

Reducing AF Related Strokes through the Design & Implementation of Service Improvement

NENC ICB Medicines Optimisation Team – County Durham

This project was funded through a joint working project with Bristol Myers Squibb (BMS) on behalf of the BMS-Pfizer Alliance

Rationale

- CVD affects around 7 million people in the UK and is responsible for 1 in 4 premature deaths ⁽¹⁾
- It is estimated that AF is responsible for approximately 20% of all strokes
- Compared with non-AF strokes, AF-related strokes are associated with increased mortality, greater disability, longer hospital stays and lower rate of discharge home ^(2,3)
- UKHSA have set a 10-year ambition for England for AF ⁽⁴⁾ and stroke prevention is highlighted as a priority in The NHS Long Term Plan ⁽¹⁾
- CVD is strongly associated with low income and social deprivation and shows a North–South divide, with higher rates in the north of England
- Gap identified in AF treatment and management across primary care in County Durham

Intervention

- Collaborative working agreement established between BMS on behalf of BMS-Pfizer Alliance, Academic Health Science Network Northeast and North Cumbria and NHS County Durham CCG
- The County Durham Medicines Optimisation (MO) Team developed 3 workstreams for GP practices to complete in line with the AHSN identified areas for improvement – Protect and Perfect
 - Protection Gap 1 - Patients with AF who have not been risk assessed CHA2DS2-VASc
 - Protection Gap 2 - Patients eligible for an anticoagulant but are untreated
 - Perfection Gap - Patients who are inadequately anticoagulated
- Worked closely with the Clinical Digital Resource Collaborative (CDRC) to embed digital tools into everyday practice and promote a local clinical pathway for anticoagulation in AF treatment to reduce unwarranted clinical variation The MO team provided additional support including clinician education, resources and local guidance on prescribing anticoagulants in non-valvular AF

Effect of the intervention

- 6,350 patients were reviewed across County Durham during the project
- 622 additional patients with high/moderate risk AF were anticoagulated (6.1% increase on baseline)
- Proportion of high/moderate risk patients anticoagulated or with a recorded reason why not increased from 89.6% to 93.1% (figure 2)
- 57% reduction in the number of patients with a missing or incorrect CHA2DS2-VASc score
- 45% reduction in the number of patients on a DOAC, for any indication, without a CrCl recorded
- AF Prevalence increased from 2.39% to 2.49%

Stroke Impact

- 622 additional patients anticoagulated
- Average CHA2DS2-VASc score between 3-5
- Based on absolute risk reduction (ARR), anticoagulating these additional patients could potentially lead to 11-21 fewer strokes per year

NB. This is a very rough estimate, and we cannot conclude that all of that effect is down to the project intervention
- Average healthcare costs in the first year following a stroke is £13,452, increasing to £22,429 for both health and social care costs at one year post stroke, and £46,039 in health and social care costs over 5 years ⁽⁵⁾

Conclusion

- The project supported national CVD ambitions and addressed the unmet need around AF treatment
- New practice processes have been implemented and clinical confidence in AF has increased
- Utilisation of the CDRC tools allowed for standardisation of AF management across County Durham

Project Outcomes against AHSN Criteria

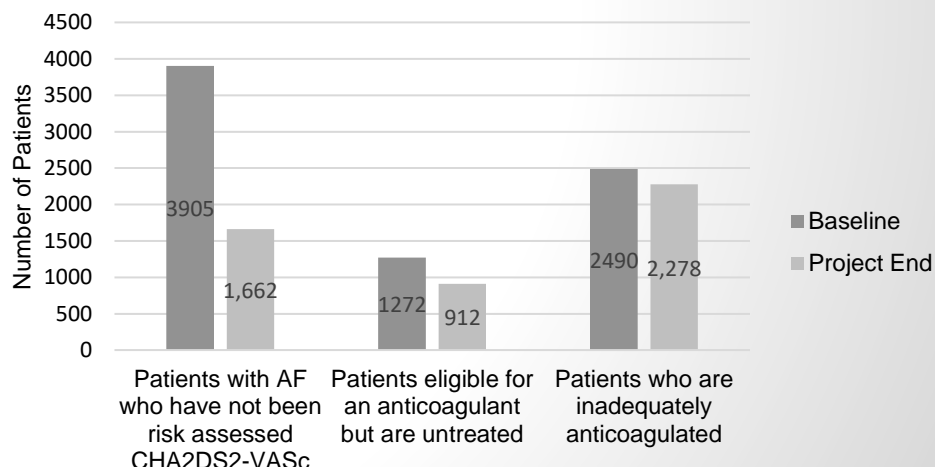


Figure 1 – Outcomes of the 3 workstreams

Proportion of high/moderate risk AF patients anticoagulated or with a recorded reason why not

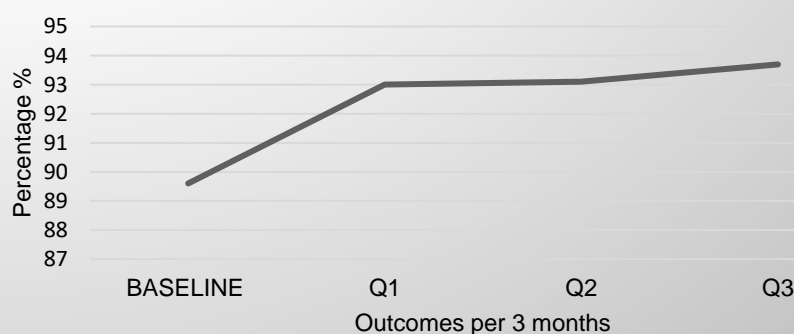


Figure 2 – Proportion of patients anticoagulated or recorded reason why not

References

1. <https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf>
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