**QUALITY IMPROVEMENT IN POST HEART CATHETERIZATION CARE.**

**K. Gu**1, M. Katz2, D. Chang3, E. Randhawa2, K. D'Mello4, G. Ledley5

1Internal Medicine, Drexel University College of Medicine, Philadelphia, PA, USA

2Drexel University College of Medicine, Philadelphia, PA, USA

3Drexel University College of Medicine/Zucker School of Medicine at Hofstra/Northwell, Philadelphia, PA, USA

4Medicine Division of Internal Medicine, Drexel University College of Medicine, Philadelphia, PA, USA

5Medicine Department of Cardiology, Drexel University College of Medicine, Philadelphia, PA, USA

**Background:** Heart catheterization is a vascularly invasive procedure for the evaluation of coronary arteries, cardiac hemodynamics, and structural heart diseases. When arterial access is required, decannulation of the sheath from the artery requires extra care as complications can be life threatening. These complications include, but are not limited to, retroperitoneal hemorrhage, hematoma, pseudoaneurysm, and arterial thrombosis. Post catheterization check (PCC) after the removal of the arterial sheath is standard of care to monitor for these complications and to clear patients of bedrest protocols. However, without proper education, house staff responsible for this often lack the skill and confidence to identify these complications early.

**Methods:** We retrospectively evaluated 31 patients who underwent heart catheterization and evaluated documentation for PCC. Seven essential elements were determined necessary and tallied from each document (access site identification, sheath removal time, subjective data, vital signs, access site exam, distal extremities exam, and fellow notification). We then provided oral presentations to educate all house staff and implemented a standardized template document to be used for each PCC. After this intervention, we prospectively evaluated an additional 31 PCC and evaluated for the same parameters as the pre-intervention group. We compared the rates of documentation, average presence of the 7 essential elements, and complications rates.

**Results:** Prior to house staff education and implementation of a standardized document, only 14 of the 31 patients had documentation of PCC by house staff. These 14 documents averaged 4.43 of the 7 essential elements. There were 3 complications. Post intervention, 30 out of 31 patients had documentation with average of 5.7 out of 7 essential elements. There were 2 complications in this group.

**Conclusion:** Post catheterization checks are an essential part of patient safety. House staff education and standardized documentation at our institution significantly improved compliance with and quality of documentation. This should be part of training in all teaching or advanced practitioner driven institutions.