



**AF-SCREEN**

[www.afscreen.org](http://www.afscreen.org)

## **AF Screen International Collaboration**

### **ABOUT**

#### **Aims of the AF Screen International Collaboration**

The aim of this collaborative group is to promote discussion and research about screening for unknown or under-treated atrial fibrillation as a way to reduce stroke and death. We will provide advocacy for implementation of AF screening programs, tailored to the medical systems of individual countries. Our efforts

## AF-SCREEN the year in review

- Membership has grown 115 → 143
- More countries represented
- Goals achieved
  - Symposia, talks at major meetings
  - Consensus document
- Another AF-SCREEN meeting > 1/3 members attending
- What do we do next ?
  - Plan large studies and combine
  - What else ?

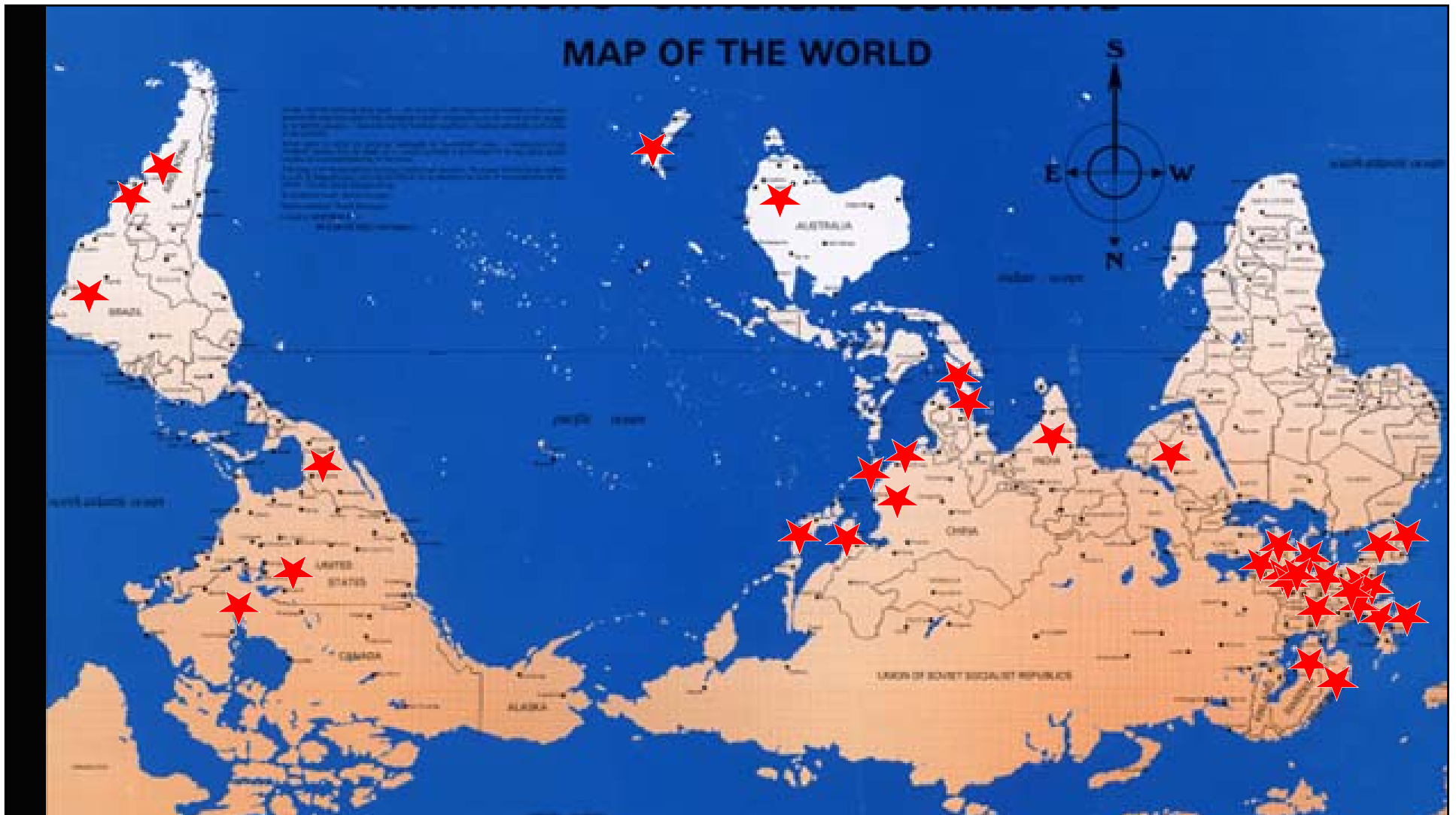
## AF-SCREEN – 143 Professionally diverse members

