

NCAP

NATIONAL CARDIAC AUDIT PROGRAMME

NICOR

National Audit of Percutaneous Coronary Intervention (NAPCI)

Interim Report 2026
Data from April to September 2025

BCIS



42,604 PCI procedures reported from April to September 2025.

Improvement in data completeness is required in some hospitals.

The median Call-To-Balloon times in Q1/Q2 2025/26 for patients undergoing primary PCI for ST-elevation myocardial infarction, for both direct and inter-hospital transfer (IHT) cases, were slightly lower than reported in 2024/25, more so for IHT cases.

There was a further rise in the use of intracoronary imaging (ICI) to 35% of complex PCI cases, and ICI was used in nearly 80% of cases of left main stem PCI.

No further increase in the use of new P2Y12 antiplatelet drugs following PCI has been seen for this period.

Drug-eluting balloons were used in 42% of PCI cases for in-stent restenosis.



- 1. ICBs and Cardiac Networks should identify steps to be taken to reduce treatment times for primary PCI for patients with STEMI**
 - Treatment times for primary PCI for STEMI for interhospital transfers have improved marginally following new guidance from NHS England, upgrading transfer of these patients to category 2 but further improvement is needed.
- 2. Centres undertaking PCI for left main stem artery or complex lesions should consider using intra-coronary imaging to help with decision making and stent optimisation**
- 3. PCI hospitals should increase their use of new P2Y12 antiplatelet drugs in patients with acute coronary syndromes**
 - Use of prasugrel is lagging that of ticagrelor, especially in NSTEMI cases. This is despite international guidelines recommending it in preference to ticagrelor. Prasugrel should be used in preference to ticagrelor and clopidogrel where there are no clinical contra-indications.
- 4. All hospitals should provide complete and accurate data to the NAPCI**
 - Data completeness for some fields remains a problem. This will become particularly relevant when individual hospital benchmarking with risk adjusted outcomes is re-initiated.



The data generated by the audit is also used as the basis for two other publications:

- For most heart attack patients, optimal care includes a PCI procedure. NAPCI data are therefore also combined with that from the NCAP's Myocardial Ischaemia National Audit Project (MINAP) to create a report that focuses on the care given to people admitted to hospital with a heart attack. This includes time delays to treatment for patients presenting with ST-segment elevation myocardial infarction (STEMI) or non-ST-segment elevation myocardial infarction (NSTEMI). More information on the NAPCI can be found [here](#).
- A slide deck of comprehensive analyses published as the British Cardiovascular Intervention Society BCIS Audit. This contains all adult interventional procedures performed in the UK from 1st April 2024 to 31st March 2025. The report can be found on the BCIS website.

The annual Clinical Outcomes Publication (COP) which provides 3-year rolling data on individual PCI operators and centres and includes an assessment of risk-adjusted 30-day survival for England and Wales also utilises the NAPCI data. The COP analysis was due to be published in 2025, but has been temporarily frozen as it is unclear whether the risk model performs well in contemporary practice given it was derived using data from 2007-2011. We have developed a new risk score that is better calibrated and has better discrimination for contemporary PCI with the inclusion of several new risk factors. We aim to validate this model and then apply it to national data and resume the COP analysis.

We are very grateful to all the PCI and audit teams for their diligence in collecting the data and we will strive to produce meaningful outputs with information that will stimulate quality improvement exercises at local level. This will lead to better clinical services and better outcomes for patients.

NICOR NAPCI audit team



Number of procedures

- All PCI cases
- Data completeness
- PCI cases by age group
- PCI cases by patient ethnicity
- Ethnicity data completeness by hospital
- PCI cases by ICB/HB/CN

Timeliness of treatment

- Definition of PPCI treatment times
- PPCI times against guideline targets
- PPCI times against ideal targets
- PPCI times by ICB/HB/CN
- PPCI times by hospital

Use of intracoronary imaging

- ICI for complex cases
- ICI for complex cases by ICB/HB/CN
- ICI for complex cases by hospital
- ICI for LMS
- ICI for LMS by ICB/HB/CN
- ICI for LMS by hospital

Use of newer antiplatelet drugs

- New P2Y12 drugs
- New P2Y12 ICB/HB/CN
- New P2Y12 by hospital
- New P2Y12 hospital rank
- New P2Y12 for STEMI
- New P2Y12 for STEMI by ICB/HB/CN
- New P2Y12 for STEMI by hospital
- New P2Y12 for STEMI hospital rank

