

## 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.

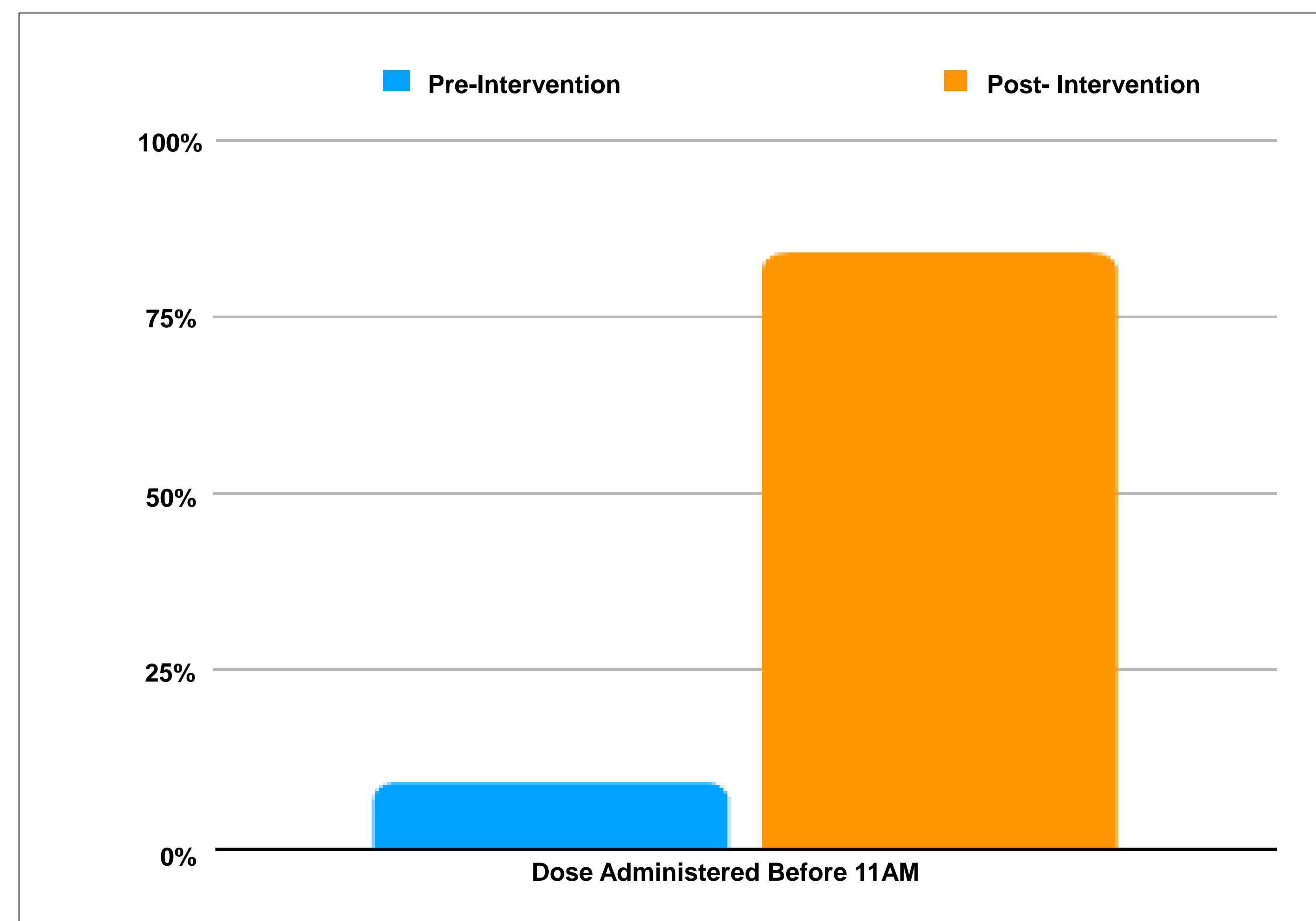
## METHODS

- We first conducted a retrospective chart review of all patients admitted for sotalol or dofetilide loading during a nine-month period from 1/2018 to 9/2018 at UF.
- Clinical data was confirmed by investigators through a detailed review of individual electronic medical records and stored in a HIPAA compliant online database.
- Patient demographics, time of first antiarrhythmic dose and total length of stay were recorded.
- This data was analyzed in order to obtain our first data set.
- We met with nursing administration to discuss reserving beds for these planned admissions, with emphasis on administering the first dose of the antiarrhythmic before 11:00 am.
- We allowed two months for our proposed intervention to be implemented, then resurveyed for a period of 6 months with data being collected in a similar manner as before.

