



Project scope: ECG patch monitors

23 October 2024

Research question

What is the clinical effectiveness, cost effectiveness (including system efficiencies) and safety of ECG patch monitors compared with traditional Holter monitors or event recorders in detecting cardiac rhythm abnormalities (with particular emphasis on patients with suspected paroxysmal AF [pAF])?

Inclusion criteria

The selection of studies for inclusion in the literature review element of the project will be based on the following criteria:

Setting	General clinical settings where ECG monitoring for a cardiac rhythm disorder is required (including outpatient and remote monitoring environments for pAF).
Population	• adults (≥ 18 years) with suspected PAF or cryptogenic stroke. • Patients who present with symptoms of AF (breathlessness, heart palpitations, dizziness and fainting) or are asymptomatic but have risk factors for AF (for example, history of cryptogenic stroke). • Patient with suspected cardiac rhythm abnormalities (eg. syncope)
Intervention	Interventions using ambulatory ECG patch devices for monitoring periods longer than 24 hours (focus on patches that can monitor heart rhythm for a longer period [up to 14 days]).
Comparator	• use of traditional ECG monitoring technologies such as Holter monitors (24-48 hours) and event recorders • standard clinical care for AF diagnosis (short-term ECG and outpatient monitoring).
Outcomes	• early detection and diagnosis of AF (particularly PAF) • reduction in stroke risk (stroke incidence or recurrent stroke) • reduced hospital visits/stays, fewer strokes or recurrent strokes and reduced waiting times • service improvement (reduction in diagnostic waiting times, increased diagnostic yield, speed of reporting turnaround time, reduction in clinic appointments) • improved equity of access • other outcomes as reported in the literature including any financial savings, patient experience and staff experience (compliance/adherence and usability of the patch technologies).

Planned activities

SHTG have agreed on the following activities to support the development of an SHTG IMTO on ECG patch monitors:

1. A comprehensive search of the literature
2. A review and summary of the evidence base, based on our findings

End products

At the end of the project, SHTG will publish:

- An IMTO
- A plain language summary

Timescales (approximate)

December 2024