

NCAP

NATIONAL CARDIAC AUDIT PROGRAMME

NICOR

Transcatheter Mitral and Tricuspid Valve (TMTV) Registry

Interim Report 2026
Data from April to September 2025

BCIS



The TMTV registry comprises all procedures relating to the mitral and tricuspid valve, including mitral transcatheter edge-to-edge repair (TEER).

Service providers

- 25 NHS commissioned hospitals, 2 NHS non-commissioned hospitals and 5 private providers perform mitral TEER procedures.
- 24 NHS (England, Wales, N Ireland) hospitals and 1 private provider submitted data for mitral TEER procedures.
- 89% average hospital data completeness across all TMTV procedures.

Procedures

- 630 TMTV procedures were carried out.
- 350 (56%) mitral TEER procedures.
- 69 (11%) tricuspid TEER procedures.

Outcomes

- 67% cases have no or mild residual mitral regurgitation following a mitral TEER procedure.
- The most common complication of a mitral TEER was pericardial effusion with tamponade which occurred in 1.3% of cases.



The Transcatheter Mitral & Tricuspid Valve (TMTV) registry is part of the National Cardiac Audit Programme (NCAP) and was launched by the National Institute of Cardiovascular Outcomes Research (NICOR) in June 2023.

The primary responsibility of the TMTV audit is to report on the use of Mitral Transcatheter Edge-to-Edge Repair (TEER) procedures, first commissioned by NHS England in 2019. The registry also describes activity for TMTV procedure for NHS hospitals in England to monitor the outcomes of those lower volume procedures that may also be in the early stage of clinical adoption.

The main focus of the audit is quality assurance and improvement. This interim report summarises the number of patients being treated with TMTV procedures from April to September 2025, where these treatments are being delivered, and outcomes for patients. The slides in the report are interactive and enable you to explore the data of interest to you.

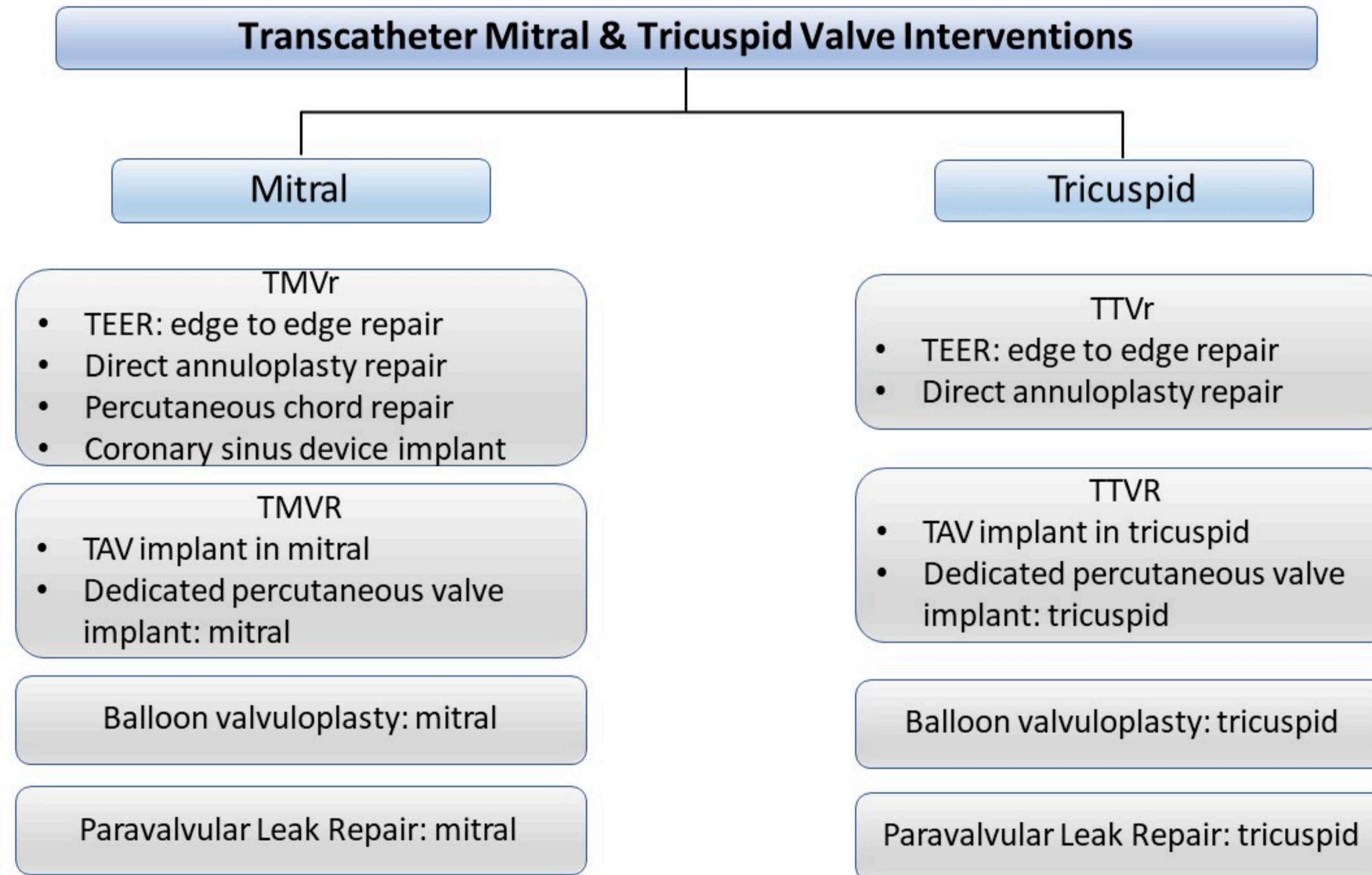
Hospitals can use online NICOR tools to analyse their activity and outcomes, including benchmarking themselves against other hospitals delivering TMTV procedures. You can find details of the audit methodology [here](#).

In this report, 96% of NHS (England, Wales & NI) hospitals performing procedures have submitted data but informal surveying suggests 100% cases are not being submitted and there is a need for significant data quality improvement at some hospitals. Caution is therefore required when drawing conclusions about the exact number of TMTV procedures and their outcomes.

The audit relies on the efforts of clinical and data management teams at the participating hospitals. We are grateful to the hospitals that have engaged with the TMTV registry and the staff who have patiently entered data and supported delivery of this audit. We will continue to work closely with all TMTV centres to improve the quality of the data.

NICOR TMTV Registry Team

Types of transcatheter mitral and tricuspid valve (TMTV) procedures



Key:

TMVr Transcatheter Mitral Valve repair

TMVR Transcatheter Mitral Valve Replacement

TAV Transcatheter Aortic Valve

TTVr Transcatheter Tricuspid Valve repair

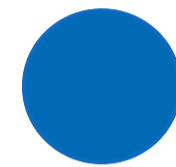
TTVR Transcatheter Tricuspid Valve Replacement

27 NHS hospitals performed mitral transcatheter edge-to-edge repair (M-TEER) procedures for the period April to September 2025



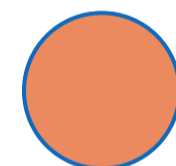
NHS (England, Wales, NI) hospitals commissioned to perform mitral TEER procedures

25



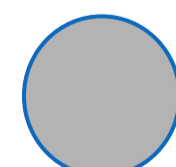
NHS (England, Wales, NI) hospitals performing but not commissioned for mitral TEER procedures

2



Private hospitals performing M-TEER procedures

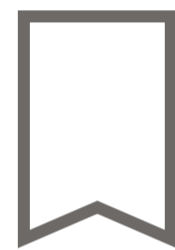
5



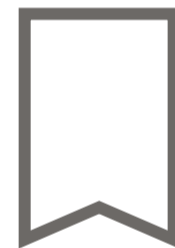
NI = Northern Ireland

Some hospitals did not report any M-TEER cases during this period.