- New P2Y12 for NSTEMI
- New P2Y12 for NSTEMI by ICB/HB/CN
- New P2Y12 for NSTEMI by hospital
- New P2Y12 for NSTEMI hospital rank

Use of drug eluting balloons

- DEB use
- DEB use by hospital
- DEB use hospital rank
- DEB with stent by hospital
- DEB with stent hospital rank
- DEB without stent by hospital
- DEB without stent hospital rank
- DEB use restenosis by hospital
- DEB use restenosis hospital rank

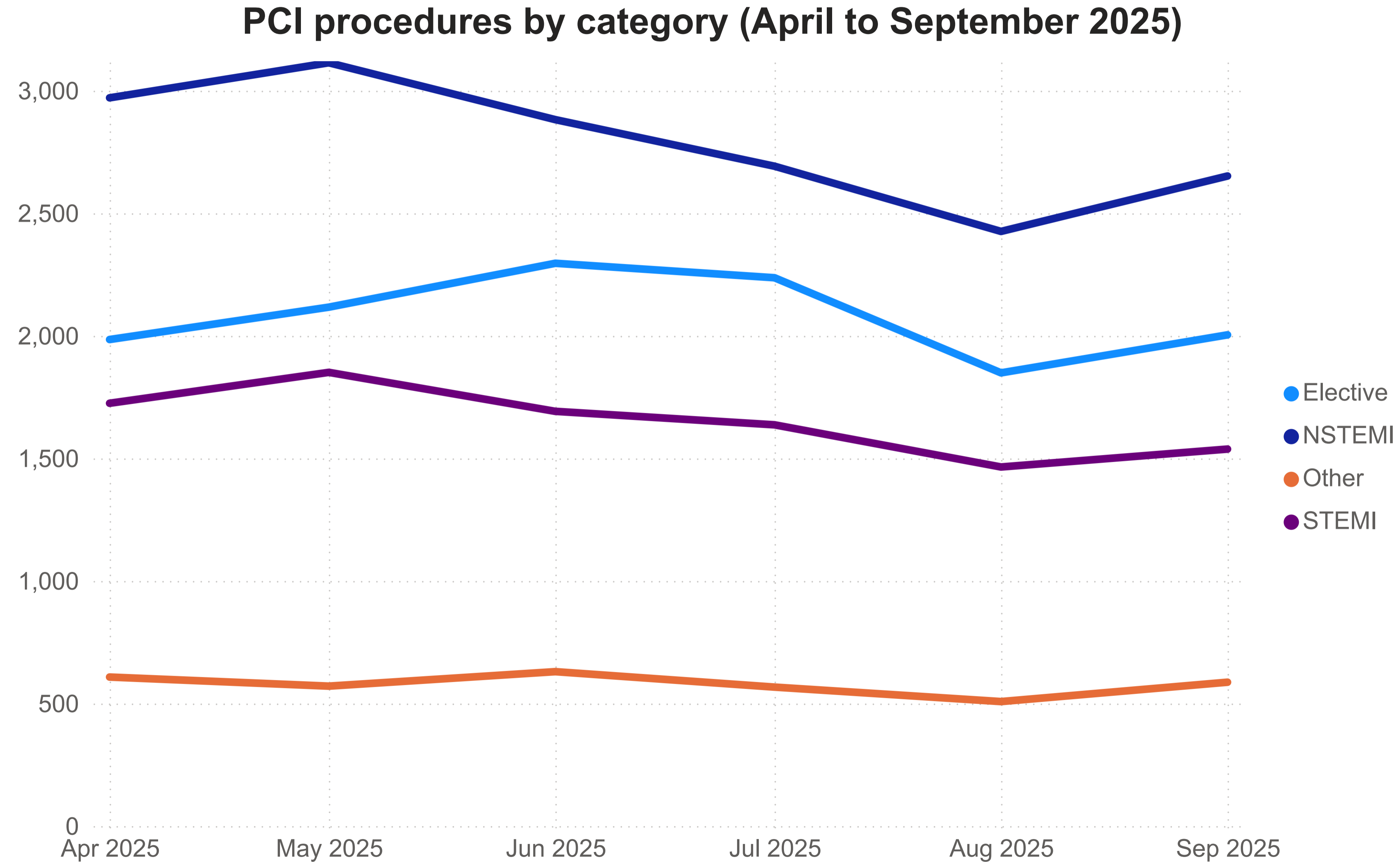
References

Most PCI procedures for the period April to September 2025 were for acute coronary syndromes



42,604 percutaneous coronary intervention (PCI) procedures were performed in England and Wales during April to September 2025/26, similar to the previous year.

