## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (see an example) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

## **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Screening Education And Recognition in Community pHarmacies of
	Atrial Fibrillation to prevent stroke in an ambulant population aged
	≥65 years (SEARCH-AF stroke prevention study): a cross-sectional
	study protocol
AUTHORS	N Lowres, S B Freedman, J Redfern, A McLachlan, I Krass, A
	Bennett, T Briffa, A Bauman and L Neubeck

## **VERSION 1 - REVIEW**

REVIEWER	Kevin McNamara Monash University Australia
	Kevin Mc Namara is a pharmacist and has received funding through the Fourth Community Pharmacy Agreement and the Fifth Community Pharmacy Agreement in Australia to investigate extended community pharmacist roles
REVIEW RETURNED	16/05/2012

GENERAL COMMENTS	It is great to see such an innovative and practical intervention being evaluated in practice, this could be of substantial public health benefit. Given that community pharmacy is becoming a crowded space in terms of screening, it is also welcome to see a significant examination of sustainability and feasibility. This is a well-designed and practical intervention.  The protocol is well-described overall, but I feel that some additional
	contextual information and clarification would be beneficial:
	Background
	Can the authors please comment on the overall reliability of the AliveCor ECG system? It is important to know if this technology is validated, reliable and likely to detect appropriate cases, given the whole screening and communication process relies on this. Most readers will not be aware of the sensitivity and specificity of screening with wireless, single lead screening technology. Page 5, line 24. Australian data on population use of community pharmacy usage is available from the following reference, this might provide more directly relevant data than references 13 and 14: Mc Namara KP, Dunbar JA, Philpot B, Marriott JL, Reddy P, Janus ED. Potential of pharmacists to help reduce the burden of poorly managed cardiovascular risk. Australian Journal of Rural Health
	2012;20(2):67-73.
	The authors should state the research question within the main text – at the moment it is only in the abstract.
	Methods
	Page 7, line 8. Consider revising the sentence, 'This community-sample is reasonably
	representative of the general population, as approximately 90% of

the population visit

pharmacies each year[12-13].' Given that those aged over 65 years visit a pharmacy far more frequently than younger participants, the sample is actually likely to be skewed towards older participants in the community. This is probably a positive effect from a screening perspective. Likewise, it might also be helpful to note if pharmacists will be encouraged to preferentially approach patients with AF risk factors, or just to approach patients generally. This is a minor point but might influence positive screening rates.

Page 7, line 51/page 8, line 50 (Screening protocols). It would be helpful to know how, and how often contact will be attempted with patients following screening, and if pharmacists or GPs will be asked to take a role in contacting unresponsive patients at a certain point. The method and frequency of contact attempts might influence referral uptake and cost-effectiveness, and if implemented widely in the future, it would be preferable to have this benchmark documented for practitioners.

Page 8, line 53: What course of action will be taken for screened patients who report not having a GP, especially if they have a positive screening for AF?

Page 11, line 20: Sample size calculation. Can youplease comment further on the parameters used for calculation of sample size. Is 1.6% incidence based on actual undiagnosed prevalence data in the over 65's or a reasoned estimate? The over-40's study mentioned in the introduction suggests about 10% with AF are undiagnosed (0.4% from 4% total), and they cite an overall prevalence of 5% in the over 65s. This does not marry with the assumed 1.6% incidence of undiagnosed AF. Also, the earlier study quoted was based on a 12-lead ECG; how is the proposed 1-lead ECG likely to compare. You may also wish to comment on what you consider an acceptable level of sensitivity/specificity.

Patient data collection is not described – is further information (e.g. demographics, history of CVD or AF) being sought when recruited, or just contact details?

Page 9, line 43: "If an abnormality other than AF is identified"...: this is the first time non-AF screening is mentioned. Please clarify if other abnormalities are potentially detectable by pharmacists. Also, I wonder why this mention of other abnormalities is restricted to patients with a known history of AF, given that all patient will be having their ECG reviewed.

The main aim is stated in the abstract, but not in the main text. I would suggest adding this to the main text.