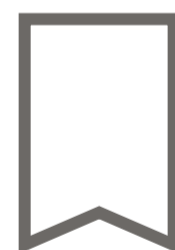
Select to show hospitals that have submitted mitral TEER data to the TMTV registry for April to September 2025.



Select all hospitals



Select hospitals that have submitted MTEER data

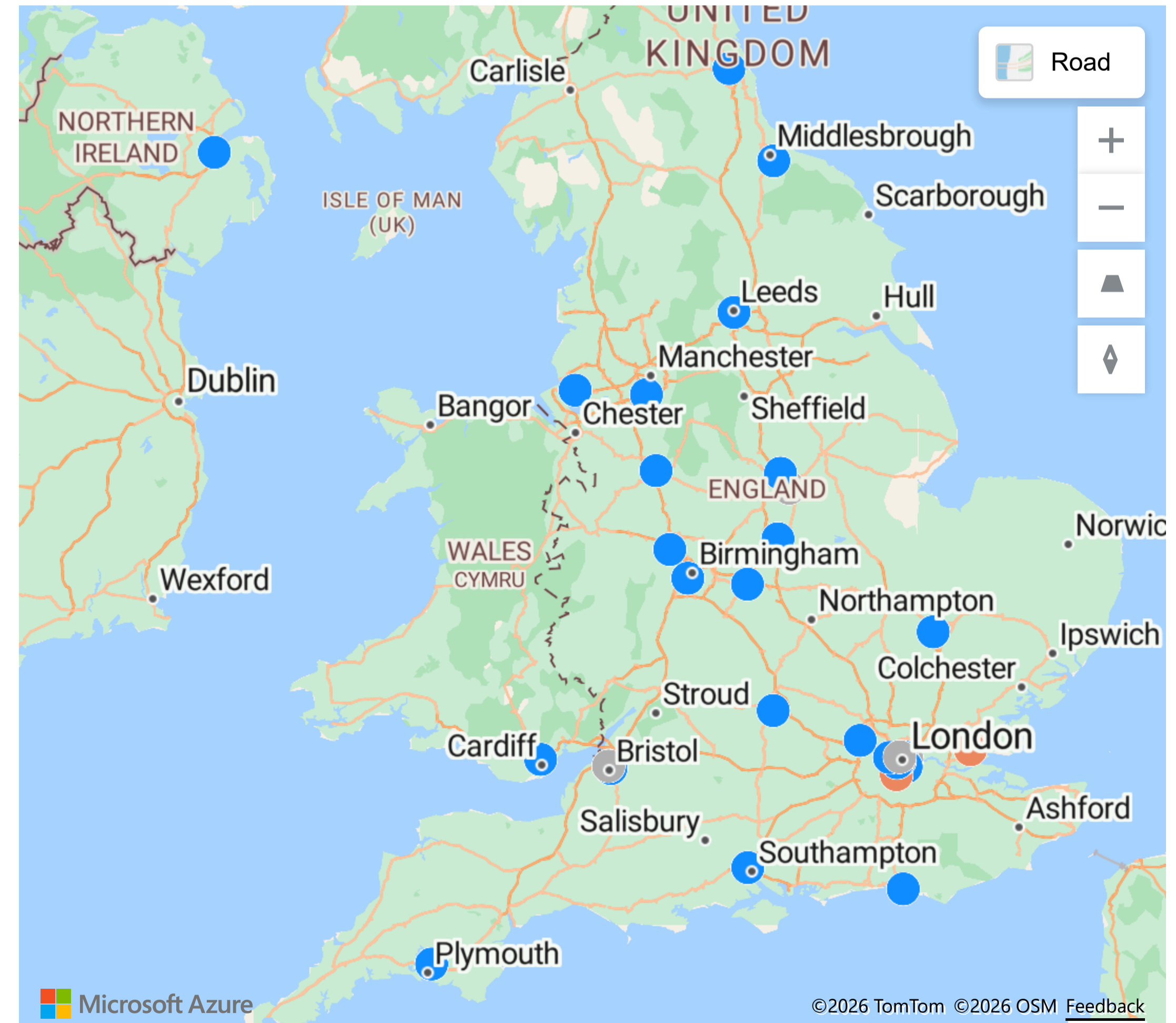


Select hospitals that have not submitted MTEER data

Currently showing Hospitals that have submitted MTEER data

Location of hospitals in England, Wales and NI performing mitral TEER

Commissioned? ● Yes ● No ● Private



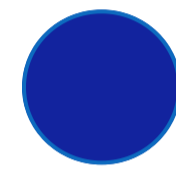
20 NHS (England, Wales and NI) hospitals submitted data for procedures other than mitral TEER for the period April to September 2025



Location of hospitals submitting data for procedures other than mitral TEER to the TMTV registry (April - September 2025)

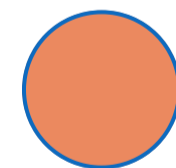
NHS (England, Wales and NI) hospitals submitted data for mitral TEER and other TMTV procedures

19

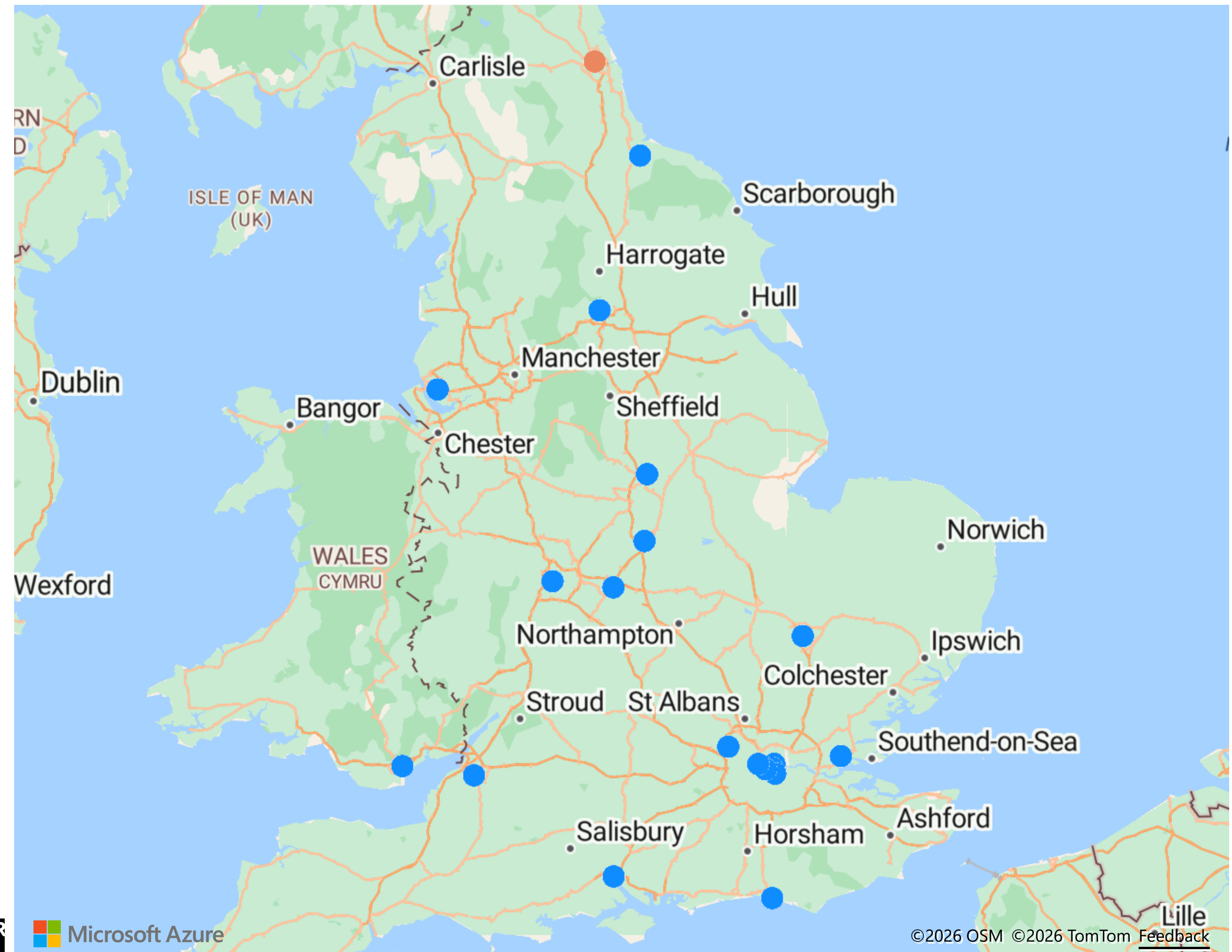


NHS (England, Wales and NI) hospitals submitted data for non-mitral-TEER TMTV procedures only

1



MTEER Data also received ● No ● Yes



Data completeness needs to be improved for several key fields to assist with benchmarking



Average data completeness across all the data fields in the TMTV registry was 88.8%.

