

6-lead electrocardiogram (ECG) for monitoring cardiac health in people having anti-psychotic medication (provisional title)

The use of certain anti-psychotic medications, particularly when given at high doses, can cause cardiac changes such as a prolonged QT interval and the risk of developing cardiac arrhythmias. These conditions can cause convulsions, dizziness and fainting, and in rare cases sudden cardiac death.

Under current guidelines, people should have an electrocardiogram (ECG) before starting treatment with certain high-dose anti-psychotic medications, or if they have a known or suspected risk of cardiovascular disease. ECGs are performed every few days following initiation of high-dose treatment or during dose escalation, and every 3 to 6 months once a steady state has been reached.

Standard care uses a 12-lead ECG done in either a primary or secondary healthcare setting. This requires a person to partially undress and to have a conductive gel applied to their skin. Portable 6-lead ECG devices can be used in people's homes and do not require the person to undress or use conductive gel. The technology could be beneficial in terms of reducing stress or anxiety for people taking antipsychotics who would otherwise have to travel for an ECG, improving attendance for ECG appointments (and therefore detecting cardiac irregularities), and reducing demand for 12-lead ECGs in hospitals or GP surgeries.

The NICE diagnostics assessment programme will assess the clinical and cost-effectiveness of AliveCor KardiaMobile 6L portable ECG devices (and any other alternative technologies identified during scoping) for monitoring cardiac health in people taking anti-psychotic medication in order to make recommendations on its use in the NHS.