ACKNOWLEDGEMENTS:

Angela Jones BSN, RN, PCCN | angela.jones@uchealth.org

PURPOSE:
The goal of the initiative was to increase the Radial Artery Access procedures to decrease post-op complications, to improve patient outcomes and satisfaction.

RELEVANCE/SIGNIFICANCE:
Utilizing the Radial Artery for our access point during cardiac procedures will decrease post-op complications, mortality rates and patient's length of stay. Observed symptomatic complications occur only 3-6% of the time due to the intricate palmar circulation. A coronary procedure with a femoral access approach has a 10% risk of severe post-op complications leading to mortality. Radial Artery access ensures the best care practices for the patients are provided.

STRAATEGY AND IMPLEMENTATION:
In 2011 the Cardiac Catheterization Lab (CCL) was not performing Radial Artery access. We implemented the new routine of Radial Artery access starting first with the planned Diagnostic Coronary outpatients population. Based on the evidence supporting this innovative technique, we partnered with the Cardiology group to implement this best practice. Nursing staff was supported with resources and education including a competency on the “Thumbs Up” procedure for Radial Artery assessment technique, we partnered with the Cardiology group to implement this best practice. Nursing staff was supported with resources and education including a competency on the “Thumbs Up” procedure for Radial Artery assessment. Nursing education encompassed a knowledge of medications, equipment set up, procedural steps and patient education pieces. As the Radial Artery practice expanded in the patient population, education was extended to include outlying units that would be involved in post-op monitoring. In 2013 the CCL department expanded Radial Artery Access to include the Acute Coronary Catheterization clients.

EVALUATION:
Currently 75% of all coronary procedures utilize Radial Artery access. Outcomes of Radial Artery access demonstrate patients ambulate earlier, experience less pain and have fewer restrictions during recovery. Length of stay is shortened thereby reducing costs. Education was extended to all areas caring for patient’s pre and post Radial Artery procedures. Nurses demonstrate expertise with this new process.

IMPULATIONS FOR PRACTICE:
As technology advances nursing staff is challenged to implement innovative practice changes to enhance quality and improve patients’ outcomes. Increasing Radial Artery access ensures the best care practices for the patients are provided.

1. Fewer restrictions post-op: earlier ambulation, with only wrist movement restrictions
2. Less procedural site pain reported
3. Fewer post-op complications resulting in 1-2% fewer post-op blood transfusions
4. 80% of patients are then eligible for Same Day discharge
5. Developed a policy and order set
6. To enhance quality patient care and improve patient outcomes, practice change education was extended to all post-op units. This included:
   - Management of Radial Compression devices
   - Monitoring bleeding, hematomas, and pain
   - Assessing for hand ischemic complication through circulation.

REFERENCES:
Valgimigli, M., Campo, G., Penzo, C., Tebaldi, M., Biscaglia, S., Brancati, M., Mongiardo, R., Schiavoni, G., & Crea, F. (2012). Transradial coronary catheterization is associated with reduced vascular complications and access crossover compared to transfemoral approach: results of a matched cohort study. EuroIntervention, 8(9), 1177-1183. Doi.10.4244/EIJ-V8-I9-1177
Valgimigli, M., Campo, G., Penzo, C., Tebaldi, M., Biscaglia, S., Brancati, M., Mongiardo, R., Schiavoni, G., & Crea, F. (2012). Transradial coronary catheterization is associated with reduced vascular complications and access crossover compared to transfemoral approach: results of a matched cohort study. EuroIntervention, 8(9), 1177-1183. Doi.10.4244/EIJ-V8-I9-1177
2014 TO 2015 RADIAL CATH COMPARED TO TOTAL NUMBER OF CATHS

WHAT PERCENTAGE OF ELIGIBLE PATIENTS GO HOME SAME DAY?