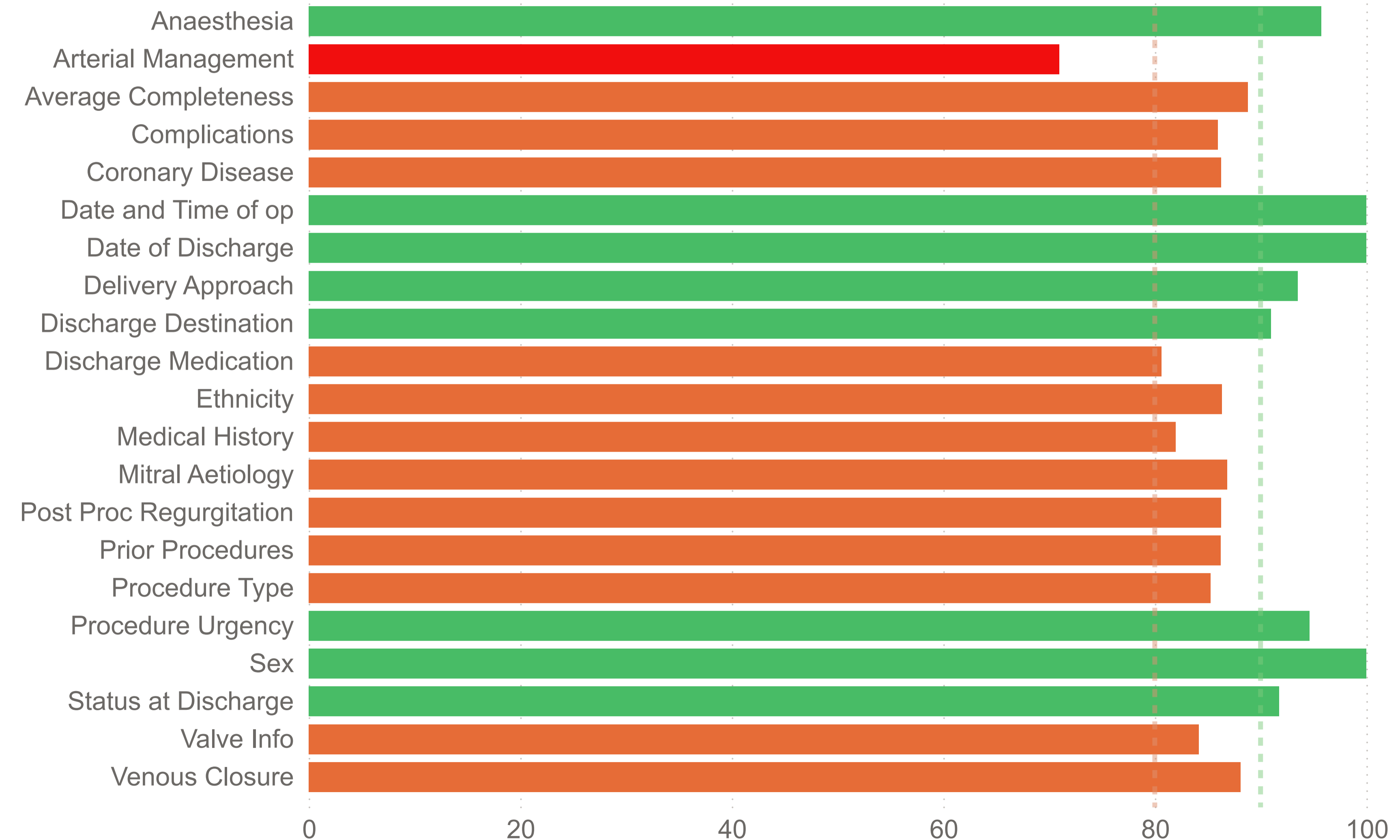
There are several important data fields which are completed less well. Reporting of valve information was 84%. This field is required for alignment with the Medical Devices Outcome Registry.

Select a hospital below to see its data.

Key
Data completeness by field or group of fields:
Green >90%
Orange 80-90%
Red <80%

Select hospital

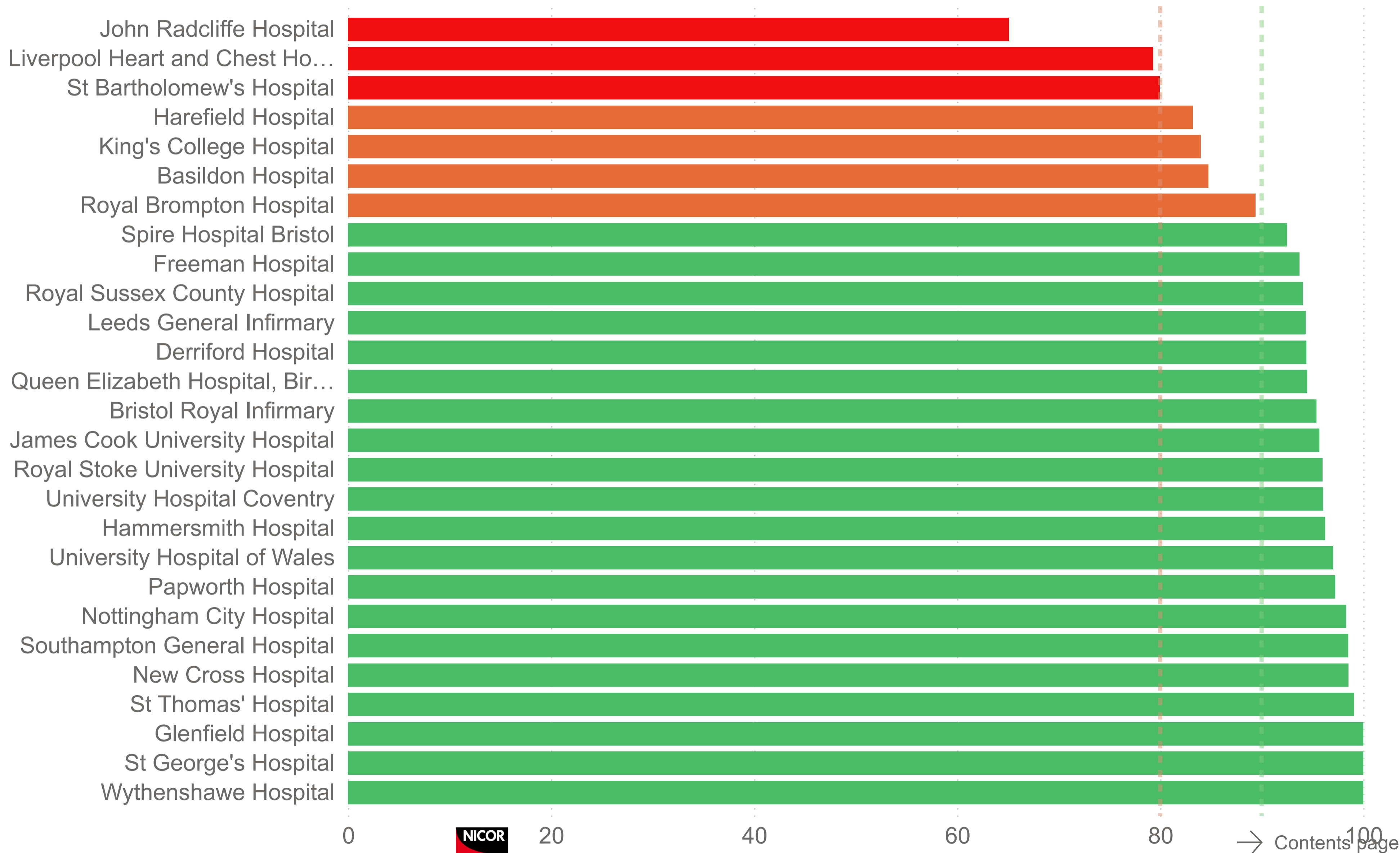
Average % completeness of data variables in the TMTV registry (April - September 2025)



Some hospitals need to improve data completeness



Average % completeness of data variables in the TMTV registry (April - September 2025)



There is the need for data quality improvement especially at:

- John Radcliffe Hospital: procedure type was not completed in all 71 cases.
- Liverpool Heart and Chest Hospital.
- St Bartholomew's Hospital.



