

24 Hour Ambulatory Electrocardiogram (ECG) in Primary Care

Service Specification No.	
Service	24 Hour Ambulatory Electrocardiogram (ECG) in Primary Care
Commissioner Lead	NHS Lincolnshire Integrated Care Board (ICB)
Period	1 st April 2023 to 31 st March 2024
Date of Review	March 2023

1. Population Needs

1.1 National Context and Evidence Base

An ambulatory Electrocardiogram (ECG) is a non-invasive, painless and common test recorded and interpreted to assist in the diagnosis or elimination of possible cardiac problems which may require referral in specialist services. The ECG can be used in a variety of clinical situations when patients experience cardiac arrhythmias, palpitations, or the complain of brief losses of consciousness (history of syncope). For intermittent and paroxysmal events, a 24-hour ambulatory ECG is the diagnostic test of choice and was historically referred to secondary acute care, medical physics or cardiology outpatients. Cardiac arrhythmia affects more than 700,000 people in England and is consistently in the top ten reasons for hospital admission, using up significant A&E time and bed days.

This enhanced service will deliver care and early reassurance to patients in GP practices, provide early identification of rhythm abnormalities and avoid unnecessary referrals to secondary care. This approach is in line with the current Sustainability and Transformation Programme which aims to provide better access to services, earlier diagnosis, avoidance of unnecessary hospital attendance and integrated care.

Local clinicians in both primary and secondary care believe it is readily feasible to transfer a proportion of 24-hour ECGs which are currently taking place in acute hospitals to community settings. The proposal is focused on transferring direct GP referrals currently made to secondary care to primary care services. The expectation is that the majority of direct GP referred outpatient ECGs can take place in a more convenient location for patients. This service shift will achieve substantial benefits for patients offering improved access, coupled with enhanced continuity of care.

This service specification provides details of more specialised or additional services which are considered to be beyond the scope of essential or additional services provided by GP practices. No part of this specification by commission, omission or implication redefines essential or additional services.

1.2 Local Context

Lincolnshire's Integrated Care System and Integrated Care Board

The NHS Lincolnshire Integrated Care System (ICS) was created on 1 July 2022 following an amendment of the Health and Social Care Act 2006.

The ICS is a partnership that brings together providers and commissioners of NHS services across Lincolnshire with local authorities and other local partners (such as the voluntary sector), to collectively plan health and care services to meet the needs of their population.

The 4 aims of the ICS are:

- improve outcomes in population health and healthcare
- tackle inequalities in outcomes, experience, and access
- enhance productivity and value for money
- help the NHS support broader social and economic development

NHS Lincolnshire Integrated Care Board (ICB) is the statutory body within Lincolnshire ICS responsible for the provision of health services, in accordance with the Health and Care Act 2022.

Lincolnshire ICB will use its resources and powers to collaboratively tackle complex challenges, including:

- improving the health of children and young people
- supporting people to stay well and independent
- acting sooner to help those with preventable conditions
- supporting those with long-term conditions or mental health issues
- caring for those with multiple needs as the population ages
- getting the best from collective resources so people get care as quickly as possible

Lincolnshire ICB statistics

- Lincolnshire ICB has 82 practices
- The total registered population is 813,240 (as of January 2023)
- The registered population live in 7 different lower tier Local Authorities
- As of 2021, the male average life expectancy in Lincolnshire (78.3 years) is slightly lower than the national average (78.7 years). The average Lincolnshire life expectancy for females is 82.8 years, which is the same as the national average
- The 2021 overall premature mortality rate in Lincolnshire (deaths <75 years per 100,000) is 366.3, which is slightly higher than the national figure of 363.4
- The average level of deprivation in England as of 2019 was 21.7. Lincolnshire ICB as a whole is slightly less deprived than this, at 20.2. However, there are pockets of deprivation across the county that are within the national 20% most deprived areas (mainly around coastal and inner urban areas)

2. Outcomes

2.1 NHS Outcomes Framework Domains & Indicators

Domain 1	Preventing people from dying prematurely	Yes
Domain 2	Enhancing quality of life for people with long-term conditions	Yes
Domain 3	Helping people to recover from episodes of ill-health or following injury	N/A
Domain 4	Ensuring people have a positive experience of care	Yes
Domain 5	Treating and caring for people in a safe environment and protecting them from avoidable harm	Yes

2.1 Local Defined Outcomes

ECG recordings and interpreting are able to be done in the community, thereby reducing the need to refer patients to secondary or acute units. This enables patients to have care closer to home and ensures that the time delay for request to investigation is minimal.

