

Vein Preservation with Extended Dwell Catheter Technology

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Relevance

The vascular access team(VAT) noted trends and changes in vascular access, including central and peripheral blood stream infections, vascular compromised patients and difficulty with placement and management. The VAT team members sought and identified an innovative solution to adapt a pediatric midline catheter into an extended dwell catheter for use across all populations to replace the traditional PIV for longer term placement, fewer complications, fewer venipunctures and unnecessary use of the limited upper arm vessels.

Purpose

The goal of this innovative midline catheter use was to promote patient care excellence with vein preservation and reduction of complications associated with central and peripheral vascular access; as well as to facilitate collaboration with clinical staff for optimal patient outcomes.

Strategy/ Implementation

General Info

- Small 22 gauge soft polyurethane catheter
- No dilator = less trauma to vessel
- Extended use – up to 29 day dwell time

Indications

- Use in patients with difficult vascular access (dialysis, IV drug use, limb limitations)
- Available for use in patients with sepsis and/or positive blood cultures

Benefits

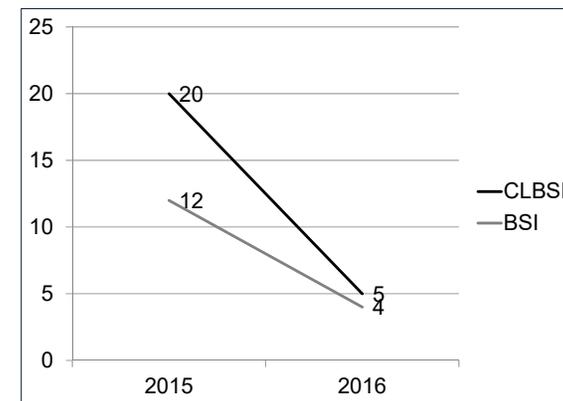
- Upper and lower arm vein preservation
- Facilitates earlier central line removal
- Reduces opportunity for blood stream infections

Evaluation/Outcomes

	Month (2016)	N	Treatment Completed	Average Dwell Time (Days)
Pilot	March	19	58% (11/19)	4
	April	31	74% (23/31)	5
	May/June	22	55% (12/22)	10
Full Use	October	73	73% (53/73)	15

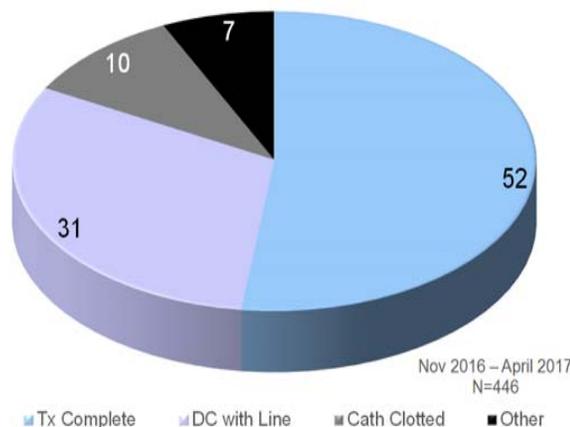
Evaluation/Outcomes

Blood Stream Infections



This project is a key contributor to the organization's sustained significant reduction in blood stream infections. The pilot demonstrated successful patient outcomes. Therefore, permanent practice change was made including procedure development and approval by the clinical practice council.

Reason for Line Removal



Implications For Practice

This innovative strategy provides an alternative for vein preservation, venipuncture reduction, patient satisfaction and reduction of complications. The procedure may be especially beneficial for patients with compromised vascular access (such as renal, mastectomy, IV drug users).

Acknowledgements

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