Number of procedures

Monthly TMTV cases by type

Procedures by type

Non-TEER TMTV procedures

Mitral TEER cases by hospital

Non-Mitral-TEER cases by hospital

Mitral TEER cases by MR aetiology

Mitral TEER cases by device type

Outcomes

Mitral TEER complication rates

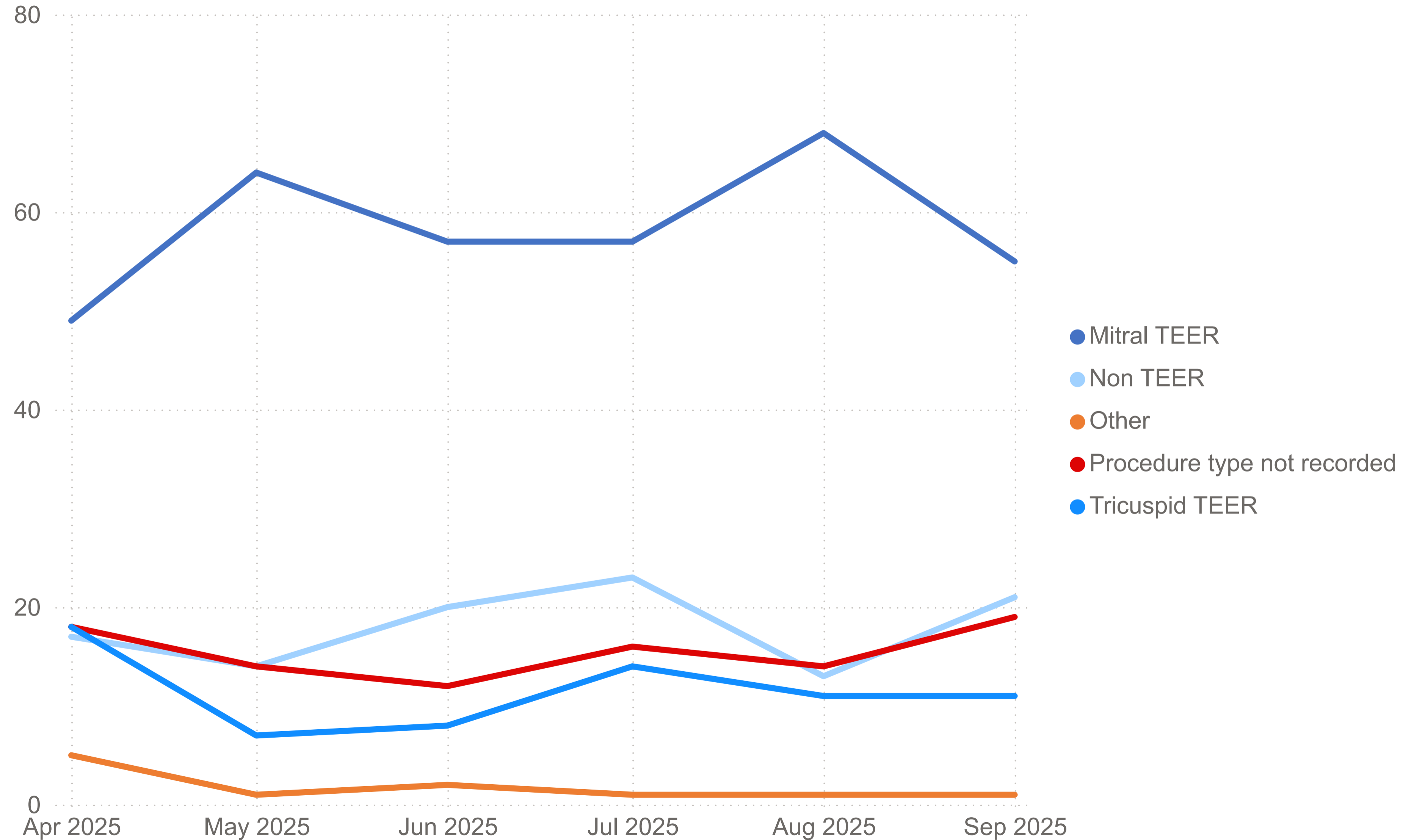
Mitral TEER post-procedure MR

TMTV mortality

About 60 new mitral TEER procedures were submitted to the registry each month



Monthly TMTV procedures by type (April - September 2025)



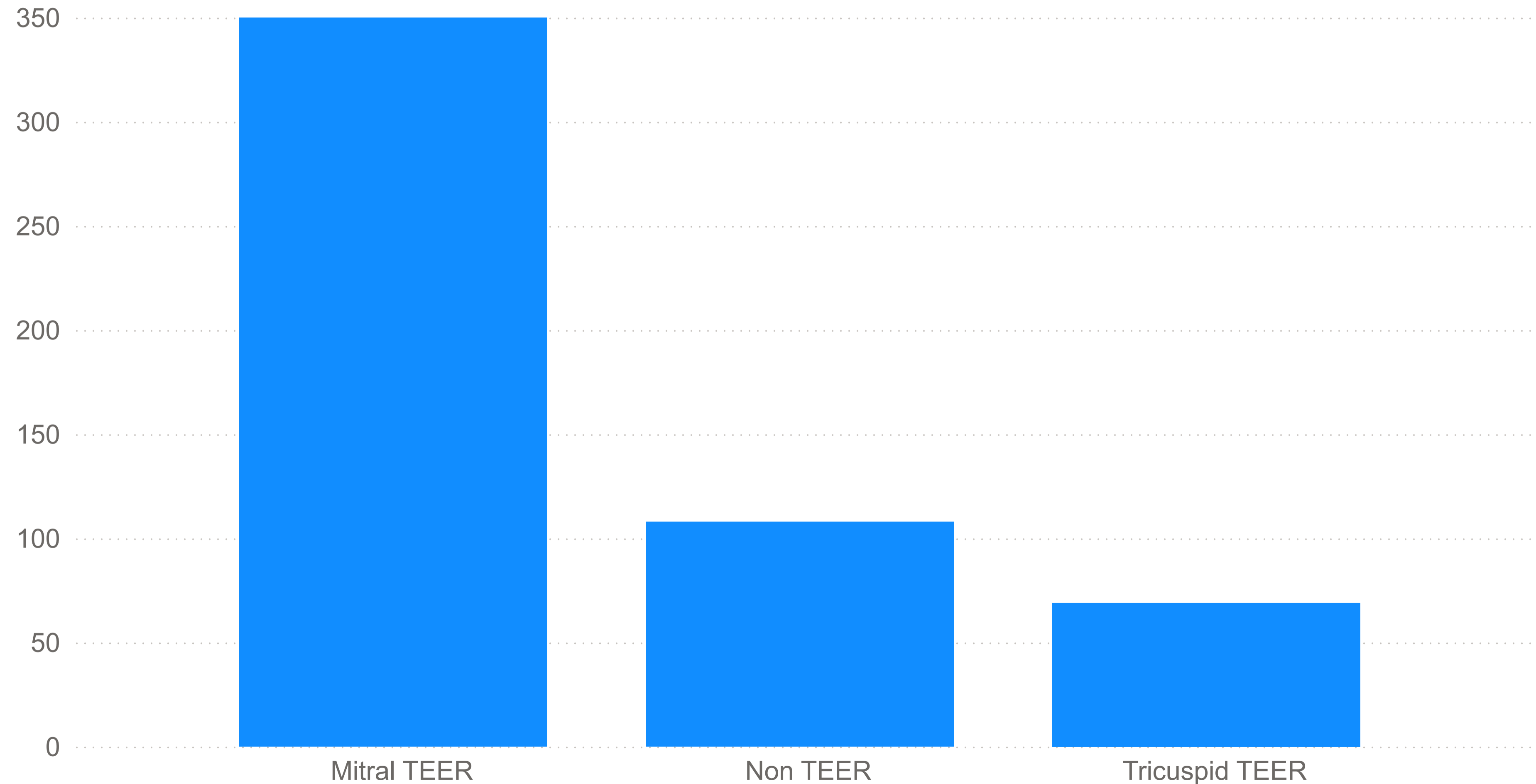
The majority of procedures during the period were mitral TEER procedures with slight variation in this number by month.

