In 2019, governance of the National Stroke Register was transferred to NOCA and was renamed the Irish National Audit of Stroke (INAS). This audit focuses on the acute care of patients with a stroke across 23 hospitals.

**WHAT IS A STROKE?**
A stroke occurs when the blood supply to part of the brain is interrupted or reduced, preventing brain tissue from getting oxygen and nutrients. Brain cells begin to die in minutes. Stroke is a medical emergency, and prompt treatment is crucial. Early action can reduce brain damage and other complications. There are two main types of stroke: a blocked artery (ischaemic stroke) or a blood vessel leaking or bursting (haemorrhagic stroke).

**TIME IS BRAIN**
Stroke is a medical emergency which requires urgent treatment. The sooner a person arrives to hospital, is assessed by a doctor and receives a brain scan, the less damage is likely to happen. This results in better outcomes and less disability.

**ONLY 50% OF PATIENTS ARRIVED AT HOSPITAL WITHIN 3 HOURS OF ONSET OF STROKE SYMPTOMS.**
Atrial fibrillation (AF) is a fast, irregular beating of the heart resulting in a slow flow of blood through the heart, which can result in the formation of blood clots. If a clot leaves the heart and travels to the brain, it can cause a stroke by blocking the flow of blood through the arteries in the brain. AF is treated with medications called anticoagulants which prevent the formation of blood clots in the heart.

**KEY FINDINGS 2020**

**EMERGENCY CARE**

- **11 minutes** - the median* time to contact with a doctor after arrival at hospital was 11 minutes, a decrease of six minutes from 2019
- **1 hour and 3 minutes** - the median time from arrival at hospital to brain scan was 1 hour and 3 minutes, an improvement from 1 hour and 20 minutes in 2019
- **10.6%** - IV thrombolysis rate. Thrombolysis is the breakdown of blood clots formed in blood vessels using medication
- **8.6%** of all ischaemic stroke patients had a thrombectomy. This is a procedure where large clots can be removed from arteries in the brain

**STROKE UNIT CARE**

- **71%** of patients with a stroke were admitted to a stroke unit (below the target of 90%)
- **68%** of patients with a stroke had the safety of their swallow screened in 2020; of those, only 43% had the screen completed within the recommended 4 hours of admission
- **5%** of patients with a stroke had a psychological assessment
- **88%** of all patients with a stroke were assessed by at least one type of health and social care professional (HSCP)

**2609 PATIENTS WITH A STROKE FROM 15 HOSPITALS HAD ADDITIONAL DATA RECORDED ON THE HSCP DATASET**

**ATRIAL FIBRILLATION**

17% of all stroke cases had a diagnosis of AF pre-stroke and treatment with anticoagulant medication was reported in 85% of these cases

28% of patients with ischaemic stroke, alive at discharge, were diagnosed with AF and 79% were prescribed an anticoagulant

* The median is the middle number in a list of numbers.
### OUTCOMES

- **75%**
  - for patients with a stroke who were admitted to an acute stroke unit, the percentage of their hospital stay spent in the stroke unit was 75%

- **7 days**
  - median length of stay on a stroke unit

- **59%**
  - of patients with a stroke were discharged home

- **13%**
  - of patients with a stroke were discharged to offsite rehabilitation

- **7%**
  - of patients with a stroke were discharged home with Early Supported Discharge (stroke specific rehabilitation in the home setting)

- **71%**
  - of ischaemic stroke cases and **60%** of haemorrhagic stroke cases had disabilities on discharge

- **11%**
  - mortality rate

### STROKE ACTIVITY AND COVID-19

The median time from arrival to review by a medical team reduced from **16 minutes** in the pre-COVID-19 period to **12 minutes** in the COVID-19 period.

The door to imaging time reduced from **79 minutes** pre-COVID-19 to **67 minutes** in the COVID-19 period.

The proportion of patients with a stroke who were discharged home with Early Supported Discharge increased to **8%** during the COVID-19 period, when compared to the pre-COVID-at **5%**.
PUBLIC AND PATIENT INTEREST

My name is Martin Quinn and I am very pleased to have the opportunity to contribute a message, as a public and patient interest representative, to the Irish National Audit of Stroke annual report and summary report for 2020. I am a stroke survivor, having suffered a stroke in 2013 while I was doing an interview on local radio. The experience of hospitalisation and recovery left me with a desire to advocate on behalf of stroke survivors and their families.

In any health-related forum, the voice of the patient should never be overlooked so as to ensure that the interests of the patient and the public are best served. It should never be forgotten that the patient is the central figure in healthcare, and the patient’s voice must always be heard, as it is by the INAS Governance Committee.

As indicated in this year’s annual report, the INAS continues to highlight the need to increase public awareness of the symptoms of stroke and the importance of seeking immediate emergency care. I fully agree with the INAS recommendation that a stroke awareness campaign should be funded as a priority in order to ensure that patients can access care as quickly as possible.

I am delighted to be a member of the INAS Governance Committee, representing and advocating for patient and public interests in stroke care, and ensuring that the patient’s voice is always heard and listened to.

Martin Quinn, Public and Patient Interest Representative, Irish National Audit of Stroke

2020 KEY RECOMMENDATIONS

RECOMMENDATIONS FOR NOCA

Complete a study in order to explore the factors contributing to stroke in patients prescribed anticoagulation therapy.

Increase the participation of Health and Social Care Professionals (HSCPs) into the HSCP dataset within INAS.

RECOMMENDATIONS FOR THE NATIONAL STROKE PROGRAMME

Develop a stroke awareness campaign.

Improve the level of swallow screening for patients with a stroke.

Pilot a large vessel occlusion ambulance bypass for patients with a stroke to the EVT stroke centres in Dublin and Cork.

All stroke services should have access to a clinical neuropsychologist/psychologist as part of a specialist multidisciplinary team providing care to patients with a stroke.