

What tests should GPs be doing and how frequently? E.g. blood pressure, pulse, blood tests, ECG, Echocardiogram.

Tests are needed at three distinct time points in course of the *patient journey*. At the outset tests will be needed to make the diagnosis and look for an underlying cause. Further tests may be needed to assess the response to drugs or other interventions and beyond that to evaluate the patient's evolving condition more generally.

At the outset most surgeries would have a clearly defined approach to investigations and these would be further informed by best advice received from organisations, such as National Institute of Health and Care Excellence (NICE) <http://www.nice.org.uk/guidance/cg180> - June 2014 and the AF Association.

The patient first presenting should be examined, their blood pressure measured and signs for other heart disease looked for. An ECG would be obtained to confirm the diagnosis of AF. Routine blood tests would include tests for anaemia, liver and thyroid function and probably also for heart function through BNP. An echocardiogram organised in the community would be useful in most patients. In those whose symptoms suggest variability in the heart rate, then ambulatory ECG recordings (24 hour tapes, Holter recordings) may be useful, and in those with intermittent symptoms then a patient activated ECG monitor may provide the diagnosis.

In some people drugs that are likely to affect the electrocardiogram may be used. For example, drugs like sotalol and amiodarone might prolong aspects (QT Interval) of the electrocardiogram that need to be observed to be sure a drug is safe. In patients given a beta blocker then the heart rate will be slowed up and some drugs may alter the time that the electrical signal takes to pass from one chamber to another. Each of these aspects should be clear through repeat electrocardiograms that are needed if drugs or drug doses are changed.

Once symptoms are controlled and the overall quality of life is deemed satisfactory then tests would in most cases not be required on a routine basis. An exception would be for people on amiodarone who require periodic assessments of thyroid and liver function through shared care guidelines. I generally recommend that after a period of say three to five years, even if all seems settled that a further assessment with ECGs and echocardiograms are useful. These would look at the cardiac function and an overall assessment of the heartbeat.