All centres should provide accurate data on procedure type.

The majority of TMTV procedures were mitral transcatheter edge-to-edge repairs (TEERs)



Total number of interventions submitted by procedure type (April - September 2025)

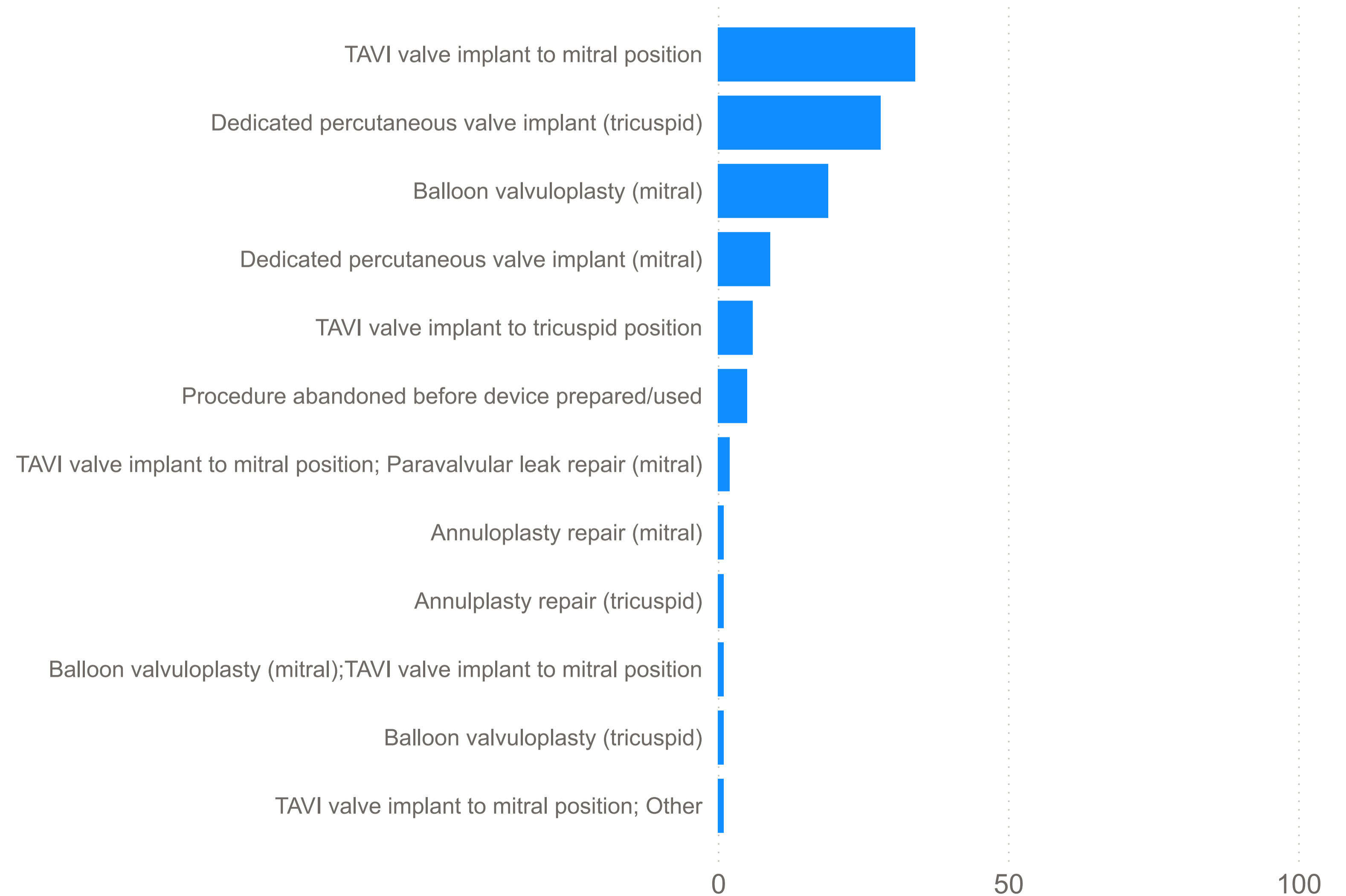


Mitral valve transcatheter edge-to-edge repair (TEER) procedures made up 56% of all TMTV procedures for the period April to September 2025.

Several percutaneous valve replacements and other non-TEER procedures were performed between April and September 2025



Number of non-TEER procedures submitted to the registry (April - September 2025)

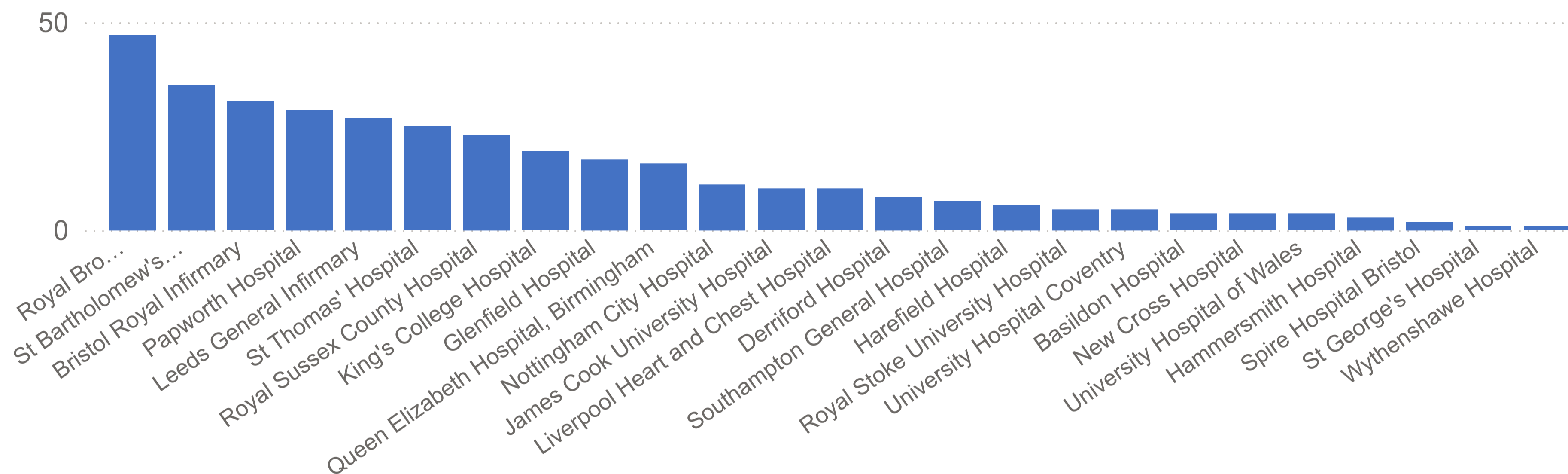


TAVI valve implants to the mitral position and dedicated percutaneous valve implant to the tricuspid valve were the most common non-TEER case during this period.

