

NCAP

NATIONAL CARDIAC AUDIT PROGRAMME

NICOR

Left Atrial Appendage Occlusion (LAAO) Registry

Interim Report 2026
Data from April to September 2025



15 centres are registered, with 13 submitting data included in this interim report.

147 LAAO procedures have been reported in this time period, up by 26 cases from the same period in the 2024/25 financial year.

Improvements are needed in data quality; bar code scanning can improve the capture of the LAAO devices used.

Reported complications remain low.



This report summarises the key findings from the Left Atrial Appendage Occlusion (LAAO) Registry, part of the National Cardiac Audit Programme (NCAP) which is run by the National Institute for Cardiovascular Outcomes Research (NICOR).

NHS England has commissioned LAAO procedures since 2018. The left atrial appendage (LAA) is part of the back left chamber of the heart (the left atrium). With some rhythm disturbances of the heart (especially, atrial fibrillation, AF), the flow of blood through the heart chambers is affected and a clot (thrombus) may occur in this chamber, especially within the left atrial appendage. If this clot comes off the wall of the appendage and gets loose in the circulation, it can travel up to the brain and cause a stroke. To prevent this, patients with AF are prescribed blood-thinning treatment (anticoagulants). Some patients are unable to take these drugs however, either because they have had a significant bleed whilst taking them or are deemed to be at very high risk of having a bleed. Such patients are eligible for the LAAO procedure as an alternative treatment. Patients can be selected for this treatment after discussion of their case by a multidisciplinary team that weighs up the pros and cons of treatment, which can then be discussed with the patient before final decisions are made.

The LAAO Registry was launched in late 2023. The first phase of the programme is to ensure that all hospitals performing these procedures are registered and are submitting data on all patients where a procedure has been attempted. This process is on-going currently and so available data are preliminary. As cases build up in the Registry, it will be possible to monitor the standard of care provided by the hospitals and to ensure the best outcomes for patients. More details on the LAAO Registry and its methodology can be found [here](#).

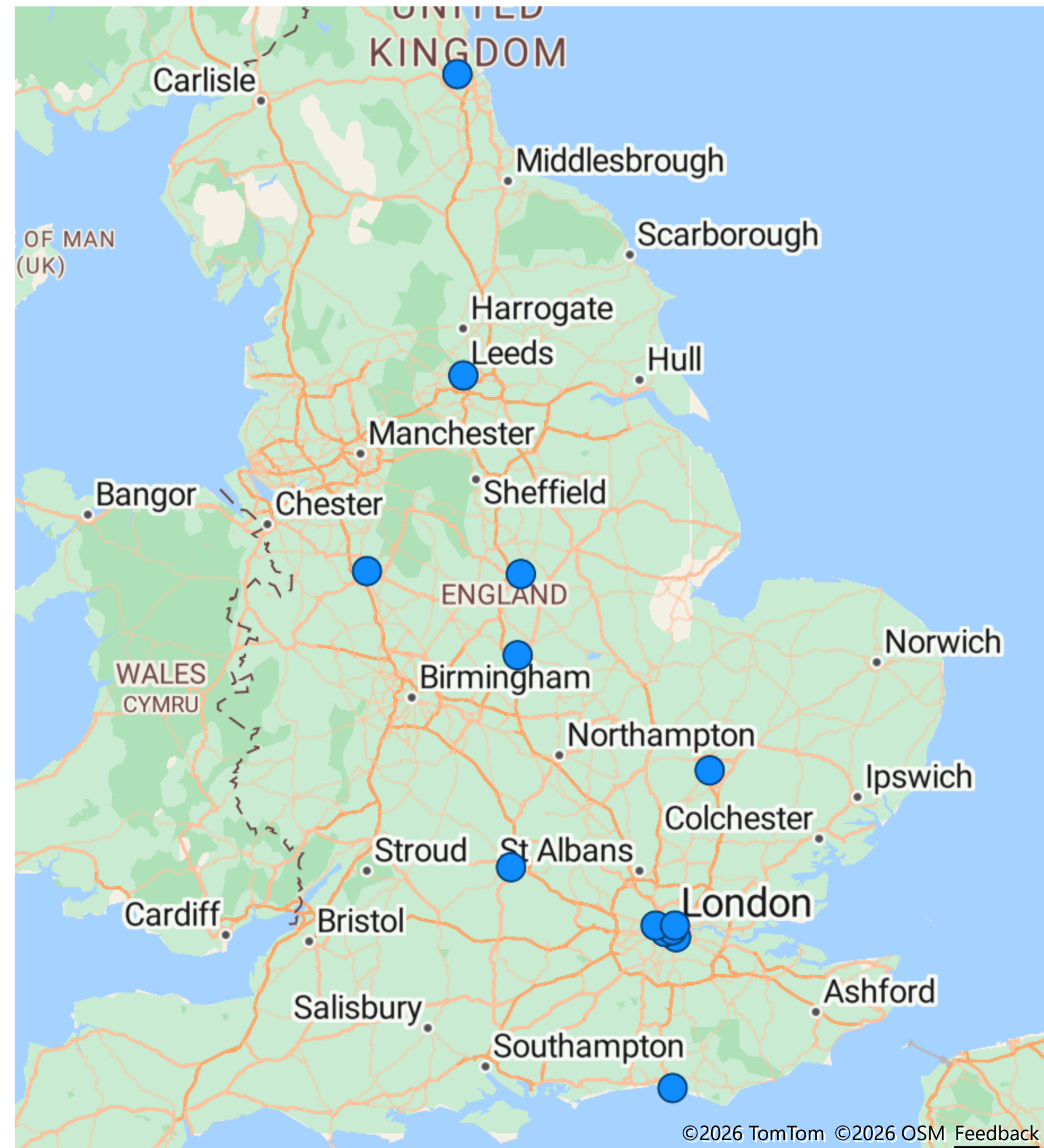
NHS England has requested hospitals to submit data to the Registry within two weeks of a procedure. Some centres are finding it difficult to comply with this request but the more timely the data, the more useful it becomes. Hospitals will be provided with the means of evaluating the care they provide and comparing their performance with the national standards.