The number of procedures for different categories of PCI all remain largely unchanged, with STEMI and NSTEMI heart attack cases accounting for the majority.



Some hospitals need to improve data completeness



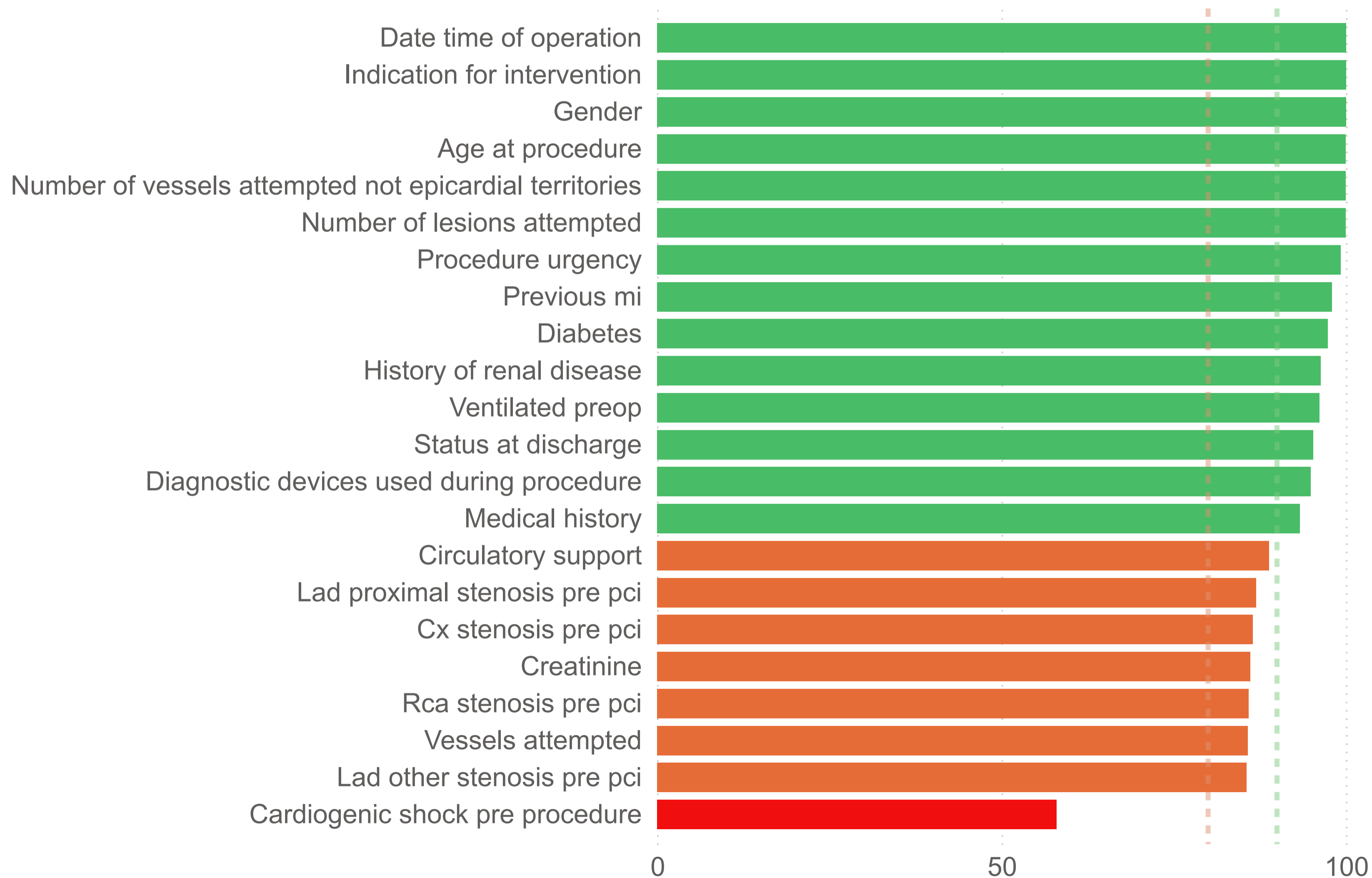
Data completeness is important. It helps to provide an accurate representation of clinical activity, procedural characteristics and risk factor profile at the centre level for individual PCI procedures performed. This allows for a better understanding of variations in practice amongst different units. Accurate capture of data for all cases allows for risk adjustment, enabling benchmarking of PCI outcomes at the individual operator and centre level which is a component of the Clinical Outcomes Publication (COP) program. A new risk score has been developed to replace the old BCIS risk score, but there is significant variation amongst centres for the capture of important clinical and procedural characteristics that are used to calculate risk. Several important risk factors are consistently captured in less than 80% of cases, with significant variation amongst centres. This may have implications for accurate benchmarking of services.