There was significant variation in mitral TEER case numbers between hospitals



Number of mitral TEER procedures by hospital (April - September 2025)

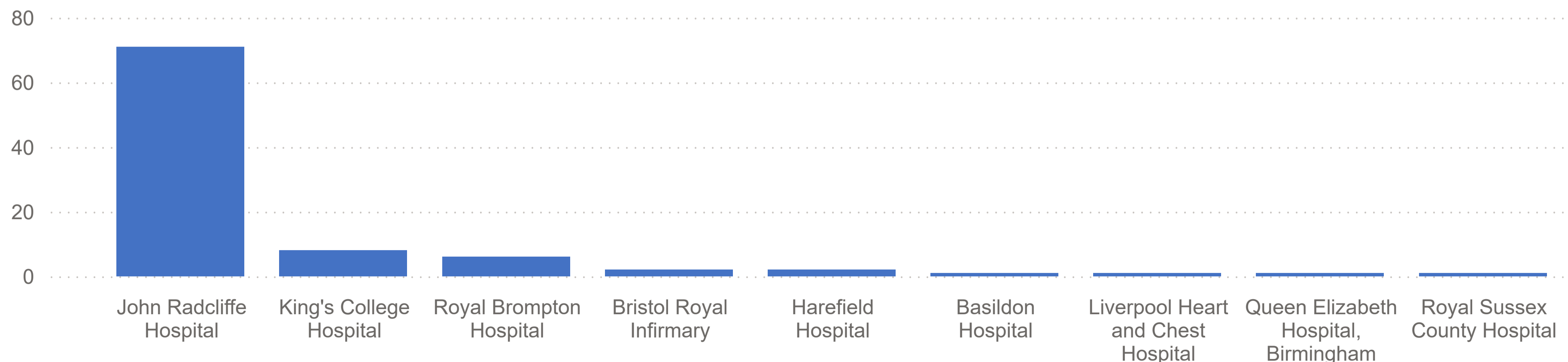


The number of mitral TEER procedures at each hospital varied in the period April-September 2025. An informal survey indicates mitral TEER volume at Wythenshawe Hospital was significantly higher than the 1 case submitted to the registry.

Several hospitals have submitted cases without recording the type of procedure. All cases submitted by John Radcliffe Hospital failed to record the procedure type.

It is essential that hospitals report 100% cases to the registry and specify the procedure type in the TMTV registry. Dataset update will include the procedure type as a mandatory field.

Number procedures where type is not recorded by hospital (April - September 2025)

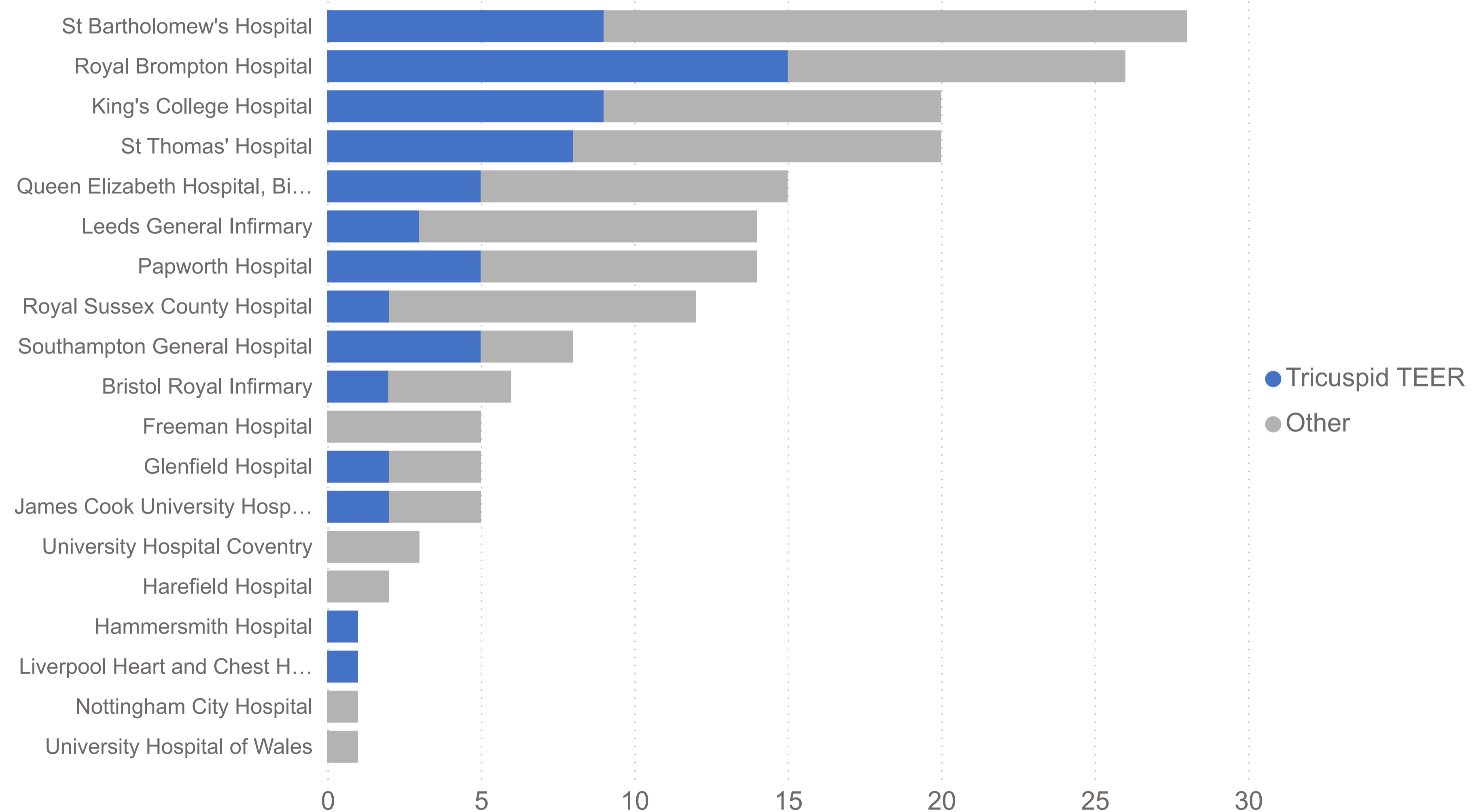


19 hospitals submitted data for procedures other than mitral TEER for the period April to September 2025



Number of procedures other than mitral TEER by hospital (April - September 2025)

There was wide variation in the number of non-mitral TEER procedures at each hospital in the period April-September 2025. The most frequent of these was a tricuspid TEER procedure.