We are very grateful to the clinical teams in hospitals and their supporting audit teams for engaging with the Registry and to build up a powerful system to ensure the NHS delivers a very high quality of care for patients selected for this treatment.

NICOR LAAO Registry team



Distribution of submitting centres across the UK



Most registered centres continue to submit their data, but we are still awaiting registration and/or submission from some major hospitals across England.

Wythenshawe Hospital and the Harefield Hospital have registered but have not sent data for this period.

Implanters in Scotland and Northern Ireland are also warmly invited to register and submit data.



The following NHS Hospitals had not registered with the national audit as of 1st May 2026:

- Liverpool Heart and Chest Hospital
- New Cross Hospital, Wolverhampton
- Queen Elizabeth Hospital, Birmingham
- Royal Victoria Hospital, Belfast
- St Mary's Hospital, London
- University Hospital Southampton

Data completeness for some hospitals needs to improve



Hospitals should ideally upload complete data for each procedure within 14 days of the date it was undertaken, including the essential details of the implanted device.

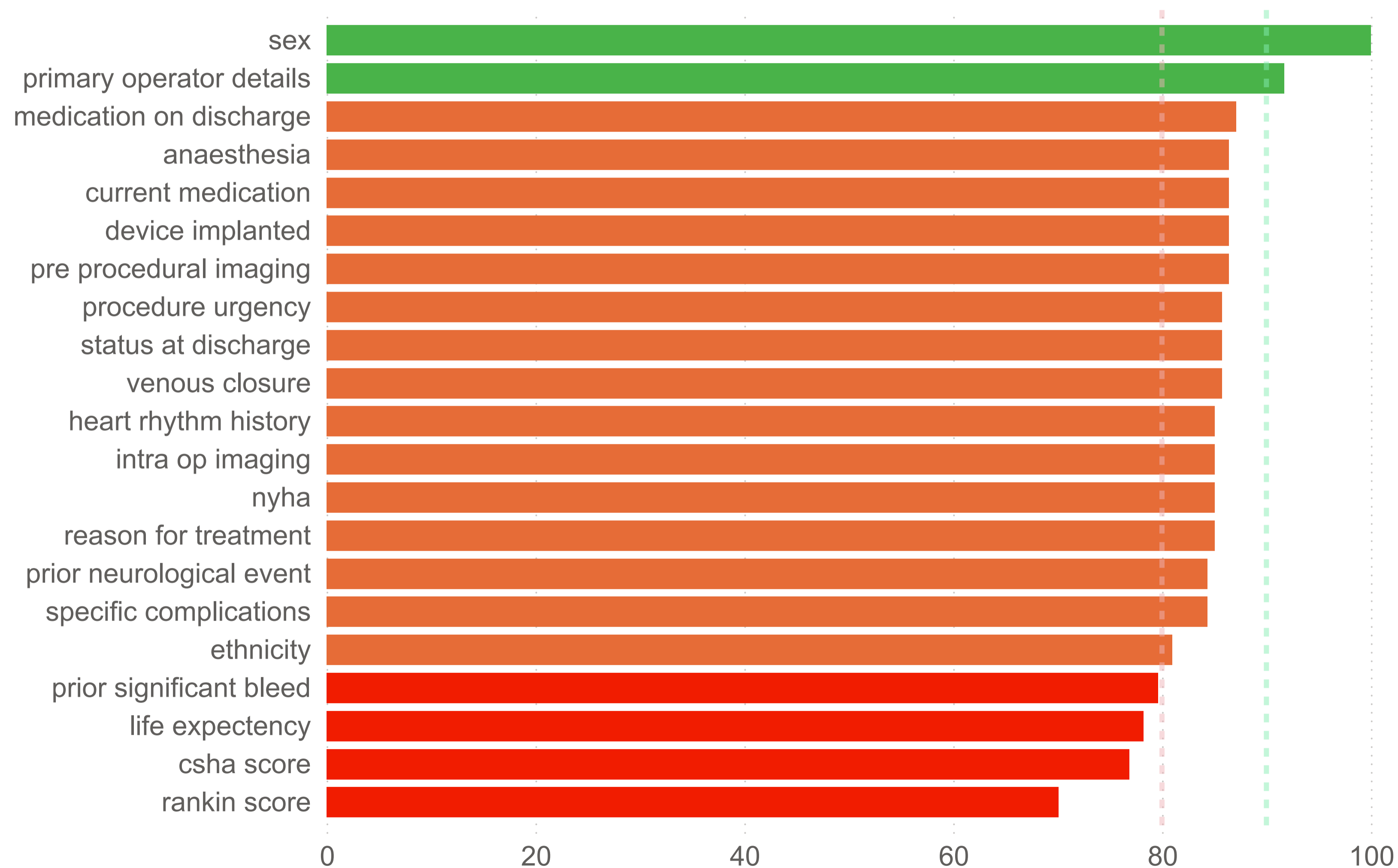
Those hospitals that have submitted data for procedures performed between April and September 2025 have generally completed most of the required data fields.

Hospitals can submit data directly through the NICOR data entry portal or transfer data from their own databases. The latter option has improved the number of submissions. We will continue to consider user feedback to assist with improvements in data submission.

Some hospitals have given only essential details to register the patient but are yet to provide the full dataset. To see how a specific hospital is performing, select from the drop-down menu below.

Select Hospital

Percentage data completeness by registry data field (April - September 2025)





