Improving frequency and appropriateness of direct oral anticoagulant (DOAC) prescribing for AF through integrated pharmacy-led care

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Background: Anticoagulants for stroke-risk reduction in atrial fibrillation (AF) are underutilised and international literature shows 10-25% of patients on a direct oral anticoagulant (DOAC) for AF are prescribed an inappropriate dose, increasing the risk of stroke and bleeding. NHS England targets are for 90% high-risk AF patients to be prescribed anticoagulation by 2029.

Purpose: A new pharmacy-led integrated care model was developed to improve the frequency and quality of prescribing and monitoring of DOACs for AF in line with national guidance. This abstract describes the results when this model of care was rolled out across a large UK city.

Methods: The integrated model of care was designed to provide a multi-pronged approach and empower primary care pharmacy teams to prescribe and manage DOACs for AF. The model includes an education and training programme, a weekly specialist-run virtual clinical discussion service, a 48-hour turn around advice and guidance service and a clinical tool that identifies and makes recommendations for patients on an unlicensed dose of a DOAC.

Results: 16,594 patients are included on the city’s AF register. From April-November 2022, an additional 1,339 (8%) patients were anticoagulated. An increase from 76.3% to 84.3% of patients on the AF register. Dosing as per manufacturers Summary of Product Characteristics (SmPC) improved for all DOACs. In April 2022 an incorrect dose was prescribed for 10%, 15% and 12% of patients respectively on apixaban, edoxaban and rivaroxaban. In November 2022 incorrect dosing reduced across the board to 7%, 8% and 7% of patients respectively. 914 patients prescribed an inappropriate dose had their dose adjusted to meet SmPC recommendations based on relevant characteristics (renal function, age, weight, serum creatinine, interacting medicines). Monitoring according to local guidelines also increased. Experience of staff was overwhelmingly positive and demonstrated growth in knowledge, skills, and activity amongst primary care pharmacy teams. Rapid access to specialist support allowed patients to be managed close to home.

Conclusions: This integrated care model improves frequency and appropriateness of DOAC prescribing for patients with AF. The model results in incorrect dosing lower than any described in international literature. The service model is sustainable and scalable, grows cross-sector clinical leadership and develops relationships between primary and secondary care. The next steps are to roll this model out across a large region.