- Cardiologists both general and EP
- Stroke neurologists
- General practitioners, general physicians, geriatricians, sleep physicians
- Nurses, Pharmacists, Physiotherapists
- Epidemiologists, Health economists
- Patient organisations

# AF-SCREEN - Geographically diverse

- Now 35 countries





# Conference symposia, talks

- HRC Birmingham Oct 2016
  - Symposium on screening sponsored by AA/AFA
  - Award



Arrhythmia Alliance

[www.hearrhythmiaalliance.org](http://www.hearrhythmiaalliance.org)

Award for Outstanding Individual  
who has contributed  
to Arrhythmia Services 2016





# Conference symposia, talks

- HRC Birmingham Oct 2016
  - Symposium on screening sponsored by AA/AFA
  - Award
- AHA 2016
  - Joint symposium AHA/AF-SCREEN, all speakers members

# Conference symposia, talks

- ESC 2017 – no complete symposia as suggested, but elements remain in parts of other symposia
  - Need to keep working on this
  - Late breaking trial and registry – a first at this ESC
  - Many presentations

Date	Time	Title	Speaker	Location	Session
Sat Aug 26	11:00-16:00	Do atrial fibrillation detection rates differ based on presenting symptomatology in patients at risk of atrial fibrillation and stroke? Results from the REVEAL AF study.	Rolf WACHTER (Goettingen, Germany)	Poster Area P772	Poster session 1: Invasive diagnostics
Sun Aug 27	8:30	Mobile technology to identify atrial fibrillation in the general population	Enrico Gianluca CAIANI (Milano, Italy)	Riga - Village 3	Remote patient monitoring and telemedicine
Sun Aug 27	16:30	State of the Art: how and whom to screen for atrial fibrillation	Renate B SCHNABEL (Hamburg, Germany)	Valetta - Village 5	Novel methods for AF screening
Sun Aug 27	16:48	Excessive supraventricular ectopic activity as a risk factor for stroke independently of atrial fibrillation detection	Ana Rita MARINHEIRO (Setubal, Portugal)	Valetta - Village 5	Novel methods for AF screening
Sun Aug 27	17:06	Incidence of atrial tachyarrhythmias in patients with pacemakers. A real-world observational research.	Giuseppe BORIANI (Castenaso (Bo), Italy)	Valetta - Village 5	Novel methods for AF screening
Sun Aug 27	17:24	Diagnostic accuracy of a novel mobile phone application in monitoring atrial fibrillation	Guy ROZEN (Yuvalim, Israel)	Valetta - Village 5	Novel methods for AF screening
Sun Aug 27	17:42	Atrial fibrillation screening - Where does the road lead to?	Jeff HEALEY (Hamilton, Canada)	Valetta - Village 5	Novel methods for AF screening
Mon Aug 28	8:30	Does subclinical atrial tachyarrhythmia matter in terms of prognosis?	Hung-Fat TSE (Hong Kong, China)	Skopje - Village 5	Atrial Fibrillation
Mon Aug 28	8:52	Monitoring for subclinical atrial fibrillation burden	Emmanuel SIMANTIRAKIS (Heraklion, Greece)	Skopje - Village 5	Atrial Fibrillation
Mon Aug 28	9:15	Should atrial fibrillation screening programmes be promoted?	Marten ROSENQVIST (Stockholm, Sweden)	Skopje - Village 5	Atrial Fibrillation
Mon Aug 28	8:30-12:30	Stroke risk in patients with asymptomatic atrial fibrillation (AF) detected incidentally in general practice is comparable to symptomatic AF presentation, and AF presenting first to hospital	S Benedict FREEDMAN (Sydney, Australia)	Poster Area P3594	Poster session 4: Stroke prevention
Mon Aug 28	14:00-18:00	Screening for atrial fibrillation in the primary health care setting	Faris GHAZAL (Stockholm, Sweden)	Poster Area P4606	Poster session 5: Demo-graphics and screening
Mon Aug 28	14:00-18:00	How patient advocacy in partnership with community pharmacy can identify people at risk of AF in community pharmacy setting	Trudie LOBBAN (Chipping Norton, United Kingdom)	Poster Area P4607	Poster session 5: Demo-graphics and screening