Individual centres / operators are encouraged to prioritise accurate / complete recording of data for PCI procedures that have been performed at the centre.

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

Hospital

Average percent completeness of data variables in the PCI registry (April - September 2025)



Patients aged under 65 were the largest group undergoing PCI

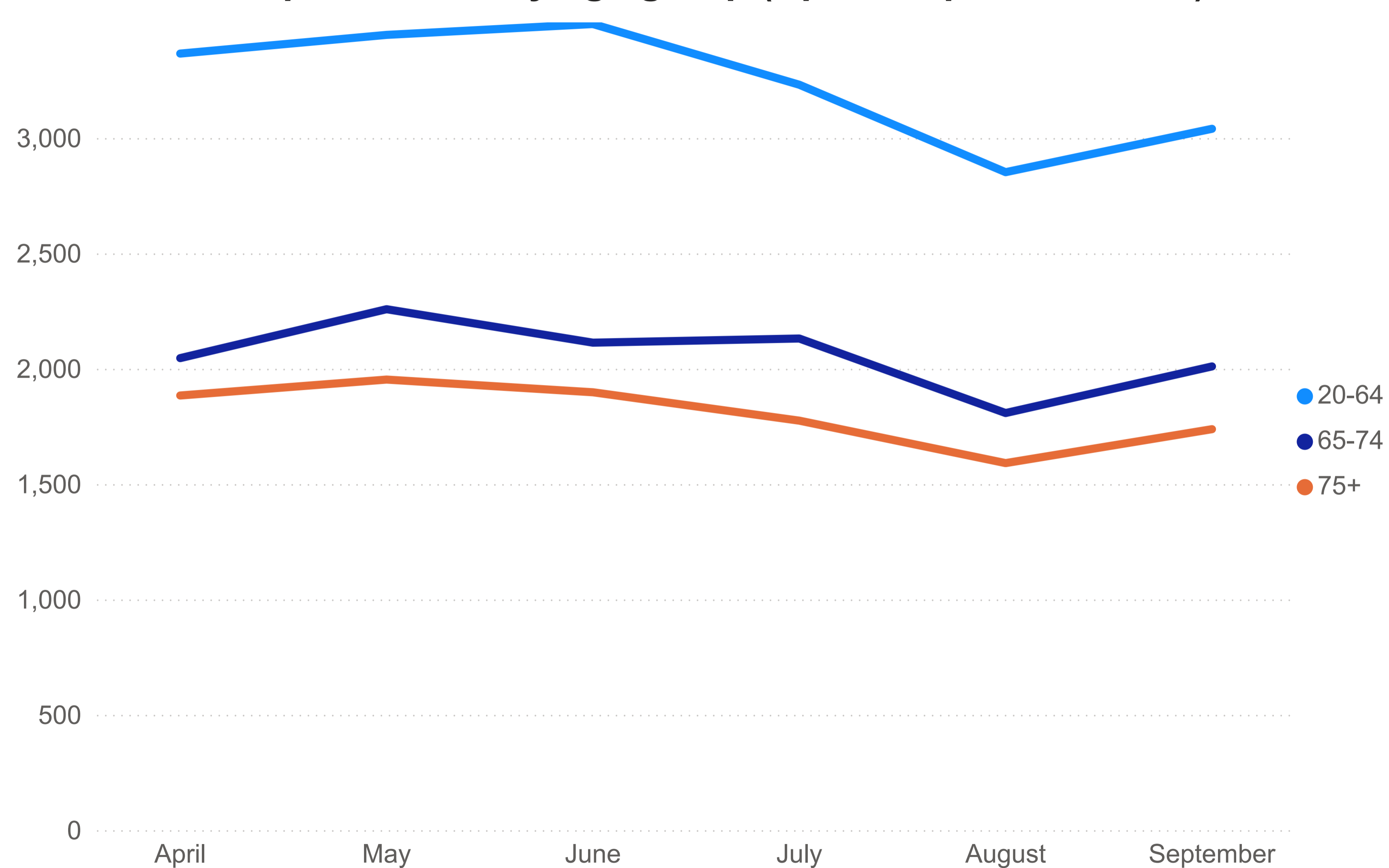


PCI procedures by age group (April - September 2025)

Patients aged up to 65 accounted for most PCI procedures in 2025/26.

