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
  - Aug 2015 ~ 20
  - Oct 2015 ~ 70
  - Aug 2016 ~ 105 Rome ESC
  - Aug 2017 ~ 141 Barcelona ESC
  - Aug 2108 ~ 154 Munich ESC
AF-SCREEN – 152 Professionally diverse members

- Cardiologists both general and EP
- Stroke neurologists
- General practitioners, general physicians, geriatricians, sleep physicians
- Nurses, Pharmacists, Physiotherapists
- Epidemiologists, Public Health, Health economists
- Patient organisations
AF-SCREEN the year in review

- More countries represented
- Now 36 countries
AF-SCREEN the year in review

- Membership has grown
- More countries represented
- Goals achieved
  - Symposia, talks at major meetings
Conference symposia, talks

- AHA Joint Symposium Nov 2017
- EHRA March 2018
- HRS May 2018 (Joint symposium 2019)
- ESC Aug 2018 Many talks/ presentations (see list)
- ??? Stroke meetings, ??? Primary care meetings
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
<th>Location</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat Aug 25</td>
<td>9:00-10:30</td>
<td>AFib – Stroke Prevention Symposium</td>
<td>Chaired by M. Ezekowitz, L. Fauchier</td>
<td>Madrid Village 6</td>
<td>Symposium</td>
</tr>
<tr>
<td>Sun Aug 26</td>
<td>10:05-10:55</td>
<td>AF SMART: Electronic tools and system for atrial fibrillation screening in general practice: automated prompts, electronic decision support and data extraction, all integrated with clinical software</td>
<td>J Orchard</td>
<td>Exhibition 3</td>
<td>Digital Health Stage</td>
</tr>
<tr>
<td>Sun Aug 26</td>
<td>11:45</td>
<td>Identifying the undiagnosed AF patient through 'Know Your Pulse' community pharmacy based events held in ten countries during Arrhythmia Alliance World Heart Rhythm Week 2017</td>
<td>N. Breakwell</td>
<td>Agora 2 – Agora</td>
<td>Rapid Fire Abstract</td>
</tr>
<tr>
<td>Sun Aug 26</td>
<td>12:03</td>
<td>Mass screening for atrial fibrillation using n-terminal pro b-type natriuretic peptide - preliminary results from the strokestop 2 study</td>
<td>K. Kemp Gudmundsdottir</td>
<td>Agora 2 – Agora</td>
<td>Rapid Fire Abstract</td>
</tr>
<tr>
<td>Sun Aug 26</td>
<td>8:30 – 12:30</td>
<td>A comparison of intermittent and continuous event recording in population screening for atrial fibrillation</td>
<td>T. Fredriksson</td>
<td>Poster Area</td>
<td>Poster Session 2</td>
</tr>
<tr>
<td>Sun Aug 26</td>
<td>8:30 – 12:30</td>
<td>Assessment of N-terminal pro-brain natriuretic peptides in the detection of atrial fibrillation</td>
<td>F. Ghazal</td>
<td>Poster</td>
<td>Poster</td>
</tr>
</tbody>
</table>
AF-SCREEN the year in review

- **Goals achieved**
  - Symposia, talks at major meetings
  - White paper screening BF May 2017 Circ
  - Website
  - Meta-analysis single timepoint screening, Nicole Lowres
    - 19 studies, 14 countries, 143,000 screened, 1,539 new AF
  - USPSTF Draft Dec 2017, 14 page response, JAMA 8/2018
  - White paper: Post-stroke screening draft 2018 RS  ?Circ

- Another AF-SCREEN meeting  ~ 1/3 members attending
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 time point 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.
AF-SCREEN Website  www.afscreen.org

- All presentations from past meetings
- List of screening publications
  - Endnote library - bibliography of screening studies
- USPSTF response
- Small secretariat, small budget
  - Andrea Thornton, Heather Beresh (PHRI Canada: Jeff Healey)
- Thanks to our sponsors – meetings and website
Thank you to our supportive sponsors:
Screening meta-analysis 1,539 new AF/143,671

Detection Rate of New Atrial Fibrillation Cases

<table>
<thead>
<tr>
<th>Summary Estimates by Age Subgroup</th>
<th>Cases/100 persons [95% CI]</th>
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<tbody>
<tr>
<td>20-59 years</td>
<td>0.34 [0.25, 0.45]</td>
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<tr>
<td>60-64 years</td>
<td>0.47 [0.35, 0.64]</td>
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<tr>
<td>65-69 years</td>
<td>0.71 [0.54, 0.94]</td>
</tr>
<tr>
<td>70-74 years</td>
<td>1.07 [0.81, 1.40]</td>
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<tr>
<td>75-79 years</td>
<td>1.46 [1.11, 1.92]</td>
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<tr>
<td>80-84 years</td>
<td>1.84 [1.39, 2.44]</td>
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<tr>
<td>85-105 years</td>
<td>2.68 [2.02, 3.55]</td>
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<tr>
<td>≥ 65 years</td>
<td>1.41 [1.10, 1.81]</td>
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</table>
CONCLUSIONS AND RECOMMENDATION  The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for atrial fibrillation with ECG. (I statement)


are first diagnosed with atrial fibrillation at the time of stroke or shortly thereafter.

