Standardized Post Procedure Observation in Interventional Radiology

The Problem

At our institution, post-procedure observation times have often been variable and attending-dependent. Although there is increasing evidence that a number of interventional radiologic procedures can be performed safely on an outpatient basis, there are no recommended observation times for these cases. In patients undergoing procedures in the interventional radiology department, patients may undergo a longer observation in the radiology care unit (RCU) after a procedure, varying by attending preference. Shorter observation times may be equally as safe while improving timeliness of discharge and convenience for the patient, cost of the encounter, and efficiency of the unit.

Aim/Goal

Our goal was to standardize post-procedural observation times, shorten observation times, and evaluate the safety of decreasing observation times by comparing the complication rates in patients undergoing procedures in the 7 months prior to standardization and 7 months after.

The Team

Christine Chen, MD, Radiology
Bridget O’Bryan, RN, Radiology
Ammar Sarwar, MD, Radiology
Muneeb Ahmed, MD, Radiology
Felipe Collares, MD, Radiology
Salomao Faintuch, MD, Radiology
Jonathan Kruskal, MD, Radiology
Olga R. Brook, MD, Radiology

The Interventions

- Developed a standardized protocol for observation times in the RCU after a procedure in the interventional radiology department, implemented in January 2014.
- Identified outpatients undergoing procedures in the interventional radiology department between 1 June 2013 and 21 July 2014.
- Identified ED visits and hospital admissions within 90 days of the procedure, and clinic visits and mortality within 30 days of the procedure.
- Joint review of clinical notes associated with the above encounters by an attending interventional radiologist and radiology resident to determine relevance to the procedure and preventability by longer observation times.
- Comparison of procedure-related and preventable encounters in patients prior to and after intervention.

The Results/Progress to Date

Lessons Learned

- Shorter observation times after outpatient interventional radiology procedures are safe, with no significant increase in procedure-related complications resulting in additional healthcare encounters.
- Changing protocols or standard practices is always a difficult transition. Involving all personnel, including nursing staff, in the formulation and follow up of the protocol has helped significantly in implementation.

Next Steps/What Should Happen Next

- Further analyze the effect of observation protocol changes on the cost of the encounter.
- Evaluation of interventional radiologic procedures not within the interventional radiology department, including CT/US and MR.
- Evaluation of interventional radiologic procedures performed with planned overnight admissions.

Average post-procedure observation times decreased after standardization.

No significant increase in post-intervention procedure-related ED visits, admissions, or clinic visits

Decreased variability of post-procedure observation times after standardization

For more information, contact:
Christine Chen, MD, PGY3 Radiology Resident
ccchen16@bidmc.harvard.edu