Date	Time	Title	Speaker	Location	Session
Mon Aug 28	14:00-18:00	Benefits of active involvement of community pharmacists in know your pulse awareness campaign	Sotiris ANTONIOU (London, United Kingdom)	Poster Area P4608	Poster session 5: Demo-graphics and screening
Mon Aug 28	17:42	Telemonitoring and screening for atrial fibrillation: future perspectives	S Benedict FREEDMAN (Sydney, Australia)	Beirut Village3	Remote patient monitoring and telemedicine
Mon Aug 28	14:00-18:00	Cost-effectiveness analysis of a handheld ECG machine used for a population-wide screening programme: the Belgian Heart Rhythm Week Screening programme	Marco PROIETTI (Birmingham, United Kingdom)	Poster Area P4596	Poster session 5: Registries and cost of treatment
Mon Aug 28	14:00-18:00	Similar clinical outcomes of asymptomatic and symptomatic patients with newly diagnosed atrial fibrillation: results from GARFIELD-AF.	Harry GIBBS (Melbourne, Australia)	Poster Area P4602	Poster session 5: Registries and cost of treatment
Mon Aug 28	14:00-18:00	Atrial arrhythmia detection by Implantable Loop Recorder in patients with and without previous stroke; impact of arrhythmia duration and time to diagnosis	Panagiota Anna CHOUSOU (Cambridge, United Kingdom)	Poster Area P4599	Poster session 5: Registries and cost of treatment
Mon Aug 28	830-1200	The Alert for Afib Intervention improves atrial fibrillation awareness in older adults at risk for developing atrial fibrillation	Pamela McCabe Rochester MN USA	Poster Area P3425	Age, elderly and cardiovascular disease
Tue Aug 29	9:42	Assessment of REMote HEArt Rhythm Sampling using the AliveCor heart monitor to screen for Atrial Fibrillation (The REHEARSE-AF study)	Julian HALCOX (Swansea, United Kingdom)	Barcelona - Main Auditorium	Hot Line: Late-Breaking Clinical Trials 4
Tue Aug 29	15:00	Effectiveness of community atrial fibrillation screening in over 10,000 citizens using smartphone electrocardiogram- The AFinder program	Ngai-Yin CHAN (Hong Kong, China)	Barcelona - Main Auditorium	Hot Line: Late-Breaking Registry Results 2
Tue Aug 29	14:00-18:00	Increased yield for repeated handheld ECG screening at 6-12 month intervals to detect atrial fibrillation during outpatient clinic reviews	Bryan Ping Yen YAN (Hong Kong, China)	Poster Area P6057	Best Posters 7: Best Posters in atrial fibrillation screening

# Conference symposia, talks

- AHA 2017 – joint symposium run again
  - Sunday, November 12, 2017, 8:00 am - 9:15 am
  - All 4 speakers and moderators are AF SCREEN members
  - 2 abstracts on screening (at least)

# AHA Symposium 2017

- John Camm, Taya Glotzer co-chairs
- Rationale for Screening *Ben Freedman*
- Single Time Point Screening *Rob Tieleman*
- Brief Intermittent or Continuous Monitoring? *Jeff Healey*
- Do We Need a Large Outcome Study to Convince National Screening Committees? *Renate Schnabel*

# Conference symposia, talks

- Little or no success with ...
  - Stroke congresses – world, American, European
  - Heart Rhythm Society USA
  - ?? EHRA
  - ?? General practice societies





ROME ESC 2016 AF-SCREEN meeting

# AF-SCREEN Consensus document

- 60 co-authors divided into groups to write 18 sections
- Each section to have draft recommendation
- Executive the steering committee selected top recommendations – finally 7
- Discussion then secret voting at consensus meeting pre ESC. Recommendations reworded
- All members voted: 85% for consensus