Fewer procedures are carried out on patients in the 65-74 and 75+ age groups.

Patterns in activity over time have remained very similar across the different age groups.



Patient ethnicity remains unknown for 35% of PCI cases

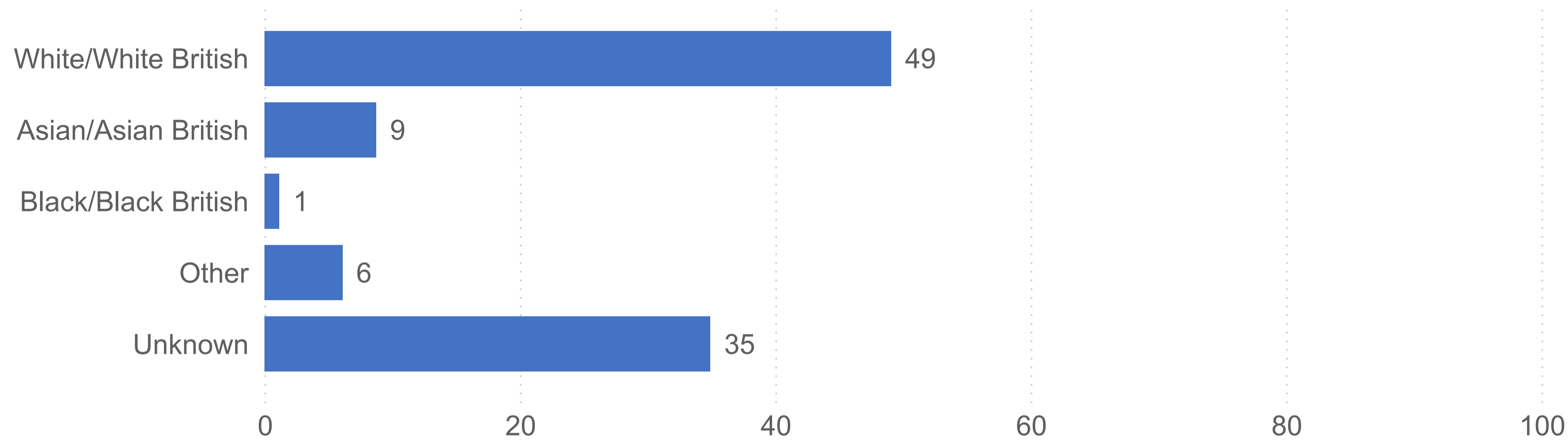


For patients where ethnicity data was provided, the breakdown in 2025/26 was:

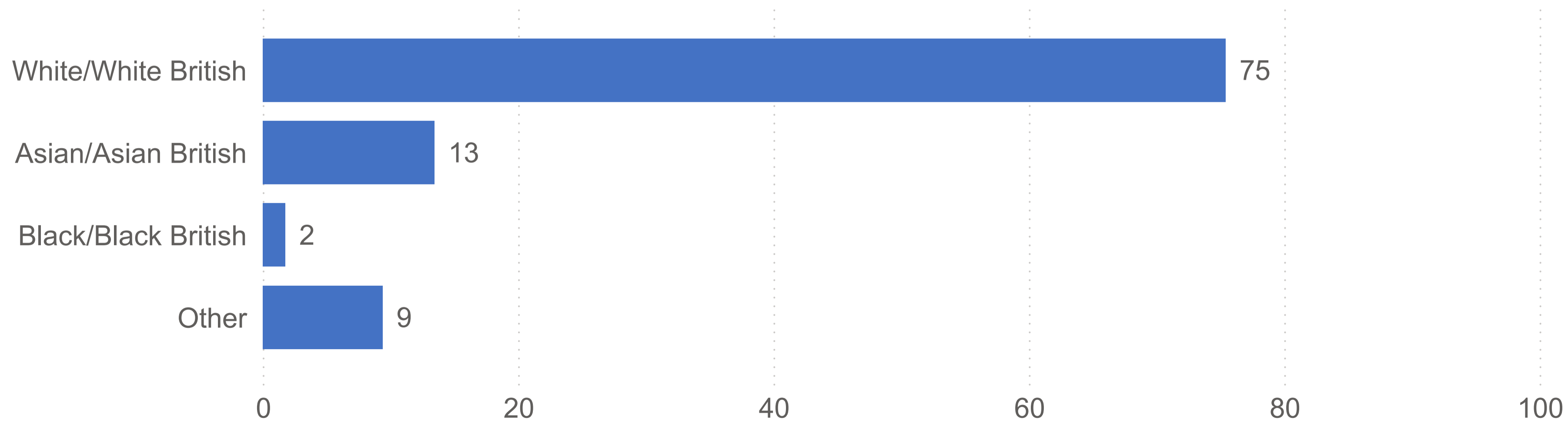
- **75% White British**
- **13% Asian / Asian British**
- **2% Black/ Black British.**

