

Benefit and Cost of Sinus Rhythm Conversion and Maintenance for Atrial Fibrillation

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Atrial fibrillation (AF) is the most common sustained arrhythmia encountered in clinical practice. Its increasing prevalence, particularly among the elderly, renders it one of the most serious current medical epidemics. AF causes a significant burden on patients and the health care system. The main goals of AF therapy are to improve symptoms, reduce morbidity, decrease hospitalization, and prolong survival. However, recent trials have not identified clear advantage of rhythm control over rate control. Consequently, economic factors often play a role in guiding AF treatment selection. Data on survival and use of health care resources from AFFIRM participants showed that, in AF patients who were 65 years of age or who had other risk factors for stroke or death, rate control is a cost-effective approach to the management of AF compared with maintenance of sinus rhythm strategy using conventional antiarrhythmic drugs.

The ATHENA trial demonstrated that dronedarone reduced the risk of cardiovascular hospitalization/death by 24% ($P < 0.001$) in patients with AF and atrial flutter. Health care costs associated with CV hospitalizations and inpatient deaths among ATHENA-like patients in the real world are high. Novel antiarrhythmic therapies such as dronedarone, with the potential to reduce CV hospitalizations/mortality in similar patients, could decrease health care costs if adopted in clinical practice.