

Detection and Diagnosis of Atrial Fibrillation: D₂AF

Study Rationale and Protocol

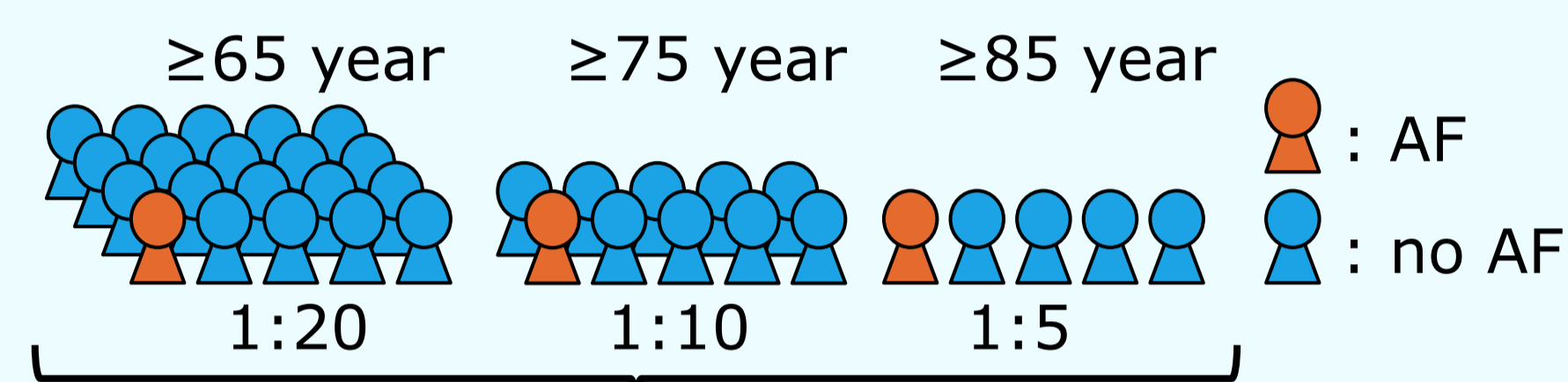
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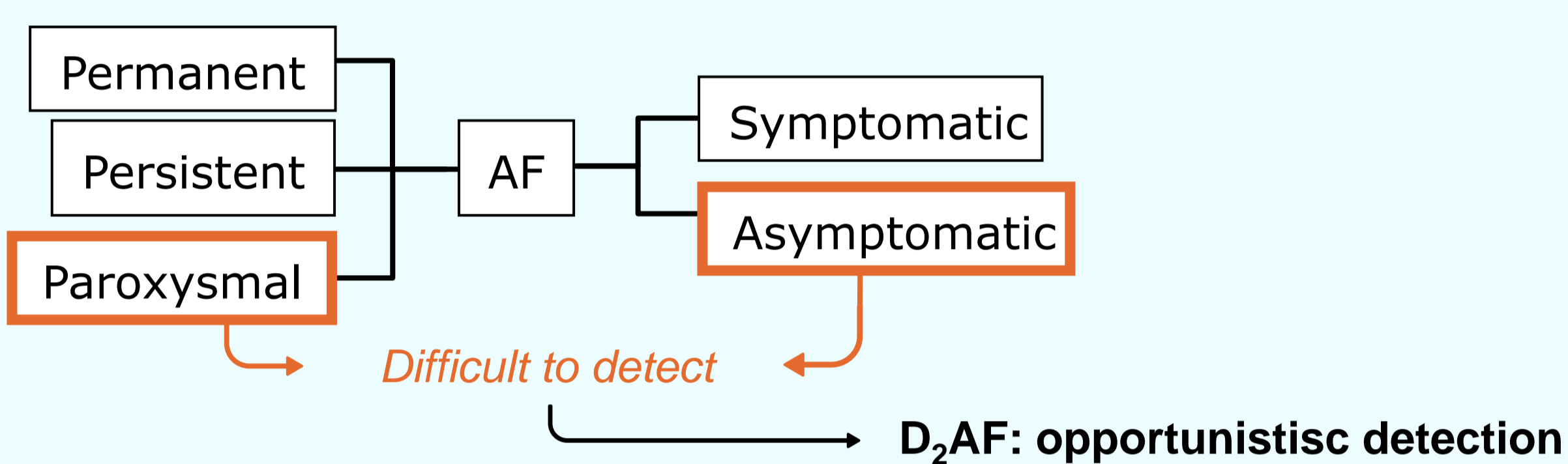
Rational