Ethnicity data was not submitted for over 35% of PCI patients. All hospitals should provide complete and accurate data to the audit.

Percentage of all PCI cases by ethnicity (April - September 2025)



Percentage ethnicity of PCI cases where ethnicity recorded (April - September 2025)



Many hospitals need to improve their recording of PCI patient ethnicity

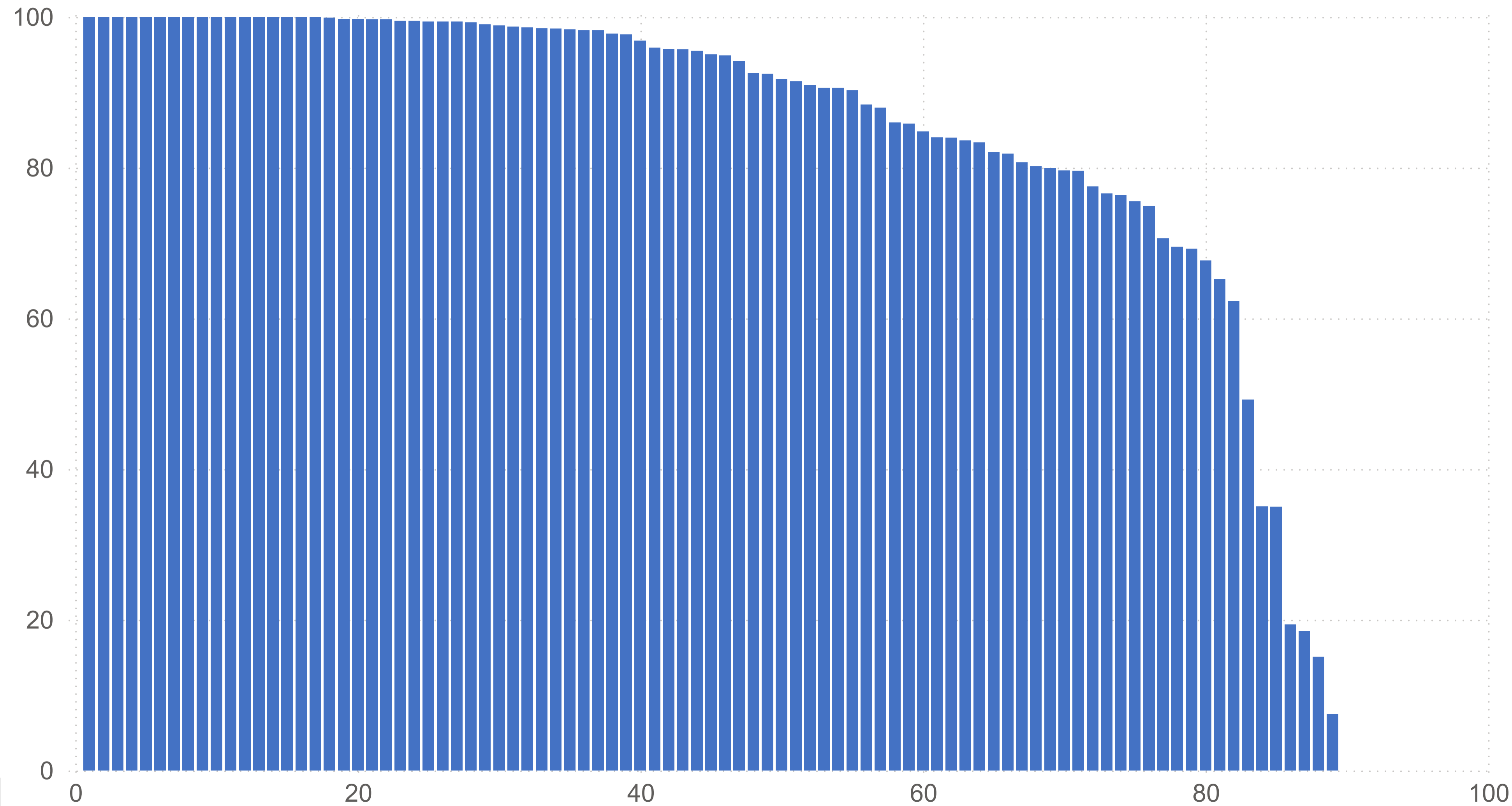


Percentage of PCI cases for which ethnicity of patient was recorded by hospital (April - September 2025)

Data completeness is an important quality metric as it allows for accurate trends to be analysed. As part of this, accurate recording of ethnicity data is important, to ensure that there are no disparities in either access to treatment or quality of treatment received on account of a patient's ethnicity.

