CENTRAL VENOUS LINE EDUCATION TOOL

The Problem

The project was designed to address the need for a comprehensive visual and descriptive guide for the safe identification and maintenance of Central Lines. Accessible and timely information concerning the proper identification and maintenance of Central lines is essential to prevent the possibility of line infection. In addition, because no visible informational resource previously existed, all requests for information concerning the proper use and maintenance of central lines are were referred to the PEVA Consultant team via phone and pager. This resulted in delays associated with obtaining the needed Central Line information required for safe patient care.

Aim/Goal

The goal of this project was to develop a website quickly accessible via POE and the BIDMC Portal. This allowed the user to visually identify a line and then view more detailed information including the full line name, the purpose of the line as well the complete flushing guidelines. By developing this online resource, clinical staff has an easily accessible and timely resource to verify line information, thus reducing the chance of a line related patient safety issue.

The Team

- Blanche Murphy RN, BSN– PEVA Non-PICC Central Line Consultant
- Andrew Mackler RN, MHA – PEVA PICC Consultant
- Davin Janicki – Project Manager, Healthcare Quality PI
- Richard Stoshane – Coordinator, Technology Management
- Oran Barber – Media Services Specialist

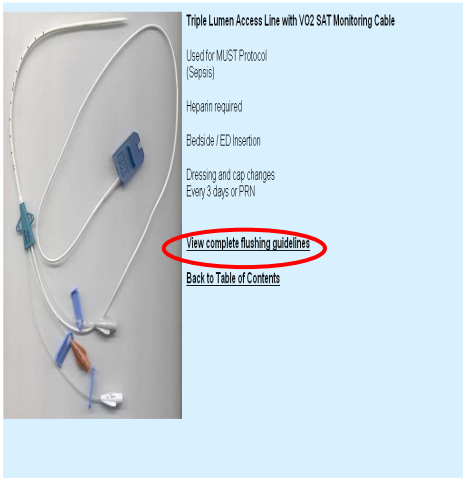
The Interventions

- Development of Wed Based Central Line Educational Resource easily accessible by any BIDMC staff member with access to the Portal.
- Creation of Link in Physician Order Entry application so that visual and descriptive verification of correct line can occur before ordering.

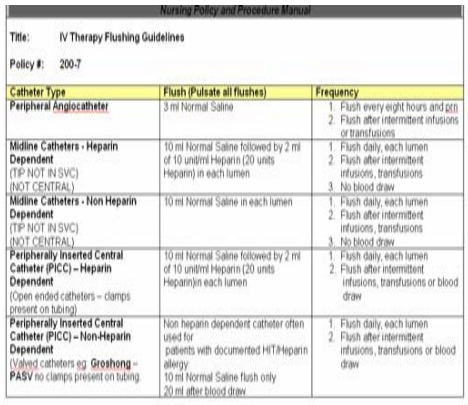
The Results

Website went live April 2008. Wesbite ranked in top tier of BIDMC portal usage.

Screenshots from Central Line Education Reference Website



Links incorporated in Pictorial Central Line Educational Website to Flushing Guidelines and creation of link from POE and home portal to this tool

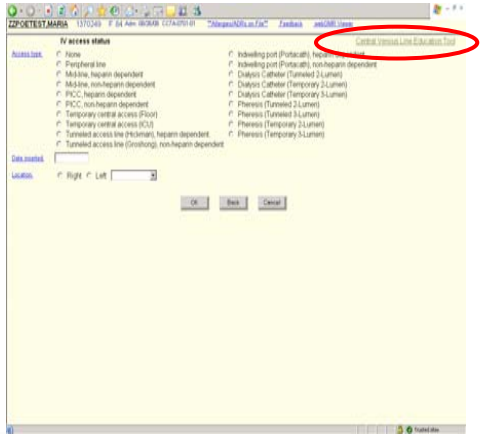


Nursing Policy and Procedure Manual

Title: IV Therapy Flushing Guidelines

Policy #: 200-7

Catheter Type	Flush (Pulsate all flushes)	Frequency
Peripheral Angiocatheter	3 ml Normal Saline	1. Flush every eight hours and prn 2. Flush after intermittent infusions or transfusions
Midline Catheters - Heparin Dependent (TIP NOT IN SVC) (NOT CENTRAL)	10 ml Normal Saline followed by 2 ml of 10 unit/ml Heparin (20 units Heparin) in each lumen	1. Flush daily, each lumen 2. Flush after intermittent infusions, transfusions 3. No blood draw
Midline Catheters - Non Heparin Dependent (TIP NOT IN SVC) (NOT CENTRAL)	10 ml Normal Saline in each lumen	1. Flush daily, each lumen 2. Flush after intermittent infusions, transfusions 3. No blood draw
Peripherally Inserted Central Catheter (PICC) – Heparin Dependent (Open ended catheters – clamps present on tubing)	10 ml Normal Saline followed by 2 ml of 10 unit/ml Heparin (20 units Heparin)in each lumen	1. Flush daily, each lumen 2. Flush after intermittent infusions, transfusions or blood draw
Peripherally Inserted Central Catheter (PICC) – Non-Heparin Dependent (Valved catheters eg: Groshong – PASV no clamps present on tubing	Non heparin dependent catheter often used for patients with documented HIT/Heparin allergy. 10 ml Normal Saline flush only 20 ml after blood draw	1. Flush daily, each lumen 2. Flush after intermittent infusions, transfusions or blood draw



What Should Happen Next

Update with new references for central access as new lines become available.

Beth Israel Deaconess Medical Center | A teaching hospital of Harvard Medical School | The Silverman Institute For Healthcare Quality and Safety

For More Information Contact
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