OBJECTIVE  To issue a new US Preventive Services Task Force (USPSTF) recommendation on screening for atrial fibrillation with electrocardiography (ECG).

EVIDENCE REVIEW  The USPSTF reviewed the evidence on the benefits and harms of screening for atrial fibrillation with ECG in adults 65 years and older, the effectiveness of screening with ECG for detecting previously undiagnosed atrial fibrillation compared with usual care, and the benefits and harms of anticoagulant or antiplatelet therapy for the treatment of screen-detected atrial fibrillation in older adults.
USPSTF
Opportunistic Screening – No Prompted pulse taking (= usual care)

- “Usual care” is not usually delivered (Economist)
  - Pulse taking, cardiac auscultation, Korotkoff auscultation

- Harms of screening with an ECG
  - Why not harms of “prompted pulse taking” = opportunistic screening
  - Is prompted handheld ECG taking more dangerous than pulse???
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.
Supplementary material  VOTING 105/115

- Screen detected AF high enough risk to justify Rx  98%
- Single timepoint screening recommended > 65  93%
- Many technologies - handheld ECG preferred  93%
- Large RCT with hard endpoints needed  97%
Screening and prevention

- Opportunistic point-of-care screening in the clinic or community should be conducted in people aged 65 years or more. 

GRADE: Strong; Evidence: Moderate.

Practice point: Devices that provide a medical quality electrocardiogram trace are preferred to pulse-taking or pulse-based devices for screening, because an electrocardiogram is required to confirm the diagnosis.
# AF-SCREEN International Collaboration Meeting

**Saturday, August 25, 2018**

Hilton Munich Park Hotel, Munich, Germany

## Program

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>8:00 am</td>
<td>Breakfast and registration</td>
<td>-- Salon Cezanne/van Gogh, Mezzanine Floor</td>
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<tr>
<td>8:50 am</td>
<td>Welcome and introductions</td>
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<tr>
<td>9:00 am</td>
<td>Year in review: Screening for Atrial Fibrillation</td>
<td>Ben Freedman</td>
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<tr>
<td>9:10 am</td>
<td>Update on current and planned outcome studies</td>
<td>Mårten Rosenqvist</td>
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<tr>
<td>9:35 am</td>
<td>Status of UK primary care screening study</td>
<td>Jonathan Mant</td>
</tr>
<tr>
<td>9:45 am</td>
<td>Covert AF in Vascular Prevention Trials: Lessons from COMPASS and NAVIGATE ESUS</td>
<td>John Eikelboom</td>
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<tr>
<td>10:05 am</td>
<td>Coffee break</td>
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<tr>
<td>10:20 am</td>
<td>UK Biobank study</td>
<td>Barbara Casadei</td>
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<tr>
<td>10:25 am</td>
<td>Treatment of subclinical AF</td>
<td>Jeff Healey</td>
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<tr>
<td>10:35 am</td>
<td>Controversies and key points for post-stroke white paper</td>
<td>Renate Schnabel, Ben Freedman</td>
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<tr>
<td>11:40 am</td>
<td>Testing new AF screening methods at scale: an update</td>
<td>Mintu Turakhia</td>
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<tr>
<td>11:50 am</td>
<td>Future activities and meetings (e.g. screening surveys, SCAF treatment survey, Horizon 2020, subgroups – pharmacy, indigenous, etc)</td>
<td>Steering Committee</td>
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<tr>
<td>12 pm</td>
<td>Lunch – Pavilion Room, Tivoli Restaurant, Ground Floor</td>
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<tr>
<td>1 – 5 pm</td>
<td>Post-stroke writing group meeting; and Indigenous AF subgroup (back of room) – Salon Matisse, Mezzanine Floor</td>
<td></td>
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2018 AF-SCREEN meeting program

- Large outcome studies—ongoing and planned (USPSTF et al)
  - RCT: Mårten Rosenqvist – Review ongoing/planned studies
  - RCT: Jonathan Mant - SAFER
  - Barbara Casdei – UK Biobank
  - Mintu Turakhia – scaled wearable

- Our Goal is to have sufficient hard outcome RCT studies of sufficient size to have a definitive answer
  - Prospective, individual patient meta-analysis/meta-regression
2018 AF-SCREEN meeting program

- Post Stroke Screening –Key issues, Key points, Voting
  - Renate Schnabel

Internet Connection:  SSID: AF Screen   Password: Stroke2018

Mobile Polling, 3 options to log in:
- Email: Open your email and click link  https://PollEv.com/afscreen
- Text: Text to 22333  Message: AFSCREEN
- Web:  https://pollev.com/  Type in username:  afscreen

- Controversies in management
  - John Eikelboom, Jeff Healey
AF-SCREEN

- Small (but slowly growing) organization of enthusiasts
- Steering Committee and exec to run meetings
  - Jeff Healey, Renate Schnabel, Mårten Rosenqvist, Ben Freedman (exec) + John Camm, Jiguang Wang
- Exciting 2018 AF-SCREEN meeting
- Post-stroke screening writing group
- Look to the future before we close