Number of cases

LAAO cases by month

LAAO cases by hospital

Procedural measures

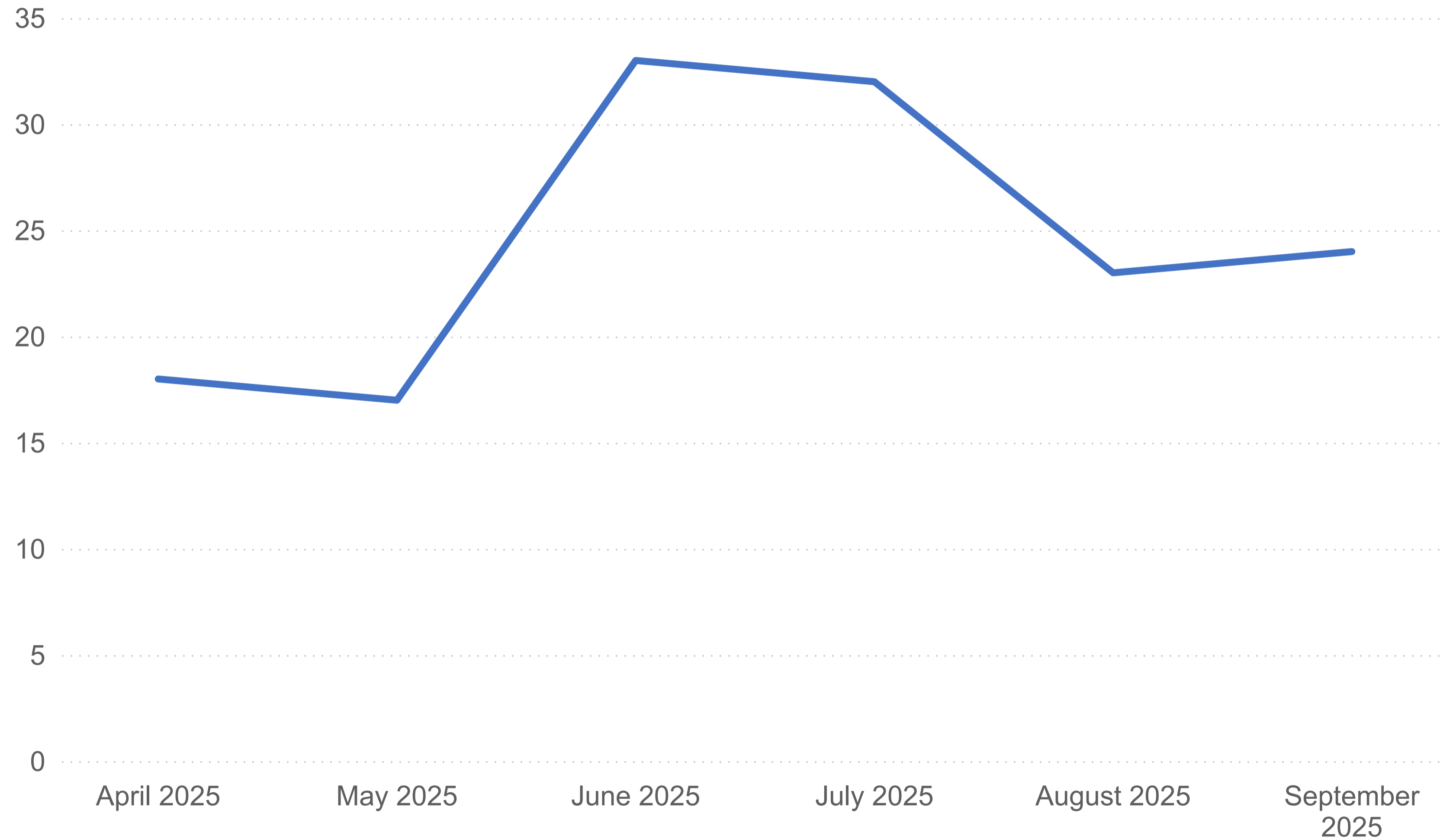
LAAO cases by devices manufacturer

Outcomes

Complication rates



Number of LAAO procedures submitted by month, Q1/Q2 2025/26



Data on 147 LAAO cases were submitted to the registry up to the end of September 2025 (up from 121 in the same period in 2024/25).