Most mitral TEER procedures were undertaken for primary degenerative disease but a fifth of cases were for secondary causes of mitral regurgitation

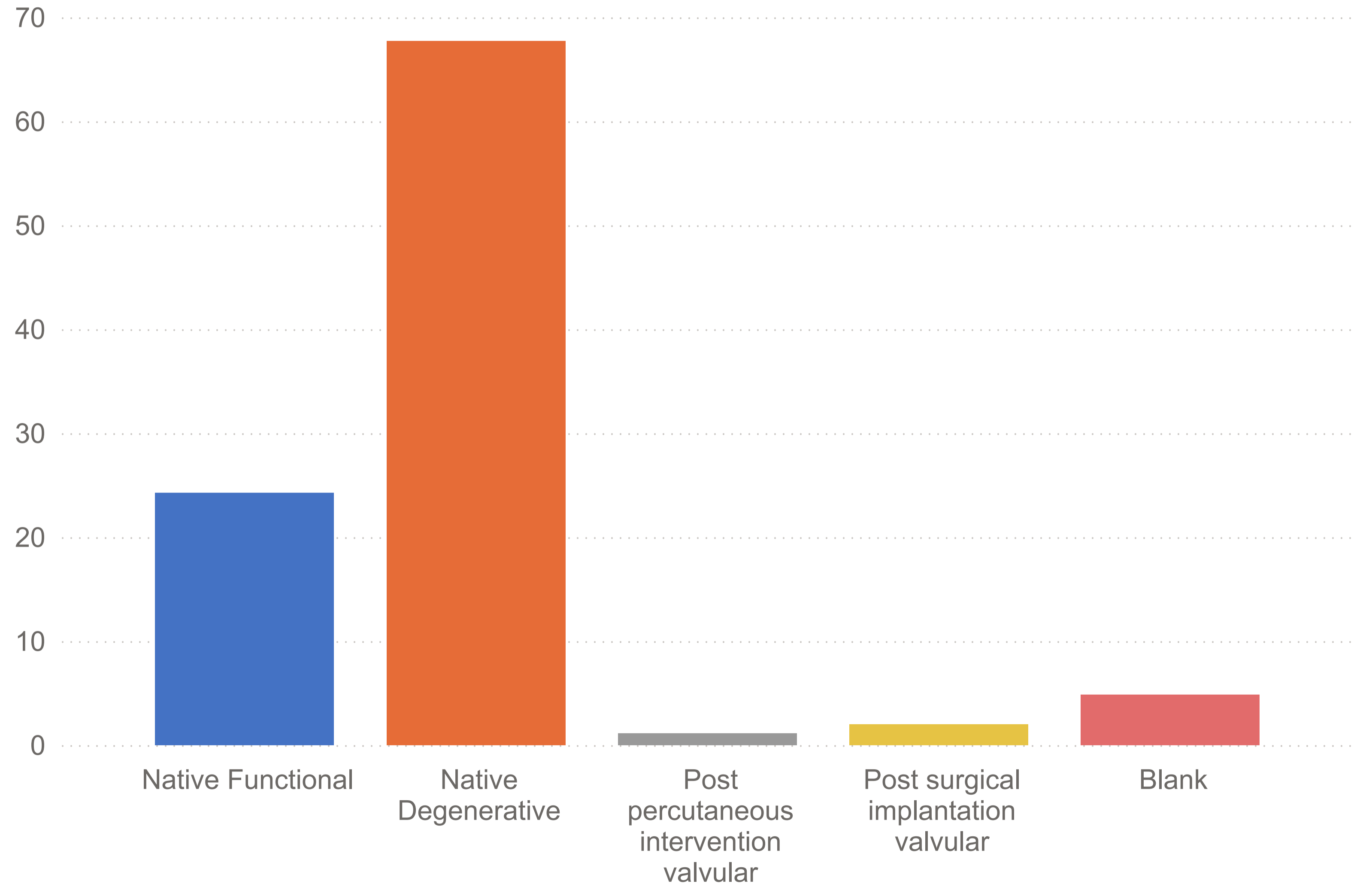


68% of mitral TEER cases in the period were for primary degenerative disease of the mitral valve.

24% of cases were for secondary mitral regurgitation which is not presently commissioned by NHS England.

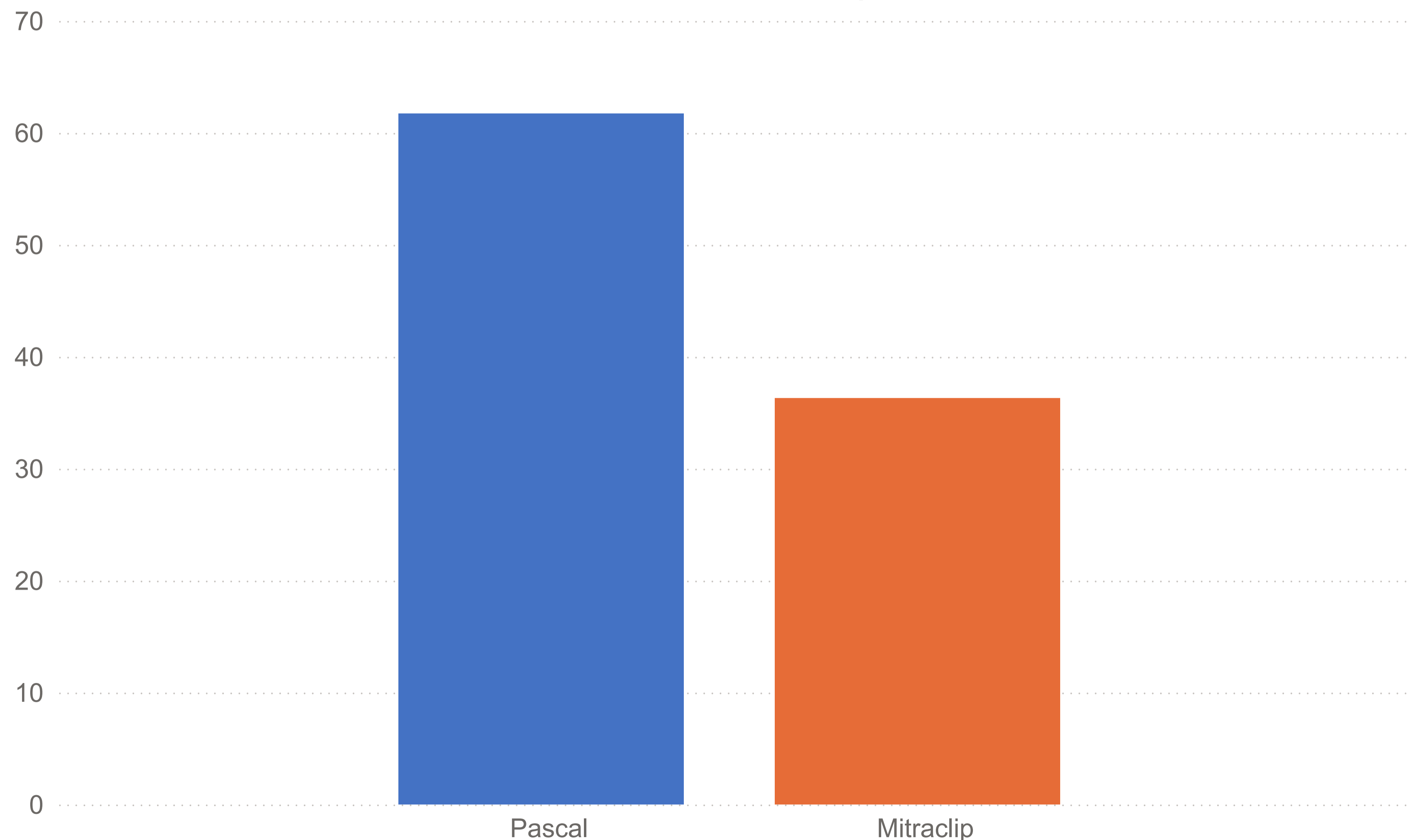
The analysis cannot be performed for 5% of cases. All hospitals should provide accurate and complete data to the registry.

