Technology use by vascular access clinicians while placing PICCs is associated with clinician characteristics, work setting and practice factors. Understanding whether such differences influence clinical care or patient outcomes appears necessary” Chopra et al (2017).

Abstract:

BACKGROUND: While the use of technologies such as ultrasound and electrocardiographic (ECG) guidance systems to place peripherally inserted central catheters (PICCs) has grown, little is known about the clinicians who use these tools or their work settings.

METHODS: Using data from a national survey of vascular access specialists, we identified technology users as PICC inserters that: (a) use ultrasound to find a suitable vein for catheter placement; (b) measure catheter-to-vein ratio; and (c) use ECG for PICC placement. Individual and organizational-level characteristics between technology users versus non-users were assessed. Bivariable comparisons were made using Chi-squared or Fisher’s exact tests; two-sided alpha with p<0.001. A significantly greater percentage of technology users also reported being certified in vascular access by an external agency than non-technology users (75% vs. 63%, p<0.001). Technology users were more often part of vascular access teams with ≥10 members compared to non-technology users (35% vs. 22%, p<0.001). Some practices also varied between the two groups: for example, use of certain securement devices and dressings differed between technology users and non-users (p<0.001).

CONCLUSIONS: Technology use by vascular access clinicians while placing PICCs is associated with clinician characteristics, work setting and practice factors. Understanding whether such differences influence clinical care or patient outcomes appears necessary.

Reference:


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