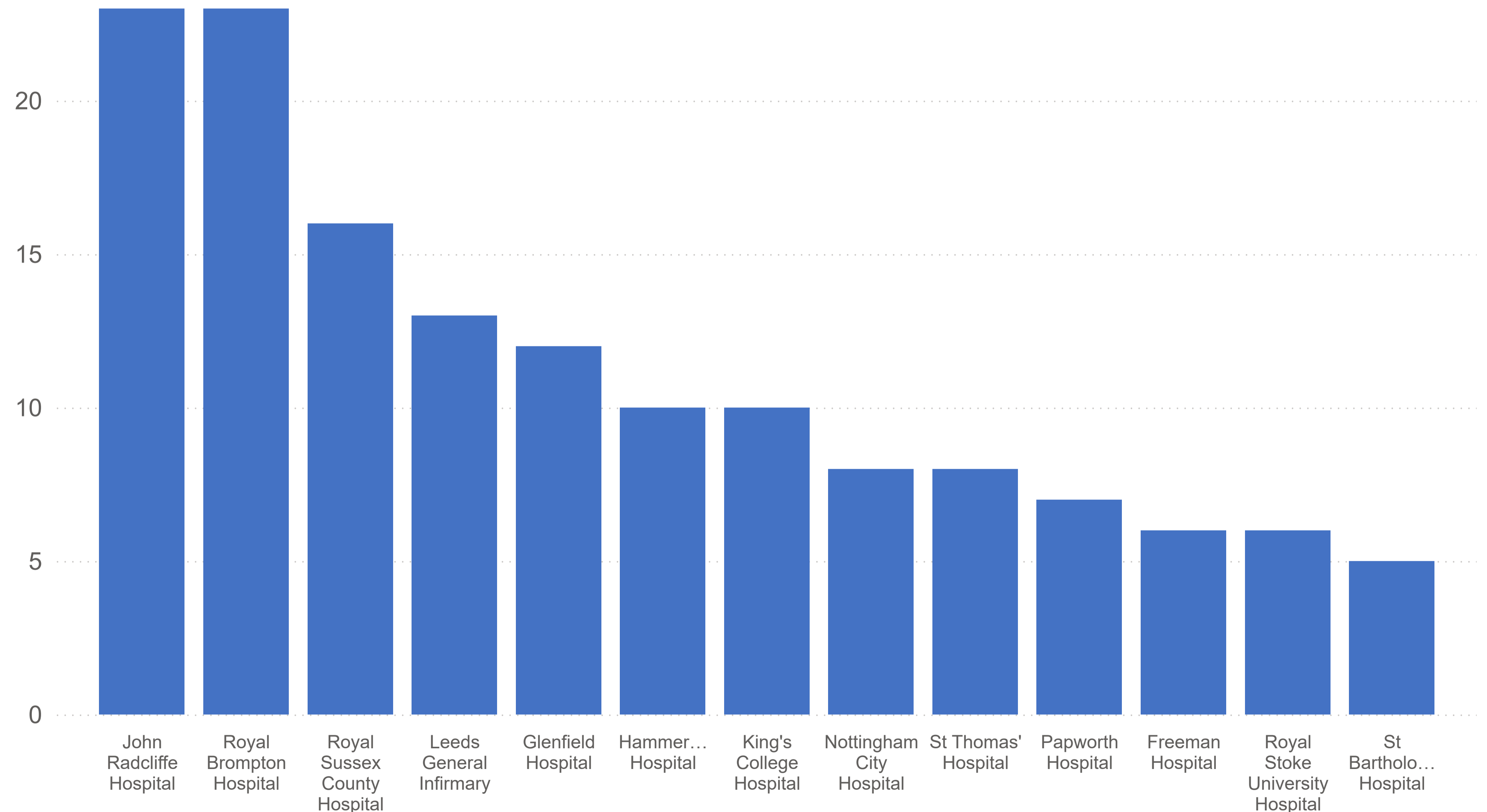
Hospitals performed between 5 and 23 LAAO procedures between April and September 2025



LAAO procedures submitted to the registry by hospital (April - September 2025)

The number of LAAO cases performed by each hospital in this time period ranged from 5 to 23.