In Q1/Q2 2025/26, ethnicity was reported for 65% of patients. Across hospitals, the rate varied from 0% to 100%. Ethnicity should be captured for at least 95% of patients.

Select a hospital below to see its specific data.



Select hospital

Rates of PCI varied significantly by geographical area



The maps show rates of each PCI procedure per 100,000 population across the 42 Integrated Care Boards (ICBs) in England, 7 University Health Boards (HBs) in Wales and 16 Cardiac Networks (CNs) in England and Wales. Darker = higher rate of cases.

In Q1/Q2 2025/26, there was significant variation in the number of cases per 100,000 population for each category of PCI.

This may relate to differences in:

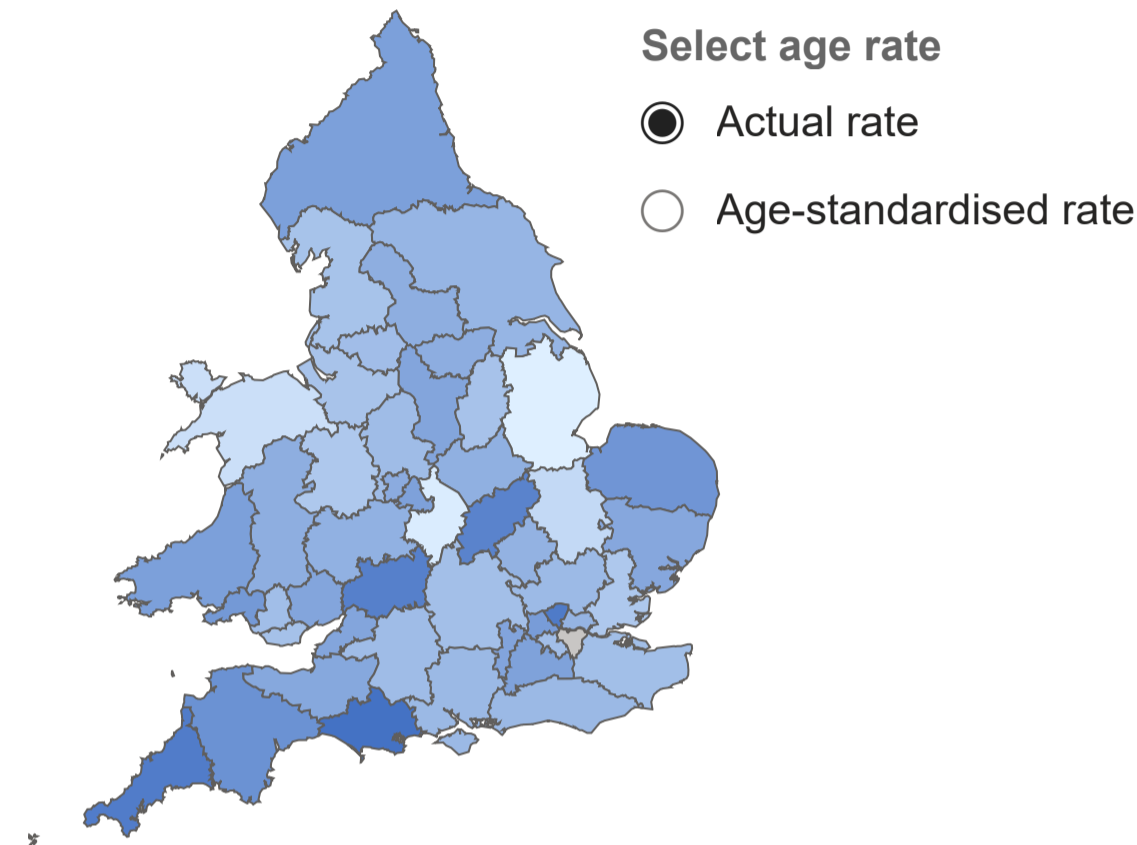
- risk factor profiles amongst different populations (such as differences in age, sex and cardiovascular risk factors)
- clinical practice, particularly the use of elective PCI for stable indications.

