIVC) insertion in emergency department (ED) patients” Hawkins et al (2017).

Abstract:

OBJECTIVES: To examine cannulation practice and effectiveness of a multi-modal intervention to reduce peripheral intravenous cannula (PIVC) insertion in emergency department (ED) patients.

METHODS: A prospective before and after study and cost analysis was conducted at a single tertiary ED in Australia. Data were collected 24 hours a day for two weeks pre- and post-implementation of a multi-modal intervention. PIVC placement and utilization within 24 hours were evaluated in all eligible patients.

RESULTS: A total of 4,173 participants were included in the analysis. PIVCs were placed in 42.1% of patients’ pre-intervention and 32.4% post-intervention, a reduction of 9.8% (95% CI: 6.8 to -12.72%). PIVC usage within 24 hours of admission was 70.5% pre-intervention and
83.4% post-intervention; an increase of 12.9% (95% CI: 8.8-17.0%). Sixty-six patients were observed in the ED for cost analysis. The mean time per PIVC insertion was 15.3 (95% CI: 12.6 – 17.9) minutes. PIVC insertion cost, including staff time and consumables per participant, was A$22.79 (95% CI:A$19.35 – $26.23).

CONCLUSIONS: The intervention reduced PIVC placement in the ED and increased the percentage of PIVC placed that were used. This program benefits patients and health services alike, with potential for large cost savings.

Reference:


Thank you to our partners for supporting IVTEAM