## Circ Supplementary material

- Voting results are shown there

## Supplementary material VOTING 105/115

- |    |  |     |
|----|--|-----|
| 1. | Screen detected AF high enough risk to justify Rx          | 98% |
| 2. | Single timepoint screening recommended > 65                | 93% |
| 3. | 2 weeks BID screening > 75 or high risk                    | 86% |
| 4. | Longer term monitoring after ESUS                          | 92% |
| 5. | Setting individualized linked to Rx – health care, country | 99% |
| 6. | Many technologies - handheld ECG preferred                 | 93% |
| 7. | Large RCT with hard endpoints needed                       | 97% |

## Supplementary material

- Voting on key points and Delphi process
  - Could not use the word *consensus*
- AF incidence and future projections
- Consequences of AF other than stroke
- Secondary AF (with other major illness)
- Arguments against screening and AF-SCREEN response
- Country profiles
- Full list of references

## WHITE PAPER

## Screening for Atrial Fibrillation

### A Report of the AF-SCREEN International Collaboration

**ABSTRACT:** Approximately 10% of ischemic strokes are associated with atrial fibrillation (AF) first diagnosed at the time of stroke. Detecting asymptomatic AF would provide an opportunity to prevent these strokes by instituting appropriate anticoagulation. The AF-SCREEN international collaboration was formed in September 2015 to promote discussion and research about AF screening as a strategy to reduce stroke and death and to provide advocacy for implementation of country-specific AF screening programs. During 2016, 60 expert members of AF-SCREEN, including physicians, nurses, allied health professionals, health economists, and patient advocates, were invited to prepare sections of a draft document. In August 2016, 51 members met in Rome to discuss the draft document and consider the key points arising from it using a Delphi process. These key points emphasize that screen-detected AF found at a single timepoint or by intermittent ECG recordings over 2 weeks is not a benign condition and, with additional stroke factors, carries sufficient risk of stroke to justify consideration of anticoagulation. With regard to the methods of mass screening, handheld ECG devices have the advantage of providing a verifiable ECG trace that guidelines require for AF diagnosis and would therefore be preferred as screening tools. Certain patient groups, such as those with recent embolic stroke of uncertain source (ESUS), require more intensive monitoring for AF. Settings for screening include various venues in both the community and the clinic, but they must be linked to a pathway for appropriate diagnosis and management for screening to be effective. It is recognized that health resources vary widely between countries and health systems, so the setting for AF screening should be both country- and health system-specific. Based on current knowledge, this white paper provides a strong case for AF screening now while recognizing that large randomized outcomes studies would be helpful to strengthen the evidence base.

Ben Freedman, MBBS,  
PhD  
et al

The full author list is available on  
page 1863.

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## AF-SCREEN Members Other Than Coauthors Who Contributed to the Individual Country Profiles and Who Participated in the Delphi Process

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**Total = 115**  
**NB 105 voted**