Prevalence of Atrial Fibrillation (AF)¹



AF is associated with an increased risk of stroke

Risk Reduction of 60%²



Patient flow and diagnostic protocol

We use three different methods of case detection in the first phase:

- 1: pulse palpation
- 2: single lead ECG (MyDiagnostick by Applied Biomedical Systems) which produces a left-right ECG
- 3: electronic sphygmomanometer with an algorithm for irregular beat detection (WatchBP Home Afib by Microlife)



1. Pulse palpation 2. Hand-ECG 3. eBPM-AF

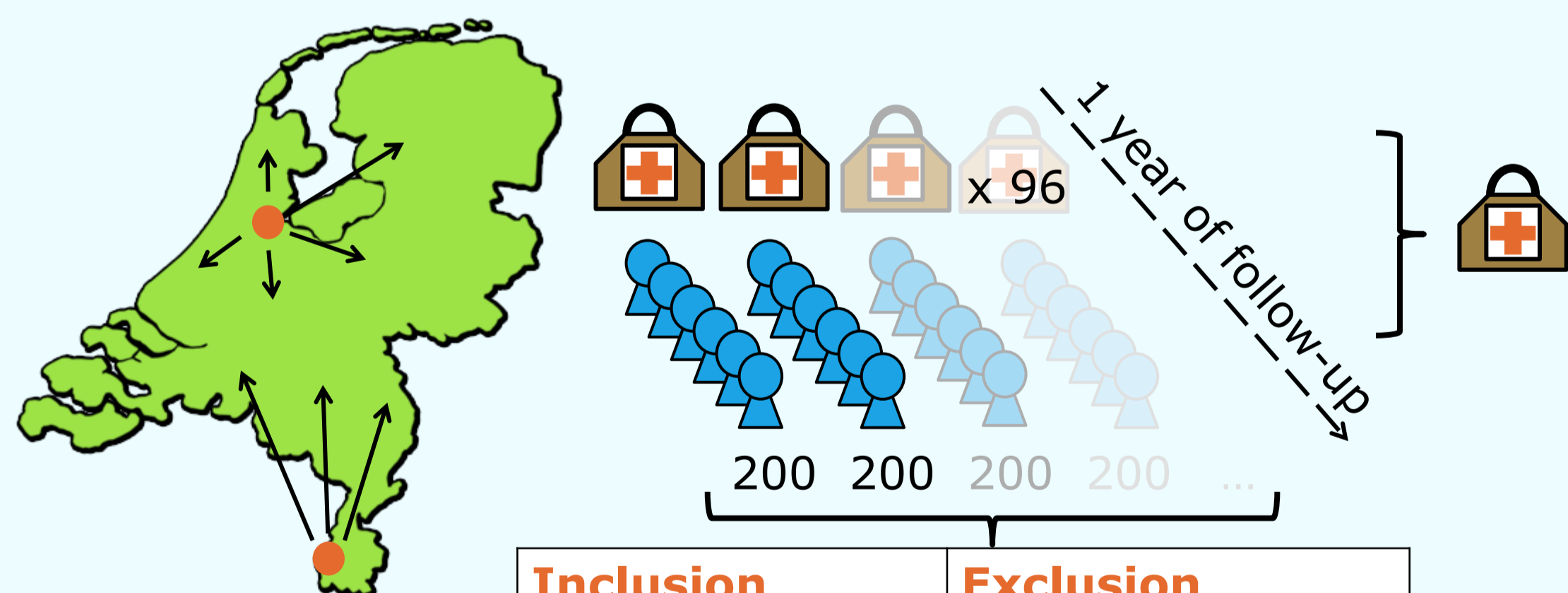
We use a two-week-holter recording in the second phase of the study to detect paroxysmal atrial fibrillation missed in the first phase.

