

# Implementation of an Atrial Fibrillation Clinic Leads to Substantial Cost Savings Through Reduction in Use of Emergency Department Services: A Single Center Experience

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## BACKGROUND

Atrial fibrillation is the most commonly encountered arrhythmia. Treatment of AF places a significant burden on the healthcare system. An estimated \$6 billion is spent in the US annually on AF treatment, 50% of which is allocated to emergency department (ED) and inpatient care.<sup>1,2</sup> Hospitalization occurs 67% of the time a US patient presents to the ED with AF.<sup>3</sup> Access to timely outpatient care in a dedicated AF pathway may have a substantial impact on healthcare resource utilization.

## METHODS

The Atrial Fibrillation Clinic at OhioHealth's Riverside Methodist Hospital was initiated in September 2018. The primary goal of this clinic is to reduce utilization of ED and inpatient services by providing an outlet for AF patients to seek acute evaluation and treatment in an outpatient setting. The clinic is staffed 5 days per week by an electrophysiology advanced practice provider (APP).

We created evidence-based pathways for both ED and outpatient providers intended to stabilize patients until they can be evaluated. Nurses triage and schedule patients to be seen within 24 to 48 hours from the time of the referral. Patients are evaluated by an APP who determines an appropriate treatment plan, including a consideration for same day intervention.

## RESULTS

Over 12 months 492 patients were referred for management of acute symptomatic atrial fibrillation. 61 patients were referred from the ED using our low risk AF protocol and 431 were referred from outpatient providers using an outpatient provider protocol.

### ED Pathway

Patient presents with acute episode of AF. If they do not meet exclusion criteria for outpatient management, ED provider initiates protocol for acute management and patient is discharged with AF Clinic follow up

### Outpatient Pathway

Patient presents with acute episode of AF. Provider initiates protocol for acute management. Same day or next day visit with AF Clinic arranged to avoid ED utilization



### AF Clinic

Acute evaluation and arrange for appropriate same day/next day outpatient treatment and discussion on longer term management strategies

255 same day interventions were performed, including TEE, cardioversion, and ablation.

**We estimate \$1.3 million in variable cost savings from the reduction in use of emergency services as well as avoidance of hospitalization.**

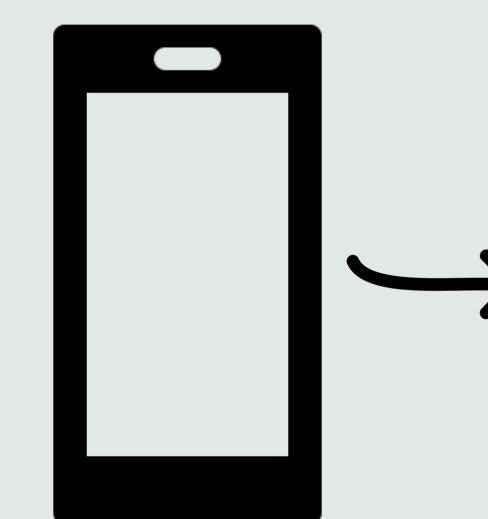
### COST ANALYSIS

Patients referred from ED	61
Patients referred from OP	431
	492
Average variable cost per AF ED Hospitalization <sup>1,4</sup>	3,000
Average Clinic variable cost <sup>1,4</sup>	200
Average cost savings	\$2,800
TOTAL POTENTIAL COST SAVINGS	\$1,377,600

## CONCLUSION

Acute evaluation and treatment of AF patients through a dedicated pathway has the potential to substantially reduce the cost of care to the healthcare system. This should be accomplished through a multidisciplinary approach including nursing, advanced practice providers, and physicians. The development of evidence-based pathways for use by emergency department and outpatient healthcare professionals can standardize therapy for this population. Educating and empowering patients with the knowledge of how and when to seek care is imperative to success.

Want more information?  
Scan for author contact information and a link to the AF Clinic website



## REFERENCES

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2. Kim MH, John SS, Chu BC, Dalal MR, Schulman KL. Estimation of total incremental health care costs in patients with atrial fibrillation in the United States. Circ Cardiovasc Qual Outcomes 2011;4:313-20.
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## DISCLOSURES

None