This service aims to:

1. Provide a 24-hour ECG recording and interpretation service from primary care
2. Deliver care and early reassurance to patients in a local setting, provide early identification of rhythm abnormalities and avoid unnecessary referrals to secondary care
3. Provide better access to services, earlier diagnosis, avoidance of unnecessary hospital attendance and integrated care
4. Compliance with NICE guidance

3. Scope

3.1 Aims and Objectives of Service

The purpose of this specification is to commission a primary care-based service providing 24-hour ECG monitoring services to patients aged 16 years and over that is clinically effective, appropriate, convenient, easy to access, and reduces referrals to secondary care.

The aim of the service is to provide improved patient access to ECG investigation and timely interpretation of the results in order to provide timely diagnosis and management.

Specifically, this relates to:

1. Prevent unnecessary referrals to hospital for 12-lead ECG and delays in interpretation
2. Detect atrial fibrillation and offer treatment to prevent strokes
3. Detect people with conduction abnormalities requiring pacemakers
4. Provide timely ECG recordings when people present with palpitations, chest pain, breathlessness or transient loss of consciousness
5. Identify serious conduction problems in people with transient loss of consciousness requiring urgent referral for pacemakers or further electrophysiological testing
6. Identify the heart rhythm present when people present with palpitations
7. Help with the diagnosis of chest pain or breathlessness
8. Provide part of the risk assessment of people presenting with hypertension

3.2 Service Description

Each patient will be over the age of 16 and offered a 30-minute appointment.

This service specification covers aspects of clinical care for the patient which is beyond the scope of essential services. The core service will include the decision-making

process to refer a patient for ambulatory ECG monitoring including consideration of clinical history, examination and previous ECG monitoring outcomes.

Please refer to the pathway and protocols document at Appendix 1.

1. Perform an ECG in all people, whether symptomatic or not, in whom atrial fibrillation is suspected because an irregular pulse has been detected.
2. In people with suspected paroxysmal atrial fibrillation undetected by standard ECG recording:
 - i. use a 24-hour ambulatory ECG monitor in those with suspected asymptomatic episodes or symptomatic episodes less than 24 hours apart;
 - ii. use an event recorder ECG in those with symptomatic episodes more than 24 hours apart

3.2.1 Clinical Criteria for Undertaking Procedure

1. Patients with unexplained fainting attached or dizzy spells, either more than once a day or infrequently but severe
2. Patients with palpitations
3. To follow up after commencing medication where appropriate

3.2.2 Follow-Up

- Patient referred back to own GP for further management
- If isolated SVTs only, then drug treatment should be commenced

3.3 Population Covered

Patients must be temporarily or permanently registered with a General Practice within the geographical boundary of Lincolnshire ICB.

3.4 Any Acceptance and Exclusion Criteria and Thresholds

Patients should be managed in accordance with the guidance outlined in this specification, including any referred to documents and guidance.

3.4.1 Acceptance

Any registered patient who presents with cardiac arrhythmias, palpitations, intermittent and paroxysmal event or the patient complains of brief losses of consciousness (history of syncope).

3.4.2 Exclusions

There are no exclusions but if a patient presents with any of the following red flags they should be referred direct to cardiology:

- Palpitation during exercise
- Palpitations with syncope/near syncope
- High risk structural heart disease
- Family History of inheritable heart disease/SADS
- High degree atrioventricular block

3.5 Interdependence with other Services/Providers

The service is an element of the ICB's cardiology pathway, which includes primary, community and secondary care elements. The provider must ensure effective relationships with all other services within the pathway including but not limited to:

- Onward referrals to be made by the patient's registered GP practice
- Information sharing protocols.

The service forms part of a system-wide service of partnership working between:

- GPs
- Primary health care teams
- Cardiology services
- The voluntary and community sector
- Independent health care providers.

3.6 Days/Hours of Operation

The service must be available to patients over a minimum of five days per week.

3.7 Equipment

Provider Practices will be responsible for the purchase and appropriate maintenance of equipment associated with the service. Staff members supporting elements of the service should have appropriate training for the equipment.

3.8 Data collection and record keeping

The provider must ensure that details of the patient's monitoring as part of this service are included in their lifelong record. If the patient is not registered for primary medical services with the provider of this service, the provider must send this information to the patient's registered GP for inclusion in their lifelong medical record.

