Title:
Evaluation of a Novel Care Pathway for Atrial Fibrillation Patients on Attainment of 2016 ACC/AHA Atrial Fibrillation and Atrial Flutter Performance and Quality Measures

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Background:
Atrial fibrillation is the most common cardiac dysrhythmia in adults, but multiple gaps of care have been identified in management. The development of clinical performance and quality measures for adults with atrial fibrillation or atrial flutter by the American College of Cardiology and American Heart Association (ACC/AHA) has provided guidance for the benchmarking and improvement of value based care. These measures focus on patient safety, effective clinical care, communication, and care coordination. In July 2015, the University of North Carolina Medical Center (UNCMC) implemented a multidisciplinary care pathway for low to moderate risk patients presenting to the emergency department (ED) with atrial fibrillation. These patients are scheduled for an outpatient visit with a Clinical Pharmacist Practitioner (CPP) within 48-72 hours instead of admitting them to the hospital.

Objectives:
The objectives of this study were to describe the population seen by the CPP in clinic and evaluate the obtainment of performance and quality metrics as described by the ACC/AHA guidelines. The final objective was to identify areas for improvement in the referral and patient care processes.

Methods:
This was a single center, retrospective chart review of adult patients presenting to the UNCMC Atrial Fibrillation Clinic from July 2015 to September 2017. The primary outcome was the percentage of 2016 ACC/AHA Clinical Performance and Quality Measures for Adults with Atrial Fibrillation obtained by the clinic based upon guidance calculations. The secondary outcomes evaluated healthcare utilization post-intervention. Descriptive statistical analyses were performed for all outcomes.

Results:
A total of 184 patients were identified; 24 patients were excluded, as they did not present through the appropriate pathway, were never in atrial fibrillation or atrial flutter or did not present to the clinic. Patients seen in the clinic were most commonly older white males with Medicare or private insurance. They had an average CHA2DS2-VASc of 2.3 and only 37.5% were found to still be in atrial fibrillation when they presented to the clinic at a median of 2 days after emergency department presentation. The majority of assessable metrics were attained in over 80% of the patient encounters. This transition pathway resulted in further electrophysiological procedures with 12.4% undergoing ablation or cardioversion within 90 days of clinic visit. Lastly, 4.3% of patients represented to the ED within 30 days.
Conclusion:
The patients seen in the UNCMC Atrial Fibrillation clinic were appropriate low to moderate risk individuals. The CPP was able to effectively care for these patients as evidenced by quality and performance measure performance. Quality improvement will need to continually be assessed as the pathway expands to other referral sources.