

# QUALITY IMPROVEMENT OF CARDIOVERSION

## FROM A PATIENTS PERSPECTIVE

*Yvonne Tindall, Jane Besley & Rosie Everitt*

### Background

Atrial fibrillation is one of New Zealand's fastest-growing forms of heart disease.

Atrial fibrillation (AF) is a quivering or irregular heartbeat that can lead to blood clots, stroke, heart failure and other heart-related complications.

Cardioversion is a way to restore a regular rhythm.

**In 2016, we examined the service for cardioversion and identified:**

- Access to treatment was unclear
- No clinical pathway
- Poor communication with the patient
- CCU was often full which resulted in cancellations
- Delays waiting for an Anaesthetist to be free
- No review or plan on discharge
- Untreated patients are at greater risk of developing complications
- The longer they remain in AF the more difficult to successfully revert them into a normal rhythm

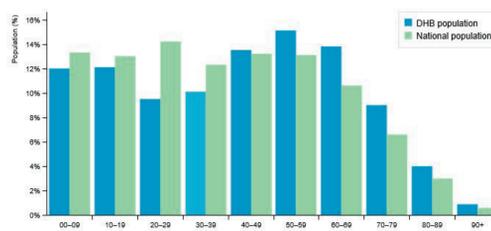
### Approach

- The nursing team identified this problem and approached Dr Garofalo and the Cardiology Clinical Governance Group (CGG)
- The CGG discussed this issue and a formal proposal was requested to change this pathway
- The team approached all stakeholders (anaesthetic team, ICU staff and Cardiologists) to streamline this service.
- A literature search on this subject was carried out and surveyed the current care in other cardiology centres around New Zealand
- A formal proposal was written to endorse a nurse facilitated clinical pathway overseen by Dr.Garofalo.
- We planned to carry out two audits.
- The first being a quantitative audit of the clinical aspects of care to measure the pathways success. Highlighting referral to treatment time, adverse events and length of stay till discharge.
- The second being a qualitative audit to measure the success of the pathway from the patient's perspective. Using the Health Quality & Safety Commission experienced-based co-design method
- This was approved by The Clinical Governance Committee and CCG.
- The nurse facilitated pathway was implemented in August 2017

### Project Reach

There was potential to improve quality of life for a great number of people within our DHB.

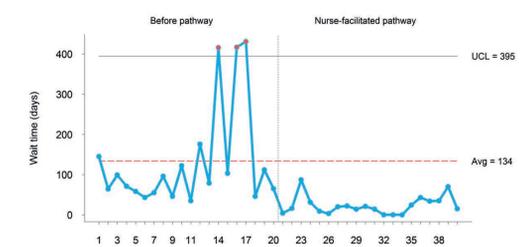
This graph shows Nelson NMDHB with its ageing population in blue, demonstrating an increased need for this service. Therefore an estimated 6822 people over the age of 65 in the Nelson Marlborough region are estimated to be in AF.



### Results

**The successes of the project were:**

- Improved access to definitive care, reduced waiting times and patient's risks
- Clear patient-centred clinical pathway
- More streamlined treatment using a dedicated expert team
- Electrophysiologist assessment and follow up.
- Consistently providing a comfortable and safe procedure
- Positive patient feedback
- Saved hospital revenue: CCU bed, Anaesthetic fees and consumables



**Areas of Improvement:**

- Clinical Governance requested extended pilot study, resulting in the acquisition of a capnography machine for assessment of sedation as per anaesthetic request
- Occasional need for anaesthetic support for high risk patients

### Learning and Sharing

**Shape future direction:**

- The results of this initiative have allowed the department to streamline these patients and therefore carried out more CV as the populations grows.
- Better accessibility to treatment has been achieved.
- Future plans: provide a dedicated community AF clinic, led by CNS to diagnose and manage future patients.
- Streamline acute patients directly from the emergency department for a cardioversion via the Medical Assessment Unit.

**Results applied to other areas:**

- Principle of co-design has been applied to other areas of practice within our department to better the patient's experience.
- Presentation at International Cardiology Society of Australia and New Zealand (CSANZ) and a great deal of interest was expressed by other DHBs



*Acknowledgements to Dr Daniel Garofalo FRACP Electrophysiologist*