

Screen reminders for
GPs did not improve
anticoagulant
prescribing in atrial
fibrillation

School for
Primary Care
Research

STUDY SUMMARY

NHS

National Institute for
Health Research

Oral anticoagulants (OAC) substantially reduce risk of stroke in atrial fibrillation, but uptake is suboptimal. Electronic health records enable automated identification of people at risk but not receiving treatment. We investigated the effectiveness of a software tool (AURAS-AF [Automated Risk Assessment for Stroke in Atrial Fibrillation]) designed to identify such individuals during routine care through a cluster-randomized trial.

Screen reminders appeared each time the electronic health records of an eligible patient was accessed until a decision had been taken over OAC treatment. Where OAC was not started, clinicians were prompted to indicate a reason. Control practices continued usual care. The primary outcome was the proportion of eligible individuals receiving OAC at six months. Secondary outcomes included rates of cardiovascular events and reports of adverse effects of the software on clinical decision-making.

Publication:

Automated Software System to Promote Anticoagulation and Reduce Stroke Risk: Cluster-Randomized Controlled Trial. Holt TA, Dalton A, Marshall T, et al. *Stroke*. 2017;48(3):787-90. doi: 10.1161/STROKEAHA.116.015468



Automated Software System to Promote Anticoagulation



Issue:

Atrial fibrillation is an irregular heart rhythm that in 2015 was estimated to affect almost 1.4 million people in England, although over 30% were not diagnosed. Atrial fibrillation contributes to about 12,500 strokes annually in the UK, and each stroke is estimated to cost around £12,000. Effective management of atrial fibrillation could reduce the number of strokes and healthcare costs. In 2015 more than one in five patients admitted to a hospital with stroke were known to have atrial fibrillation, but less than half were taking anticoagulants.

What we did:

Our cluster-randomised controlled trial assigned 47 general practices in England to either usual practice or to a new proprietary software tool – Automated Risk Assessment for Stroke in Atrial Fibrillation. The software generated screen reminders when patients eligible for treatment with oral anticoagulants were seen by a clinician, who then had to indicate a reason if treatment was not initiated. The practices had a combined population of 5,339 atrial fibrillation patients eligible for oral anticoagulants at the beginning of the study, 62.6% of whom were being treated.

What we found:

There were no reports of adverse effects of the software, such as inappropriate clinical or prescribing decisions. A greater rate of diagnosis of transient ischemic attack (possibly because of improved detection or overdiagnosis) was associated with a reduction (of borderline significance) in stroke and hemorrhage over 12 months.