Objectives

- 1) To estimate the extra yield of detected cases of AF in patients aged 65 years and over, using an optimized case finding protocol in primary care;
- (2) To compare three diagnostic methods (index tests) to detect AF;
- (3) To provide an estimate of the cost-effectiveness of optimized case finding in primary care

Methods

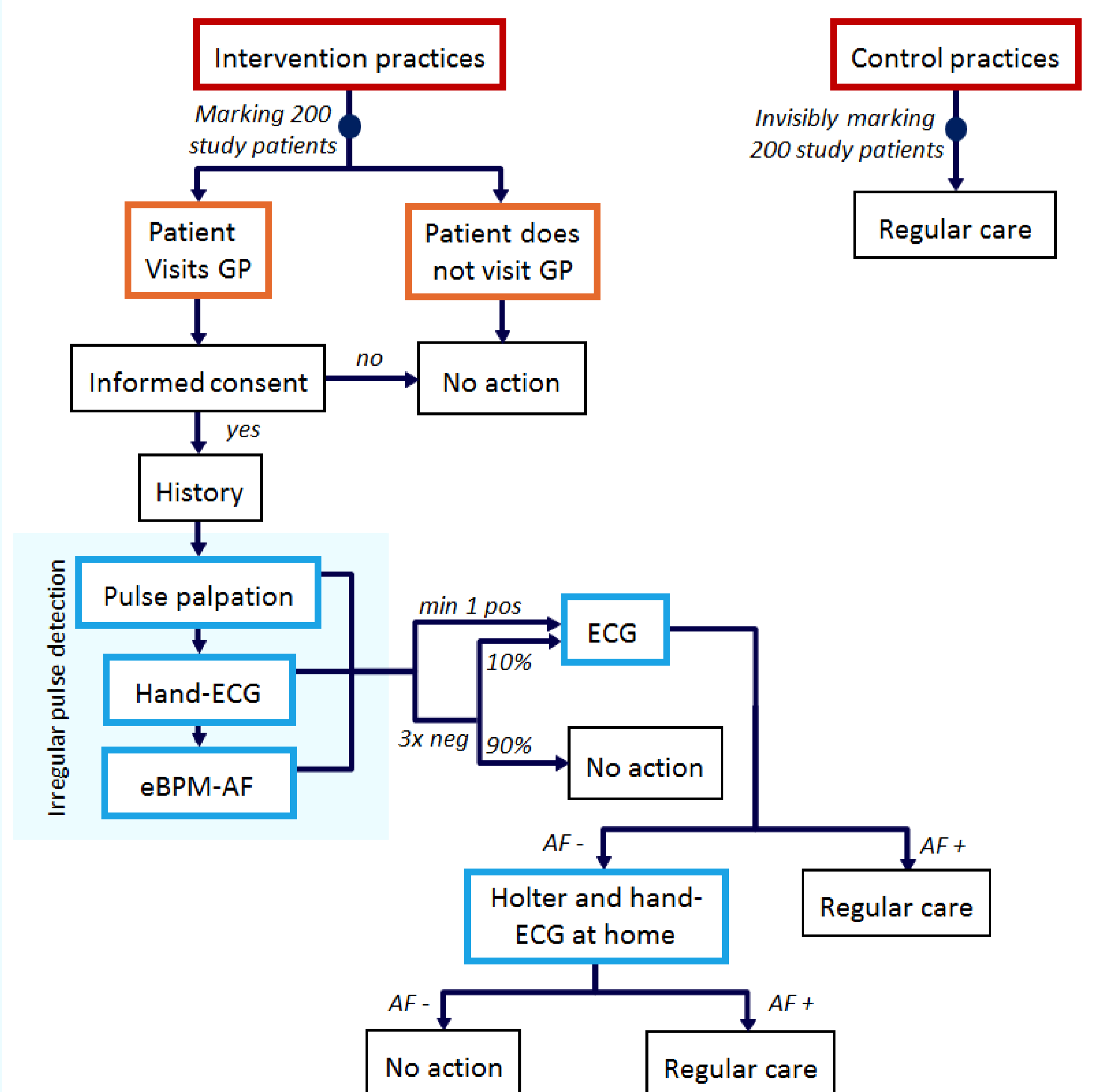
- Cluster-randomized trial
 - 48 intervention practices
 - 48 control practices (care as usual)



- Patient selection

Inclusion	Exclusion
≥65 year	Unable to give informed consent
	Pacemaker
No known AF	Terminally ill
	Unable to attend screening practice

Patient flow and diagnostic protocol



References

1. Heeringa J, van der Kuip DA, Hofman A, Kors JA, van Herpen G, Stricker BH, et al. Prevalence, incidence and lifetime risk of atrial fibrillation: the Rotterdam study. *European heart journal*. 2006 Apr;27(8):949-53.
2. Hart RG, Pearce LA, Aguilar MI. Meta-analysis: antithrombotic therapy to prevent stroke in patients who have nonvalvular atrial fibrillation. *Annals of internal medicine*. 2007 Jun 19;146(12):857-67