#### Lehigh Valley Health Network

## **LVHN Scholarly Works**

Patient Care Services / Nursing

## Flushing Policy Compliance on Central Lines

Nicole Ahrens BSN, RN Lehigh Valley Health Network, Nicole.Ahrens@lvhn.org

Erin Ginther BSN, RN Lehigh Valley Health Network, Erin.Ginther@lvhn.org

Emily Naugler BSN, RN Lehigh Valley Health Network, Emily.Naugler@lvhn.org

Follow this and additional works at: https://scholarlyworks.lvhn.org/patient-care-services-nursing



Part of the Nursing Commons

## Let us know how access to this document benefits you

#### Published In/Presented At

Ahrens, N., Ginther, E., & Naugler, E. (2020, October 15). Flushing Policy Compliance on Central Lines. Poster presented at LVHN Vizient/AACN Nurse Residency Program Graduation, Lehigh Valley Health Network, Allentown, PA.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.

# Flushing Policy Compliance on Central Lines

Nicole Ahrens, BSN, RN, Erin Ginther, BSN, RN, Emily Naugler, BSN, RN

Lehigh Valley Health Network, Allentown, Pennsylvania

#### BACKGROUND

- Many patients undergoing chemotherapy treatments have central lines called ports placed. These devices help preserve their veins and allow for easier venous access for medication administration and blood draws.
  - RNs are accessing lines on admission
  - Patients might not always need continuous medication
  - Is patency being maintained in these cases through flushing?
  - How often is flushing being performed?
  - Are orders being placed for flushes to be done every shift?

#### PICO

- P Patients with central lines
- I Nursing education on flushing order entry for central lines
- C No intervention/current practice
- O Affects flushing order entry compliance

#### **EVIDENCE**

- Ports should be flushed with between 10-20 mL NSS (Chou et al., 2019; Wu et al., 2018)
- Flushing ports in general, especially while using pulsatile technique, is a simple but effective technique to reduce bacterial colonization of central lines (Ferroni et al., 2014)
- Pulsatile technique is more effective at removing solid deposits than continuous flushing (Boord, 2019)

#### **OUTCOMES**

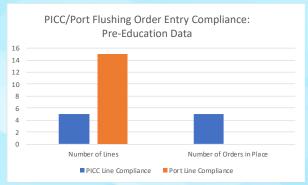


Figure 1: Of the observed patients, the five patients that had PICC lines all had flushing orders. In the 15 patients with ports, 0 patients had flushes ordered.

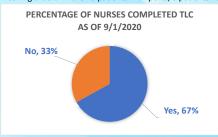


Figure 2: After pre-education data was collected, TLC was sent out to all nurses on 5KS and 5T. Of these nurses, 67% completed the TLC by the due date.

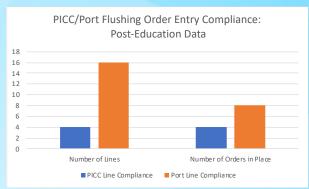


Figure 3: After the education was provided. PICC lines had 100% flush compliancy, and port flush compliance rose to 50%.

#### **IMPLEMENTATION**

- Chart audits were performed prior to education and after education to evaluate compliance in flushing orders.
- TLC education was assigned to RN's on 5T and 5KS on August 14th. RN's were given until August 22nd to complete the TLC.
- Post education chart audits were completed after August 22nd.

#### **NEXT STEPS**

- Place reminders around unit at nurses. stations
- Provide additional education if desired
- Continue to monitor
- Provide feedback to staff about performances
- Acknowledge compliance

#### REFERENCES

\*Boord C, (2019). Pulsatile Flushing: A Review of the Literature. Journal of infusion nursing: the official publication of the Infusion Nurses Society. 42(1), 37-43. https://doi.org/10.1097/NAN.000000000000031

\*Chou, Pin-Li MDa, b; Lu, Jul-Ying MDa, c; Cheng, Chia-Hui RNd; Chu, Yen PhDa, d; Wu, Ching-Feng MDa, b; Ko, Po-Jen MDa, b; Lu, Yun-Hen MDa, b; Wu, Ching-Feng MDa, b; Current port maintenance strategies are insufficient, Medicine:

\*Farmii, A., Gaudin, F., Gulffant, G., Flaud, P., Djurussel, J. J., Descamps, P., Berche, P., Nassif, X., & Merckx, J. (2014). Pulsative flushing as a strategy for prevent bacterial colonization of vascular access devices. Medical devices (Auckland, NZ), 7, 379-383. https://doi.org/10.2147/MDER.S7127.

HomeMed Education Committee (2018, February), Care of the Port in the Home

-Wu, C. Y., Cheng, C.H., F.U, Y., Chu, Y., Wu, C. F., Chiu, C. H., Ko, P. J., & Liu, Y. H. (2018). Recommended irrigation volume for an intravenous port Ex vivo simulation study. *PloS one*, 13(8), e0201285. https://doi.org/10.1371/journal.pone.0201785