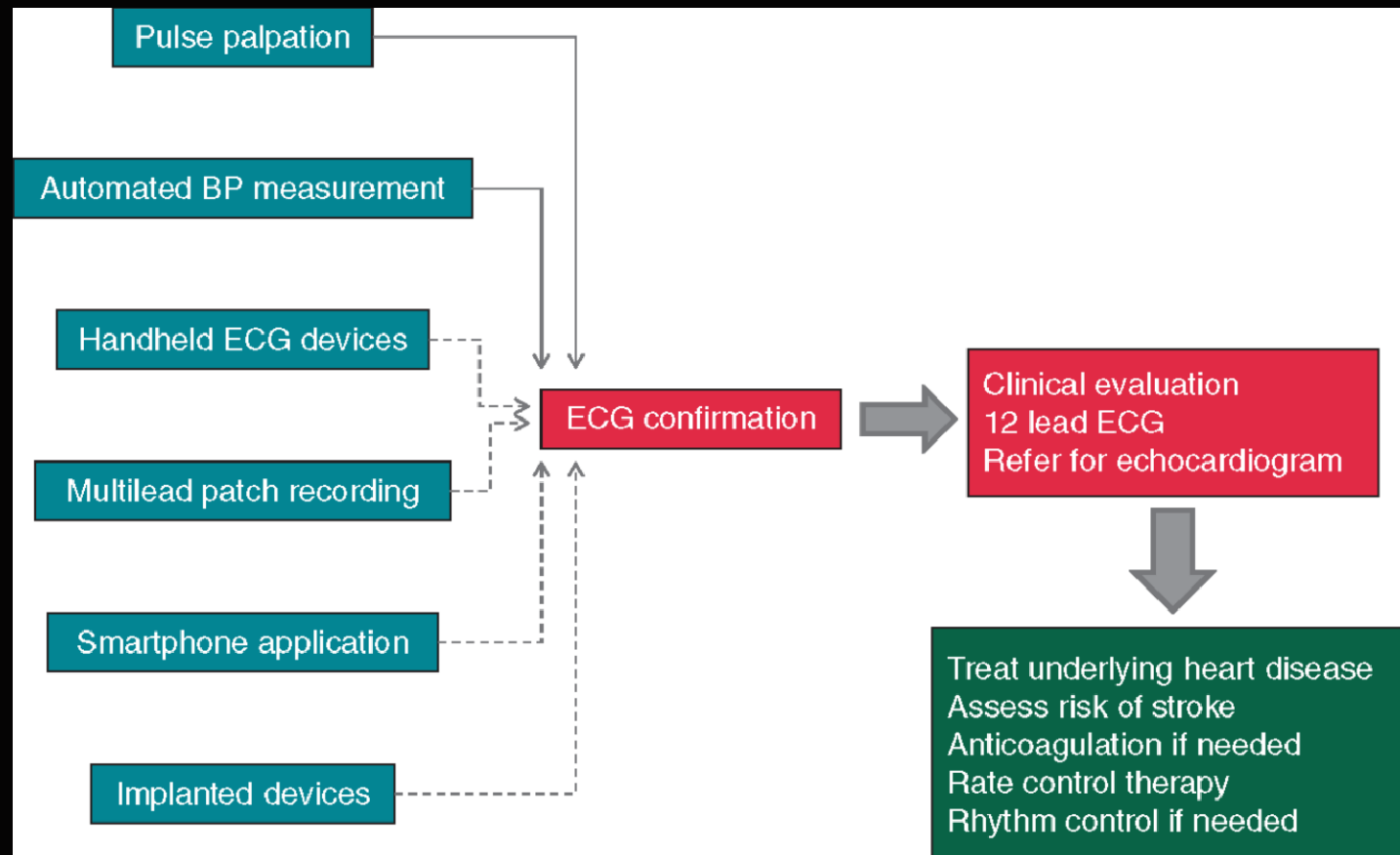


# **Screening for atrial fibrillation: a European Heart Rhythm Association (EHRA) consensus document endorsed by the Heart Rhythm Society (HRS), Asia Pacific Heart Rhythm Society (APHRS), and Sociedad Latinoamericana de Estimulación Cardíaca y Electrofisiología (SOLAECE)**

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# EHRA Consensus document Mairesse et al

*Europace* online 2017





# AF-SCREEN white paper

## ***Key Point 6***

There is a need to perform large randomized controlled studies using hard end points (including stroke, systemic embolism, and death), of strategies for screening, to strengthen the evidence base to inform guidelines and national systematic screening strategies.

## AF-SCREEN white paper - Conclusions

setting for screening is highly dependent on the health system in each country and needs to be individualized but must crucially be linked to a pathway for appropriate diagnosis and management. Although the World Health Organization criteria for screening appear to be met<sup>100</sup> and the evidence is strong for commencing screening efforts in many countries, 1 or more large and adequately powered randomized outcomes trials of a strategy of screening would strengthen the evidence for the adoption of larger scale systematic screening programs for AF to reduce ischemic stroke/systemic embolism and death (Figure 3).

## This meeting - program

- Setting the scene – moving the field forward
  - Jeff Healey
- Review studies – ongoing and planned
  - Mårten Rosenqvist
- Statistical and data considerations re pooling
  - Shrikant Bangdiwala
- Implementation workshop
  - Ben Freedman

# This meeting - program

- What the authorities want
  - Jonathan Mant
- Review studies – ongoing and planned
  - Mårten Rosenqvist
- The future
  - Meetings, Congresses, Symposia
  - Screening surveys, post-stroke screening white paper, interest groups (pharmacy, indigenous etc), screening bibliography, list of studies, ?????

# AF-SCREEN

- Small organization of enthusiasts
  - Jeff Healey, Mårten Rosenqvist, Ben Freedman
- No budget – run year to year with help from industry sponsors to hold meetings
- PHRI – C-SPIN – Jeff Healey for secretariat
  - Kimberley Begley, Heather Beresh, Andrea Thornton