

Quality Indicators
for guideline

**Atrial Fibrillation:
Diagnosis and Management**

Health Insurance Organisation

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NICE
National Institute
for Health and
Care Excellence

Introductory note

The National Institute for Health and Care Excellence (NICE) guideline NG196 “Atrial fibrillation: diagnosis and management” was originally developed in 2014 and was last updated in 2021. The updated version of the guideline was made available to the Health Insurance Organization (HIO) through a license agreement with NICE, towards the contextualization of the guideline to the Cyprus healthcare system reality. To this end, HIO recruited local medical experts in the field of atrial fibrillation, other relevant healthcare professionals, and patient representatives, and formed a Technical Expert Committee (TEC). In a series of meetings, the TEC members assessed the scope and the full text of the guideline, and implemented modifications, if these were well supported by scientific evidence. In addition, the TEC members examined the quality indicators relating to the diagnosis and management of atrial fibrillation that have been developed by NICE for the UK National Health Service (NHS), in terms of their applicability for the Cyprus General Health System (GESY). Those that were deemed both clinically relevant and technically feasible were selected for implementation. During this process, all suggested text modifications, along with the supporting evidence, were communicated to NICE for additional comments and clarifications. The first draft of the guideline was completed by TEC after taking into consideration the feedback from NICE and was translated to the Greek language. The Greek version was back-translated to English by NICE to assess the validity of the translation and the final Greek version of the guideline and the suggested quality indicators were released for public consultation. Several potential stakeholders have been invited to participate in the consultation process, such as government-public health agencies, medical/scientific associations and unions, patient associations, and pharmaceutical/medical equipment companies. Following the public consultation process, the TEC made final text modifications and finalized the guideline.

Quality Indicators

In total, five quality indicators that are relevant to the Atrial Fibrillation guideline are suggested by TEC for implementation in the GESY. Based on their technical feasibility, indicators A, B and C will be prioritized, while indicators D and E will be implemented at a later stage. The suggested indicators are presented in the subsequent sections.

FINAL

Indicator A: Proportion of patients admitted to hospital for stroke with a pre-existing diagnosis of atrial fibrillation, who were on anticoagulation.

Numerator: The number of patients in the denominator on anticoagulation before admission.

Denominator: The number of patients admitted to hospital with a primary diagnosis of stroke, who had a pre-existing diagnosis of atrial fibrillation.

Calculation: $(\text{Numerator}/\text{denominator}) * 100$

Specifications:

- Calculated on an annual basis, at the end of the year.
- Calculated across the whole GESY

Data source: HIO information system (For the denominator: in-hospital diagnosis of “stroke” combined with electronic record diagnosis of atrial fibrillation. For the numerator: “anticoagulation prescription” status from the patient’s electronic record, going back 3 months before the date of admission).

Minimum population: The indicator is appropriate to assess performance at the whole country level.

Exclusions: No exclusions apply for this indicator

Indicator B: The percentage of patients registered at the practice aged 65 years and over who have been diagnosed with one or more of the following conditions: coronary heart disease, heart failure, hypertension, diabetes, chronic kidney disease, peripheral arterial disease, or stroke/transient ischemic attack who have had a pulse rhythm assessment in the preceding 12 months.

Numerator: The number of patients in the denominator who have had a pulse rhythm assessment in the preceding 12 months.

Denominator: The number of patients aged 65 and over registered at a GP practice who have been diagnosed with one or more of the following conditions: coronary heart disease, heart failure, hypertension, diabetes, CKD, PAD, or stroke/TIA.

Calculation: $(\text{Numerator}/\text{denominator}) * 100$

Specifications:

- Calculated on an annual basis, at the end of the year.
- Calculated separately for each health care practitioner registered at GESY

Data source: HIO information system (For the denominator: Patient Age at start of reporting period and Information on different diagnoses with no time restriction, obtained from patient's electronic record. For the numerator: information on performance of pulse rhythm assessment from the patient's electronic record in the preceding 12 months before the date of indicator evaluation).

Minimum population: The indicator is appropriate to assess performance at individual healthcare practitioner level.

Exclusions: People with diagnosed atrial fibrillation.

Indicator C: The percentage of patients with atrial fibrillation, currently treated with an anticoagulant, who did not have an assessment in the preceding 12 months of renal function, creatinine clearance, full blood count (FBC) and liver function tests (LFTs) as appropriate for their anticoagulation therapy.

Numerator: The number of patients in the denominator who have had a review in the preceding 12 months of the following: Assessment of renal function, creatinine clearance, full blood count (FBC) and liver function tests (LFTs) as appropriate for their anticoagulation therapy.

Denominator: The number of patients with atrial fibrillation, currently treated with an anticoagulant.

Calculation: (Numerator/denominator)*100

Specifications:

- Calculated on an annual basis, at the end of the year.
- Calculated separately for each health care practitioner registered at GESY
- Assessments (parts of the numerator) can be carried out any time during the year (and as such, each individual component will be recorded separately), not as part of an annual review

Data source: HIO information system (for the denominator: AF diagnosis -any time diagnosis- and “anticoagulation prescription” status from the patient’s electronic record, going back 6 months before the date of indicator evaluation. For the numerator: activities -claims- recorded at the patient’s electronic record going back 12 months before the date of indicator evaluation).

Minimum population: The indicator is appropriate to assess performance at individual healthcare practitioner level.

Exclusions: No exclusions apply for this indicator.

FINAL

Indicator D: The percentage of patients with atrial fibrillation in whom stroke risk has been assessed using the CHA2DS2-VASc score risk stratification scoring system in the preceding 12 months (excluding those patients with a previous CHA2DS2-VASc score of 2 or more)

Numerator: The number of patients in the denominator in whom stroke risk has been assessed using the CHA2DS2-VASc score risk stratification scoring system in the preceding 12 months.

Denominator: The number of patients with atrial fibrillation.

Calculation: (Numerator/denominator)*100

Specifications:

- Calculated on an annual basis, at the end of the year.
- Calculated separately for each health care practitioner registered at GESY.
- All patients with past AF diagnosis will be included.

Data source: HIO information system (For the denominator: AF diagnosis -any time diagnosis- from the patient's electronic record. For the numerator: activity of filling specific CHAD2DS2-VASc score questionnaire any time during 12 preceding months before the date of indicator evaluation)

Minimum population: Minimum population: The indicator is appropriate to assess performance at the whole country level.

Exclusions: Patients with atrial fibrillation with a previous CHA2DS2-VASc score of 2 or more.

FINAL

Indicator E: In those patients with atrial fibrillation with a record of a CHA2DS2-VASc score of 2 or more, the percentage of patients who are currently treated with anticoagulation drug therapy.

Numerator: The number of patients in the denominator who were prescribed oral anticoagulants in the 6 months leading up to and including the date of indicator evaluation.

Denominator: The number of patients with most recent CHA2DS2-VASc stroke risk assessment score of 2 or more.

Calculation: (Numerator/denominator)*100

Specifications:

- Calculated on an annual basis, at the end of the year.
- Calculated separately for each health care practitioner registered at GESY.
- All patients with past AF diagnosis will be considered.

Data source: HIO information system (For the denominator: AF diagnosis -any time diagnosis- from the patient's electronic record in addition to having a CHAD2DS2-VASc score of 2 at their last annual CHAD2DS2-VASc score assessment. For the numerator: "anticoagulation prescription" status from the patient's electronic record, going back 6 months from the date of indicator evaluation).

Minimum population: The indicator is appropriate to assess performance at the whole country level.

Exclusions: No exclusions apply for this indicator.