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**QI Project to Increase Venipuncture Best Practice in Patients with GFR < 60mg/dl**

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**Introduction**

Vein preservation for patients with CKD is essential for effective disease process management and necessary for construction of an arteriovenous fistula (AVF). Depleted venous access is frequently cited for as a reason for low fistula achievement. Current vascular access practices have potential to affect future fistula rates. Therefore, effective vein protection requires participation and education of the entire medical community to promote awareness of this problem.

**Methods**

A process to promote vein preservation in inpatient venipuncture practice was developed for use in a hospital unit. Steps:

1. Pre-assessment survey to assess knowledge, attitude, and beliefs of inpatient nursing care staff related to CKD, GFR, and venipuncture.
2. Online program to educate staff about CKD, GFR, and best practice venipuncture knowledge for patients with decreased GFR.
3. A 30-day pilot program, identified all patients with GFR less than 60 mg/dl, which trigger the RN and/or PCT to attempt venipuncture and IV access in the dorsum of the hand first, as per evidence-based guidelines.
4. Post-intervention assessment to determine if knowledge, beliefs, and attitudes of nursing care staff changed after the project.

**Results**

Prior to educational intervention only 16% of staff were aware that at a GFR level < 60 mg/dL, patients should undergo a vein assessment prior to venipuncture, and 77% of staff did not know the dorsum of the hand is the preferred site. After educational intervention 71% of staff knew that patients should undergo a vein assessment at a GFR < 60 mg/dl, and 86% of staff identified the dorsum of the hand as the preferred site. 100% of staff felt a sign posted above the bed, as a visual reminder that the patient has a GFR < 60 mg/dl, was an effective way to promote the use of the dorsum of the hands for venipuncture.

**Conclusion/Implications**

The creation of a program to educate inpatient nursing care staff about best practice related to venipuncture in patients with decreased GFR rates is essential to the preservation of veins for future AVF formation.

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