

# **Improving the management of adult patients presenting to the Emergency Department with atrial fibrillation with rapid ventricular response.**

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**Objective:** To discuss the development and implementation of an evidenced based clinical pathway for adult patients presenting to the emergency department (ED) at South West Healthcare Warrnambool with atrial fibrillation with a rapid ventricular response (AFRVR) undertaken as part of the Emergency Clinical Network's (ECIICN) evidence-based care projects cycle 2013.

**Method:** This was a before and after quality cycle project. A multidisciplinary project team used the plan, do, study, act (PDSA) change cycle model. They developed a project plan and, based on the results of a pre-project audit, developed and implemented an evidence based multidisciplinary pathway for patients with AFRVR. We employed simulation-based training to support implementation. Outcomes of interest were management according to the pathway, documentation of duration of symptoms, documentation of rate vs. rhythm control strategy and documentation of CHADS2 score. Evaluation was by comparison of proportions (Chi square) before and after implementation of the pathway.

**Results:** Treatment according to a clinical pathway increasing from 0 to 41% ( $p < 0.01$ ). The proportion of patients where chronicity was recorded improved from 63% to 82%; the proportion where a documented treatment strategy was recorded deteriorated a little (37% to 32%) and the proportion of patients with CHADS score recorded also deteriorated a little (23% to 17%) - all of these were not statistically significant. Key success factors included a dedicated project team, innovative education through the use of real time simulated scenarios to test and refine the evidenced based clinical pathway and the support of the ECIICN. Barriers/ challenges have included lack of buy-in from outside of the ED and sustainability.

**Conclusion:** Developing a clinical pathway for the management of adult patients presenting to the ED at South West Healthcare Warrnambool with AFRVR improved the management of this population. We continue to work on external stakeholder acceptance and sustainability.