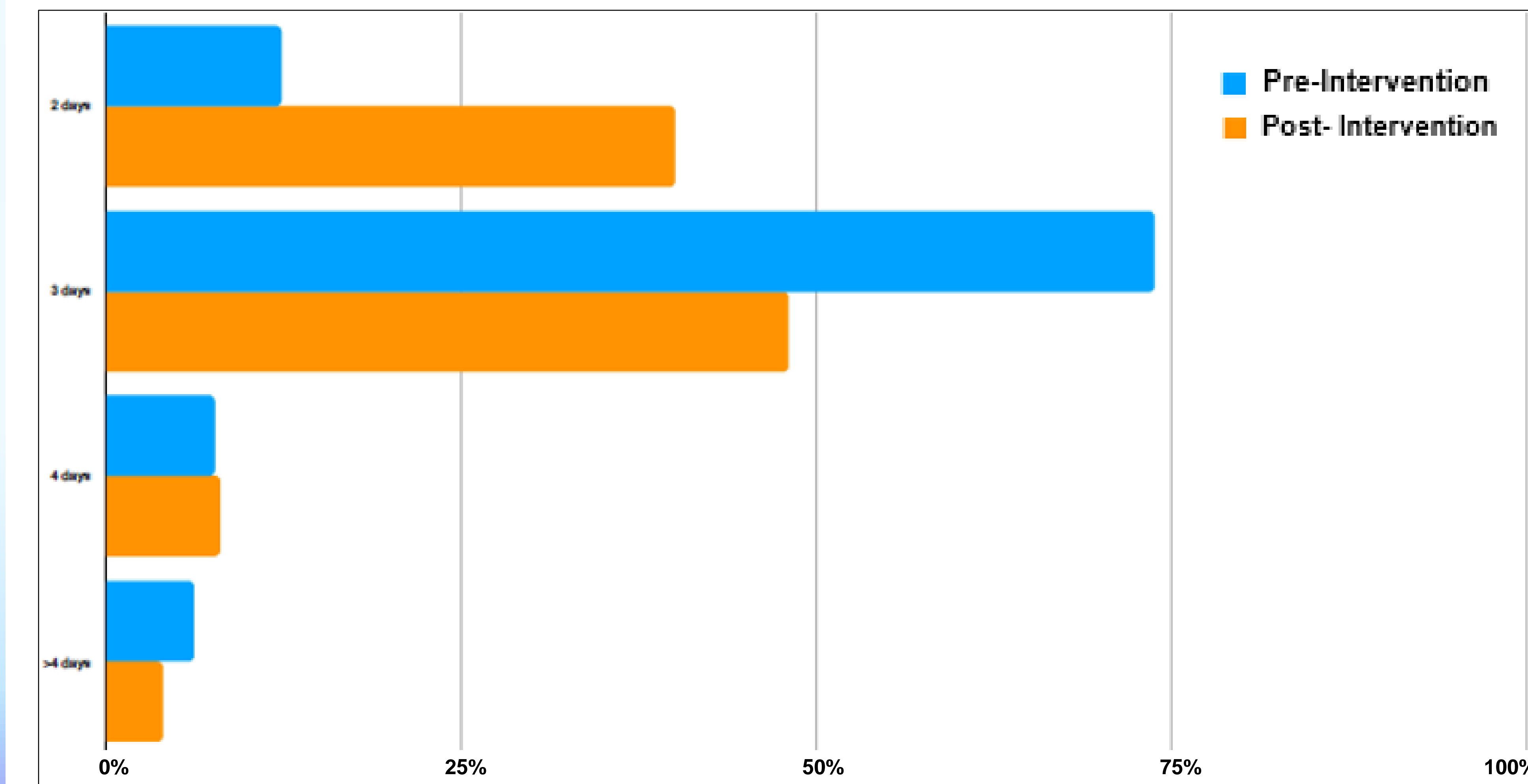
## RESULTS

- Our analysis included a total of ninety patients.
- The 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 11:00am. The length of stay (LOS) was statistically longer, with the majority of patients having a three-day hospitalization (73%).
- In the post-intervention group, medication administration prior to 11:00am 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).

**Figure 1:** Percentage of patients receiving first antiarrhythmic dose before 11:00 AM



**Figure 2:** Length of Stay



## DISCUSSION

- This study identified a significant problem with the elective admission process.
- The old process resulted in delayed initiation of the antiarrhythmic agent and prolonged LOS. Long wait times in the lobby were a regular occurrence, sometimes in excess of 12 hours.
- Our intervention of reserving bed space for pre-admitted patients undergoing antiarrhythmic loading resulted in an improvement in time to medication administration, as well as an overall reduction in LOS.
- Although our study was not designed to investigate this, there was an observed, anecdotal increase in patient and staff satisfaction.
  - "Knowing what admissions were coming helped staffing assignments go smoother".
  - "The changes allowed for earlier medication start times and any pharmacy related issues could be addressed during the day instead of late evening or by the night coverage fellow."