Monitoring and reporting will be done on a quarterly basis and it is recommended that the practice use the following code when recording the delivery of this enhanced service. The required reporting template can be found in Schedule 6A of the contract

PROCEDURE	SNOMED CODE	READ CODE
24 hour ECG (procedure code)	252417001	X77c0

Reporting to include:

- Total number of ECGs undertaken
- Number of patients subsequently referred to cardiology (including through advice and guidance)
- Number of patients subsequently referred to a specialist for interpretation (including through advice and guidance)

Additional data to be recorded in the patient's record should also include:

1. Referral for practice service and explanation and information provided to the patient
2. Appointment for fitting and removal of monitor
3. Fitting of the device, appropriate information and supply of patient diary
4. Removal of the device and information on when the results will be available and how to access those results
5. Reading of the results and arrangements for any practice follow up or referral to cardiology
6. Results and requirement for any ongoing management or referral, if applicable.

The provider must if requested, provide an annual report to Commissioners highlighting any results of research conducted and information gathering which will lead to improvements in practice and/or efficiencies in service delivery.

The provider is encouraged to participate and present any clinical research supporting the further development of this service and improvements for patient care.

4. Applicable Service Standards

4.1 Applicable Local Standards

Agreement to this specification places on the Provider an obligation to provide the specified service at the level of service, days and hours of operation and at the locations specified. Any variation can be made only with the agreement of the Commissioner. The Provider must plan for and put in place robust contingency arrangements for known or possible events which may include:

- Staff sickness
- Staff turnover
- Maternity
- Annual leave or other types of special leave.

4.2 System Resilience

It is expected that periods of expected high demand which could lead to the variation, suspension or restriction of the service provided shall be planned for accordingly. For example, this may include winter pressure planning. The provider will be expected to actively contribute toward the commissioner-led System Resilience Plan, where required. Providers are strongly encouraged to have contingency plans in place with other local providers for suitably qualified and experienced staff to perform this service in the event that their own staff is not available.

4.3 Professional Standards and Codes of Conduct

1. Providers must be registered with the regulatory body appropriate to their profession and must adhere to the professional standards and codes of practice.
2. Staff assisting in 24-hour ECG procedures should be appropriately trained and competent taking into consideration their professional accountability and the Nursing and Midwifery Council (NMC) guidelines on the scope of professional practice.
3. The services provided and scope of this service will be reviewed with staff as part of the annual appraisal process.
4. The service provider must provide evidence to the ICB that their healthcare professionals have the appropriate knowledge, skills, experience, qualifications and competency to provide the service. This must include but would not be limited to the following requirements:
 - Enhanced Disclosure and Barring Service checks have been completed
 - Where applicable staff will be fully registered with the appropriate professional body
 - All staff will be able to provide evidence of their continuing professional development post qualification.

5. Applicable Activity and Quality Reporting Requirements

5.1 Applicable Quality Requirements

Practices which take part in the scheme must demonstrate that service provision is of high quality, evidence based, safe and effective, with robust governance systems and safeguards in place, staff have received appropriate training and equipment is maintained to the highest standard. Practices may be required to provide commissioners with assurance that services provided are within the criteria of the contract general conditions, service conditions and particulars.

The Service Provider will notify the ICB Quality Services Team, Cross O'Cliff Court, Bracebridge Heath, Lincoln, LN4 2HN directly or by email licb.clinicalriskincidents@nhs.net of all serious incidents. These must be reported by the service provider within one working day of the information becoming known to them.

The service provider will participate in a review of any serious incidents notified to the Head of Quality Services and demonstrate that any learning from the incident is acted upon to minimise future risk.

5.2 NICE guidance to be followed

<https://www.nice.org.uk/guidance/ng196><https://pathways.nice.org.uk/pathways/atrial-fibrillation>

<https://www.nice.org.uk/guidance/qs93>

6. Location of Provider Premises

Service delivery should be from the registered GP practice, where the GP practice is a Provider of the service. Alternative service provision locations should be agreed with the ICB.

Where a service provider is providing this service for a population covering several practices, agreement should be reached with the commissioner as to where these services will be located, in order to ensure equitable access to all patients.

The service may be provided as a home-based service in accordance with the registered provider's normal home-based services policies/guidance.

The provider's premises must meet the clinical requirements to provide primary care services as advised in clinical guidance. The premises must be kept clean and safe for use and should portray an image of high quality and professional services at all times.

It is a requirement that all providers have a fully operational NHS N3 (secure) connection and will be required to utilise appropriate NHS IT systems such as NHS mail, NHS SUS, e-Referrals etc. All relevant staff must have their own smartcard.

7. Finance Schedule

Please refer to Schedule 4 (finance schedule) for tariffs.

Payment will be based on the impact and saving on secondary care referrals achieved through contracting with the 'provider' on either a population basis or a practice list basis.