Percentage of mitral TEER cases by aetiology of mitral regurgitation (April - September 2025)





Percentage use of specific device types in mitral TEER procedures (April - September 2025)

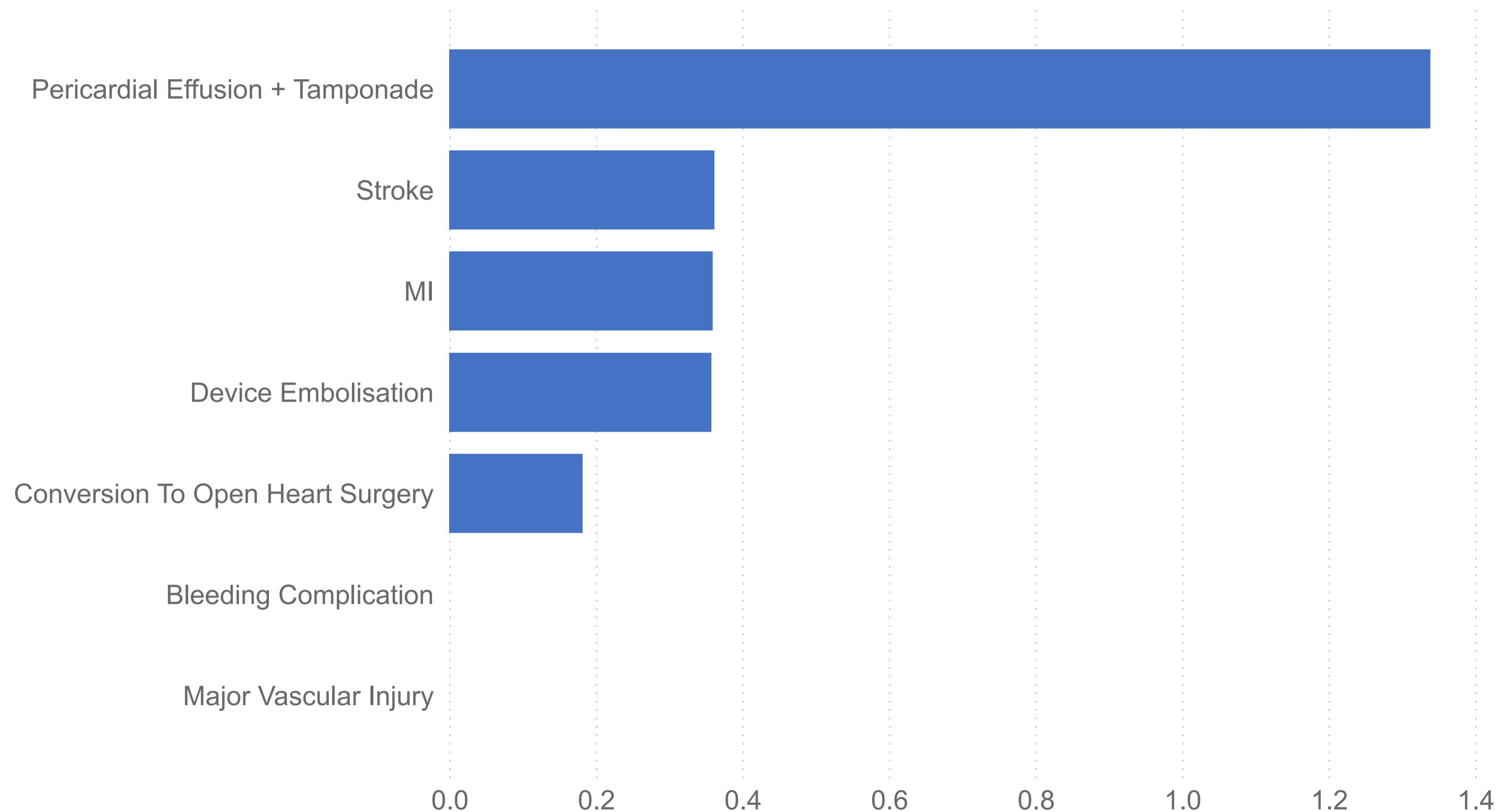


Both types of commercially available device (MitraClip and PASCAL) were used for mitral TEER procedures.

The majority of cases (62%) used the Pascal repair system.



Percentage of cases with recorded complications following a mitral TEER procedure (April - September 2025)



The most common complication of a mitral TEER procedure for the period April-September 2025 was pericardial effusion with tamponade which occurred in 1.3% of cases.

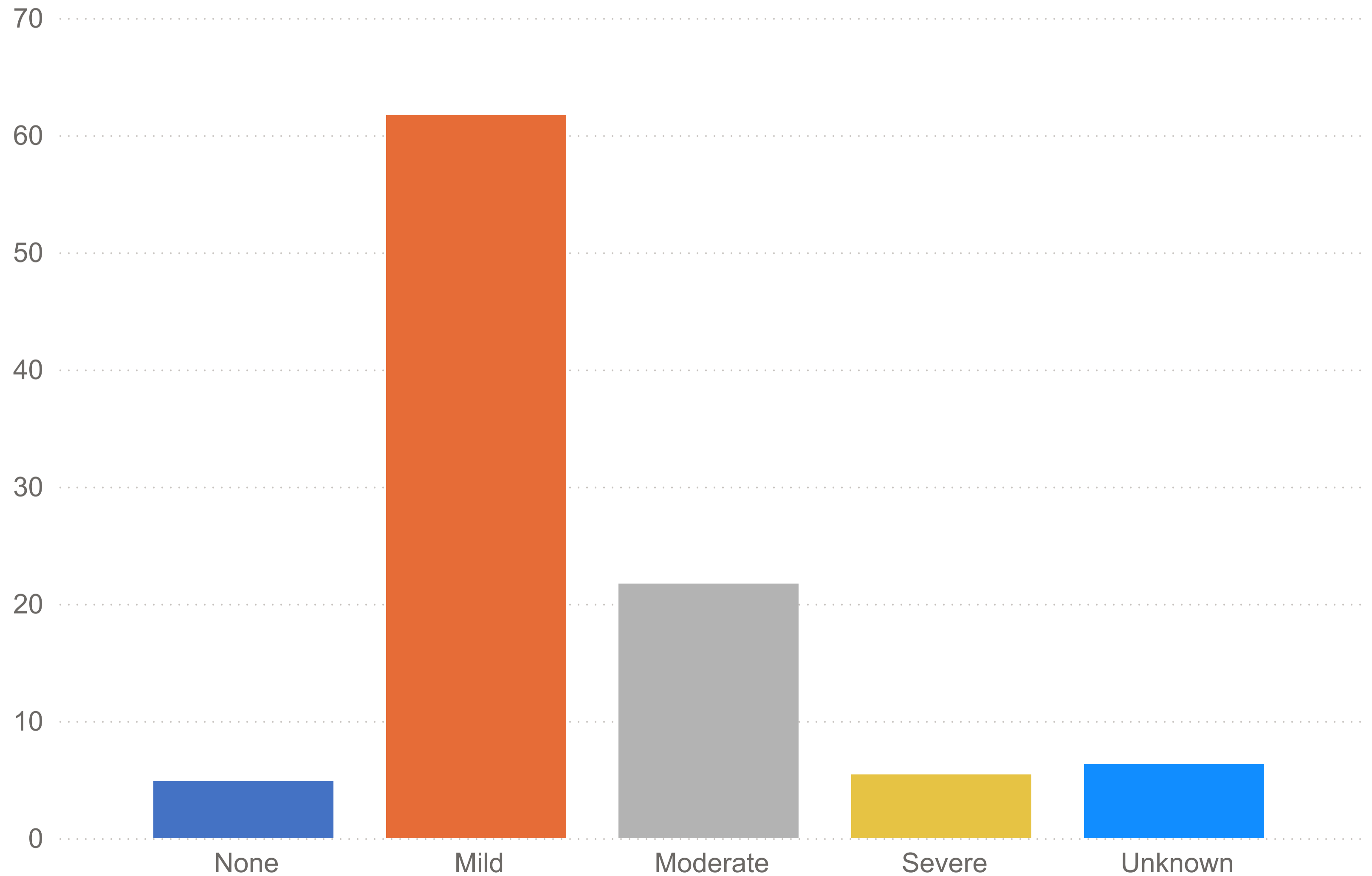
Conversion to open heart surgery occurred in two cases due to valve related complication.

MI = myocardial infarction

The majority of mitral TEER procedures resulted in no or mild mitral regurgitation



Percentage mitral regurgitation severity class following mitral TEER procedures (April - September 2025)



Following mitral TEER, 5% cases had no mitral regurgitation and 62% had mild mitral regurgitation. The residual mitral regurgitation following mitral TEER indicates effectiveness of the treatment.



In-hospital mortality risk following TMTV procedures (April - September 2025)

The overall in-hospital mortality rate following TMTV procedures was 1.7% for the period April to September 2025.

Hospitals should ensure discharge status is complete for every patient.