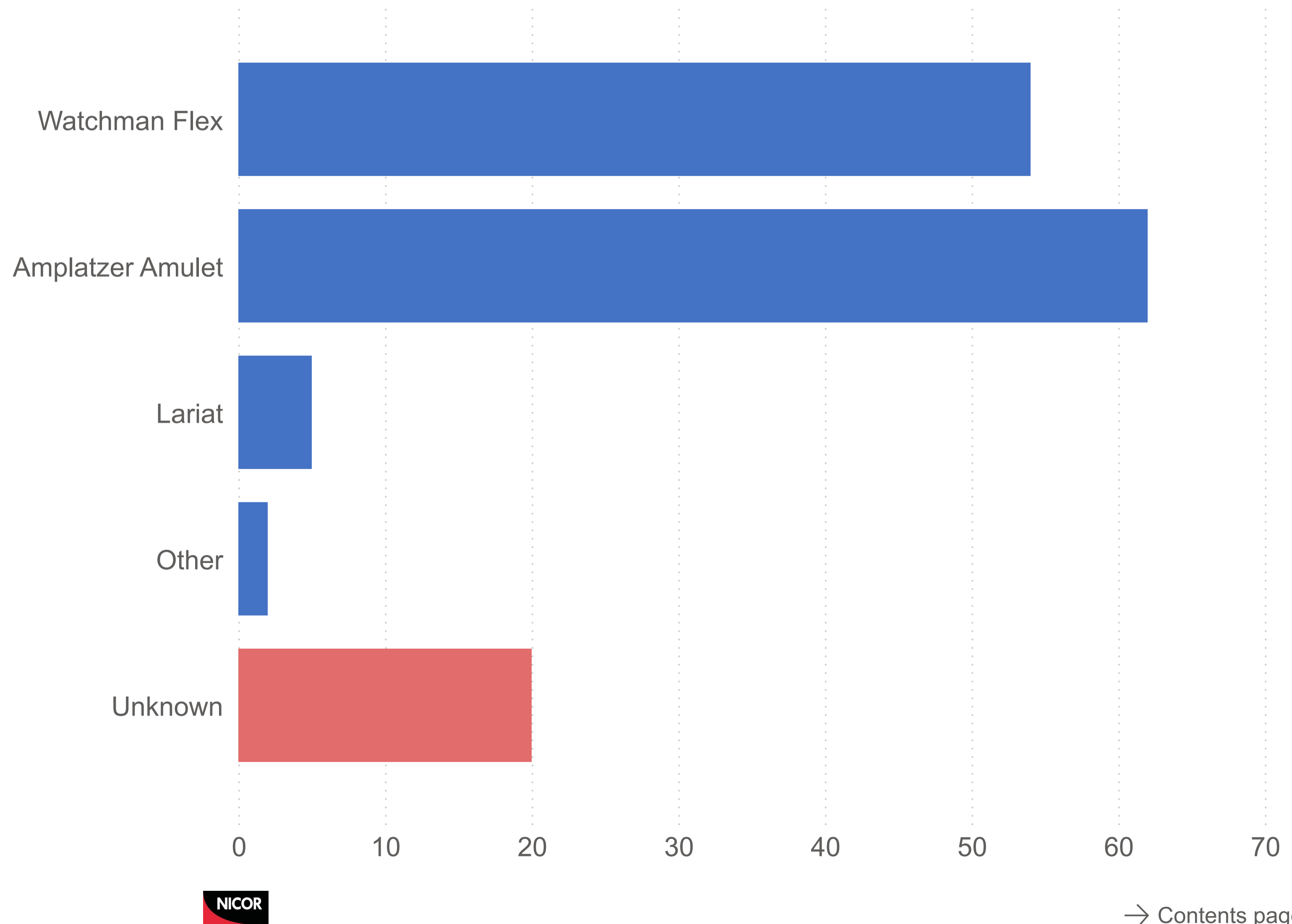
7 hospitals performed 10 or more cases between April and September 2025.



Most LAAO procedures between April and September 2025 were performed using the Amplatzer Amulet or Watchman Flex devices



Number of LAAO cases by device manufacturer (April - September 2025)



Whilst current numbers are too low to analyse any differences between devices, identification of the device is important for patient safety analysis. Since April 2025, barcode scanning can be used to enter the device serial number into the NICOR CAR data portal simply by clicking the barcode icon at the edge of the data entry field.

The presence of 20 returns with the device used coded as “unknown” is disappointing, and should be improved by submitting centres.



Percentage of different complications following LAAO procedures (April - September 2025)

Complication rates following LAAO procedures were very low for the period April to September 2025. Minor non-cerebral bleeding, device embolisation requiring percutaneous retrieval, and both drained and non-drained pericardial effusions each occurred in fewer than 1% of cases. No procedural deaths were reported.

