Improving management of atrial fibrillation with RVR
Central Gippsland Health Service - Sale

Why this project is important in our Emergency Department

In March 2013, the Emergency Care Improvement and Clinical Network (ECIICN) embarked on its fifth round of evidence-based improvement projects in Emergency Departments (EDs). The aim of these projects is to enhance the use of evidence-based care in EDs, to reduce variation in clinical practice and to improve consistency of care.

Central Gippsland Health Service - Sale Emergency Department selected ‘Improving the management of atrial fibrillation with rapid ventricular response’ as the topic for improvement. We consider this topic was important to us because:

• Significant variation in management of patients with AF and RVR, depending on the treating medical registrar
• Patients not being consistently managed in accordance with the current evidence
• Streamlining care was important for patients and patient flow.

What we did

• Implementation of the AF with RVR pathway based on the pathway supplied by the ECIICN, which was slightly modified to suit our local needs and resources
• Inservice education for staff on the management of AF and the new pathway
• Written instructions on how to administer the IV medications were attached to the document
• Laminated copies of the pathway were also provided in the resuscitation bays
• Implementation of the pathway led to the revision of the Amiodarone Infusion Drug Protocol used in the critical care areas.

What we achieved

1. The proportion of patients treated according to a pathway improved from 0% to 76%; (p<0.01).
2. The proportion of patients where chronicity was recorded was unchanged.
3. The proportion where a documented treatment strategy was recorded reduced slightly 100% to 70%; (p=NS).
4. The proportion with CHADS score recorded improved from 30% to 70%; (p<0.01).

What we learnt

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<tr>
<th>Key success factors</th>
<th>Barriers/Challenges</th>
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<tr>
<td>A flyer with beginning date and duration of the project was placed in the handover and tea rooms to raise staff awareness of the project</td>
<td>Did not identify and consult key stakeholders external to the ED early enough in the project, e.g. CCU NUM and pharmacy</td>
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<td>Regular audits to keep the project on track</td>
<td>IV amiodarone was used more frequently, leading to multiple issues relating to increases in rate and administration of the loading dose</td>
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<td>Staff confidence in project leader as well supported by NUM and had previously led an improvement project</td>
<td>Be more specific to staff about medical record documentation requirements to ensure outcome measures can be audited</td>
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<td>Organised approach to the education of medical and nursing staff</td>
<td>Pathway and IV drug administration instructions made easily accessible for staff</td>
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<td>Nursing staff were all eager to participate in project as the flowchart provided structure and standardised management of rapid AF presentations</td>
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Impact on patient care, staff and ED

• Patient care was directly impacted as clear and decisive management was implemented rapidly, thereby averting patient deterioration
• Medical staff found the flowchart easy to use.