Investigation of the Approach to Tracking Cardiac Catheterization Complication

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**Background:** Infection Control has been retrieving Meditech information to track infection rates during hospitalization and in the immediate 30 day following hospitalization. Given the success of this approach, it was hypothesized that this report could be used to track other adverse outcomes. We purposed to compare using Meditech generated information to the presently used ACC database for tracking adverse events post cardiac catheterization.

**Methods:** We retrospectively generated a report of all patients who had a cardiac catheterization from April, 2003- September, 2003 who were either readmitted or had cultures in the 30 days following their procedure. All patients who had potentially adverse events in the electronic and/or paper medical record were reviewed to determine the nature of the event.

**Results:** We generated 831 individual patient reports; of these 508 had a cardiac catheterization and 308 patients had a potentially adverse outcome. The ACC database had 107 records during the same time period, of which the Meditech system shared 30 patients with the ACC. Five of these patients had the same complication as demonstrated in the ACC database and 25 had not previously reported adverse outcomes. We found 77 infections, 46 cardiovascular events, 23 bleeding events, 182 occlusive events, and 14 other events.

**Conclusions:** Using the Meditech System to track adverse events provides a complementary system to the presently employed ACC database. The system is able to track events that occurred post-discharge, something which is not presently done with the ACC. However, the ACC tracks events which occur while in the hospital, which the Meditech reporting system does not do. Given the referral base of approximately 40% of patients at this tertiary referral center, the major limitation to the Meditech system is that it does not account for patients who do not receive follow-up care in the UMASS Memorial System of Hospitals. More direct means of follow-up would be needed for this purpose.