

AF-SCREEN Steering Committee: USPSTF “I” recommendation on ECG screening for AF

See AF-SCREEN website for full comments <http://www.afscreen.org/news/>

1. Agree with with the USPSTF that there are significant research needs and data gaps required to inform national organisations on systematic screening with ECG. AF-SCREEN voted (97% agreement): large RCTs with hard endpoints are needed to strengthen evidence base for national **systematic screening** strategies.
2. Disagree about USPSTF position on opportunistic screening/ case finding, which we believe is based on mis-interpretation and non-inclusion of key evidence
3. There will never be trial evidence that opportunistic screening/ case finding saves lives/prevents strokes as this is already accepted practice, based on compelling non-randomised evidence, which the USPSTF has largely ignored
4. AF-SCREEN members voted that screen-detected AF was not benign and with additional stroke RFs carried sufficient risk to justify consideration of screening and therapy to prevent stroke, and that single timepoint screening appears justified ≥ 65 . Our recommendations largely pertained to opportunistic case finding/screening
5. Definitions of community systematic screening need to be differentiated from opportunistic case finding which many call ‘opportunistic screening’ or just screening
6. Data other than RCTs should be considered in the absence of an end to end outcome study, as otherwise potential preventable burden is underestimated, and has been underestimated in the review and recommendations.
7. USPSTF misinterpreted SAFE study results, and conflated opportunistic screening or case finding with usual care, which it was not. Both arms i.e. systematic and opportunistic screening were superior to usual care. Missed REHEARSE-AF study results and impact of prolonged patient-activated screening in the analysis of detection rates.
8. Recommendation immediately out of date if STROKESTOP (ESC 2018) is positive
9. USPSTF inconsistent in having a grade A recommendation on screening for hypertension for years without a large outcome study of a strategy of screening, just “substantial indirect evidence”. For both AF and hypertension, the screening test is also the diagnostic test. Results from treatment of clinical hypertension have been used to justify the grade A recommendation on screening for hypertension. Not so for results of studies of treatment of clinical AF to prevent stroke. Treatment of AF is more effective than treatment of hypertension, and reduces all-cause mortality.
10. Agree with USPSTF extrapolation of benefits/harms from clinical AF & incidentally detected asymptomatic AF to screen-detected AF. New evidence (2 additional cohorts ESC 2016) of asymptomatic AF detected incidentally having at least as bad prognosis as symptomatic AF re stroke and death. Missed a cohort study examining effect of treatment vs no treatment in incidentally detected AF in the review.
11. Exclusion of heart disease, heart failure, prior stroke from a new meta-analysis of effect of therapy, because community screening would exclude such people. This is not valid. This logic could be extended to exclude diabetes and hypertension. Two thirds of patients with screen-detected new AF have co-morbidities that both increase the likelihood of AF development, and also increase stroke risk. Makes no sense to exclude these from national screening program, as most likely to have unknown AF and benefit most from treatment.
12. Evidence of psychological harms of ECG screening minimal, and lessened by screening test and diagnostic tests the same, and rapid and non-invasive. Major harms are those of **treatment** (bleeding), which in almost all cases are outweighed by stroke prevention.
13. Focussed on 12-lead ECG and did not review the large amount of data from use of single lead rhythm strips from hand-held devices (as in ESC recommendation).
14. No mention of screening for known untreated AF as collateral benefit from ECG screening
15. Recommendations of others limited to AHA/ASA. No mention of ESC, EHRA, RCPE, WHF, EPCCS, HIQA, AF-SCREEN, and now Scottish cross-party group