Background - Warfarin has historically been considered the cornerstone of oral anticoagulation (OAC) therapy in stroke prevention in patients with atrial fibrillation (AF). The alternatives are DOACs (Direct Oral Anticoagulant) such as apixaban. It is hypothesised that the quality of care and management of patients with a primary diagnosis of non-valvular AF or atrial flutter (AF/Flutter) can be improved using apixaban instead of warfarin as there is:
• No need for blood tests, specifically, the frequent measurement of INR (International Normalised Ratio)
• No need for heparin (enoxaparin) injections
• Earlier discharge home without having to wait for an anticoagulation status to be established, thus reducing the risk of hospital acquired infection and relieving bed pressures in the process

Aim - The aim of this study was to establish if the above hypothesis is applicable to Jersey, by evaluating hospital length of stay (LOS), drug acquisition and administration costs, INR monitoring and related staff contacts, in two patient groups after the introduction of apixaban

Method - Data was collected from two time periods; July 2011 - June 2012 when warfarin was the drug available and July 2016 - June 2017 when apixaban had become the more common drug used Comparisons were made between the two cohorts:
• Length of stay (LOS)
• Number of INR tests
• Staff contact
• Enoxaparin administration
There were no statistical differences between the two cohorts regarding baseline characteristics

Results - 46 patients (>18 years) with AF/flutter as primary admission cause were eligible across both audit periods. The mean LOS was 8.19 days (Standard Deviation (SD): 6.59) in the warfarin cohort (n=15) and 2.23 days (SD: 2.64) in the apixaban cohort (n=31) A difference of -5.96 days (p<0.001)

Patients anticoagulated with apixaban received fewer blood tests and heparin injections
There was an approximate reduction of £2700 mean per patient cost with the use of apixaban

Conclusion - Patients who were anticoagulated with apixaban for primary, non-valvular AF spent less time in hospital This translates to earlier discharge, thus reducing the risk of hospital acquired infection and the need for long term INR monitoring in the community This proved to be cost effective (Graph 1 above)

Lessons Learned -
1) These study results can help guide clinicians in the management of non-valvular AF and will inform planned local anticoagulation policy
2) The benefits above could be shared with patients currently on warfarin for non-valvular AF and they could be offered a choice to switch over to a DOAC
3) There is a plan to formally capture if the switch to apixaban has improved patient experience. A survey is to be developed and distributed to patients diagnosed with non-valvular AF commenced on DOACs

References: