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**Category:** Quality improvement (Systematic and continuous actions leading to measurable improvement in health care service and/or health status)

**Title:** Antiarrhythmic Loading - Process Improvement for Elective Admissions

**ABSTRACT BODY**

**Background:**
Sotalol and dofetilide are commonly prescribed medications to control atrial fibrillation. They both require initiation within a supervised setting to monitor for adverse QT interval prolongation. All these admissions are planned in advance, but until our project began, these patients did not have preassigned beds. We believed implementing a policy to reserve beds for these admissions would not only ensure they received the antiarrhythmic agent sooner, but would also expedite throughput and decrease length of stay.

**Methods:**
We first conducted a survey of all patients admitted for sotalol or dofetilide loading during a nine-month period. We recorded when the first antiarrhythmic dose was administered, as well as the total length of stay. We then analyzed this data to obtain our first data set. With those results, we met with nursing administration to discuss reserving beds for these planned admissions. We allowed two months for proposed changes to be implemented, then resurveyed for a period of 6 months. This data was collected in a similar manner as before.

**Results:**
We surveyed a total of ninety patients. Our pre-intervention group consisted of sixty-five patients, whereas our post-intervention group consisted of twenty-five patients due to time constraints. In the pre-intervention group, only 9% of patients received their first dose of dofetilide or sotalol prior to 11:00. The length of stay (LOS) in the pre-intervention group was statistically longer, with the majority of patients having a three-day hospitalization (73%). In the post-intervention group, medication administration prior to 11:00 was improved to 84%. LOS was also reduced (48% of patients had a LOS of three days vs. 73% in the pre-intervention group; 40% of patients had a LOS of two days vs. 12% in the pre-intervention group). Although our study was not designed to investigate this, there was an observed, anecdotal increase in patient and staff satisfaction.

**Conclusion:**
Reserving bed space for pre-admitted patients receiving anti-arrhythmic loading demonstrated an improvement in time to medication administration, as well as an overall reduction in LOS. Anecdotally, it also appears to have increased patient satisfaction.

**Clinical Implications:** ...understand the value of pre-assigning bed space for planned admissions involving antiarrhythmic loading in order to improve time to medication administration and decrease LOS.