

# Screening strategies for atrial fibrillation: a systematic review and cost-effectiveness analysis

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## Plain English summary

### Screening strategies for atrial fibrillation

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## Plain English summary

**A**trial fibrillation (AF) is the most common heart rhythm disorder. AF is a major cause of stroke and subsequent disability and mortality. Many AF patients benefit from blood-thinning drugs (anticoagulation therapies), which have been shown to reduce the risk of an AF-related stroke. AF is often diagnosed only after an AF-related stroke. Earlier detection could prevent AF-related strokes, disability and mortality. This study aimed to assess whether or not a national screening programme for AF would represent good value for money. To do this, we reviewed studies looking at how well screening tests identify individuals with AF and also studies that compare different methods of screening. We found that a national screening programme in which older individuals (aged 65–70 years) are invited to be screened during a routine appointment with their doctor is likely to be cost-effective. There was also evidence that repeated screening every 5 years until age 80 years would prove to be of value. The screening test most likely to be cost-effective involves either a nurse taking a pulse rhythm check or a specific blood pressure monitor that is also able to detect AF. Whichever screening test is used, patients with a positive result would need to have their diagnosis confirmed by a trained doctor using an electrocardiogram machine before discussing treatment options.

New studies on (1) how to implement screening in general practice, (2) the performance of new tests (patches, smartphone/watch devices, iPads, hand-held devices) and (3) the effectiveness of screening with regard to the long-term risks of AF-related stroke and mortality would be useful.



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