



RISTRA-AF Executive Summary

The Problem

- Emergency department (ED) management of primary atrial fibrillation and flutter (AF) varies considerably across the region. Hospitalization rates, for example, vary two-fold. Implementation of best practices may help standardize regional care.
- Many AHA AF recommendations readily apply to emergency care, but some do not translate as easily, e.g., amiodarone's delayed onset (at least 6-8 hours) makes it unsuitable as a first-line pharmacologic cardioversion agent for all-comers.

One Solution

- With multispecialty input, we have designed an evidence-based clinical decision support system, called RISTRA-AF, to inform patient-specific treatment decisions for rate reduction, cardioversion, and stroke prevention. The tool is an adjunct to, not a replacement for, clinical judgment.
- RISTRA-AF was piloted across ROS, SAC, and SSC EDs and improved by physician-user feedback. We are now rolling it out in a staggered fashion across CREST sites.

Examples of Treatment Recommendations

- Many stable ED AF patients with rapid ventricular response will have a more sustained rate reduction when, early in their ED stay, they are given long-acting oral agents, which have been shown in several studies to reduce need for hospitalization.
- First-shock electrical cardioversion is more effective using maximal joules. In obese patients (or maybe all patients), this should be augmented with manual pressure.
- Many AF patients passing through the ED are eligible for stroke prevention. RISTRA-AF will pre-populate the CHA₂DS₂-VASc score to readily identify eligible patients and prepare a handy risk-specific patient educational handout. The tool will guide anticoagulation choice and dosing or, if physicians prefer, can hyperlink them to eConsult to enlist the help of the anticoagulation service.

Getting Acquainted with RISTRA-AF

- RISTRA can be accessed through the ED Navigator and ED Consult Start pages. The landing page that links to the AF module has introductory slides and a training survey (i.e., quiz) to help familiarize users with the tool. One can select "training mode" on the first page of RISTRA-AF to allow exploration of the tool on any patient (with AF or not) without registering them in the study.
- Any questions? Just ask your local CREST champion.