Age-standardised rates are also provided for fairer comparison between areas, given that age is a significant factor in requiring a PCI procedure.

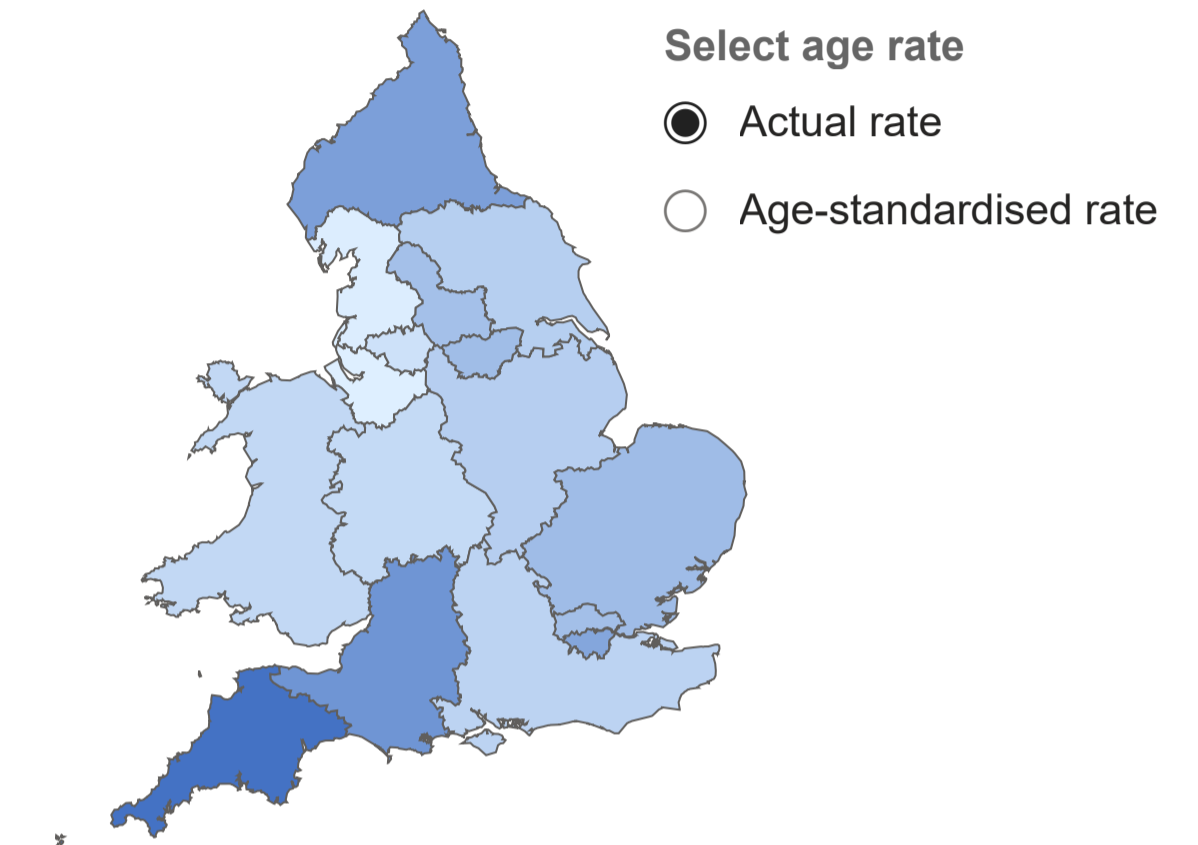
Select type of PCI below and age rate in the maps or hover over the maps to see specific data

Select type of PCI

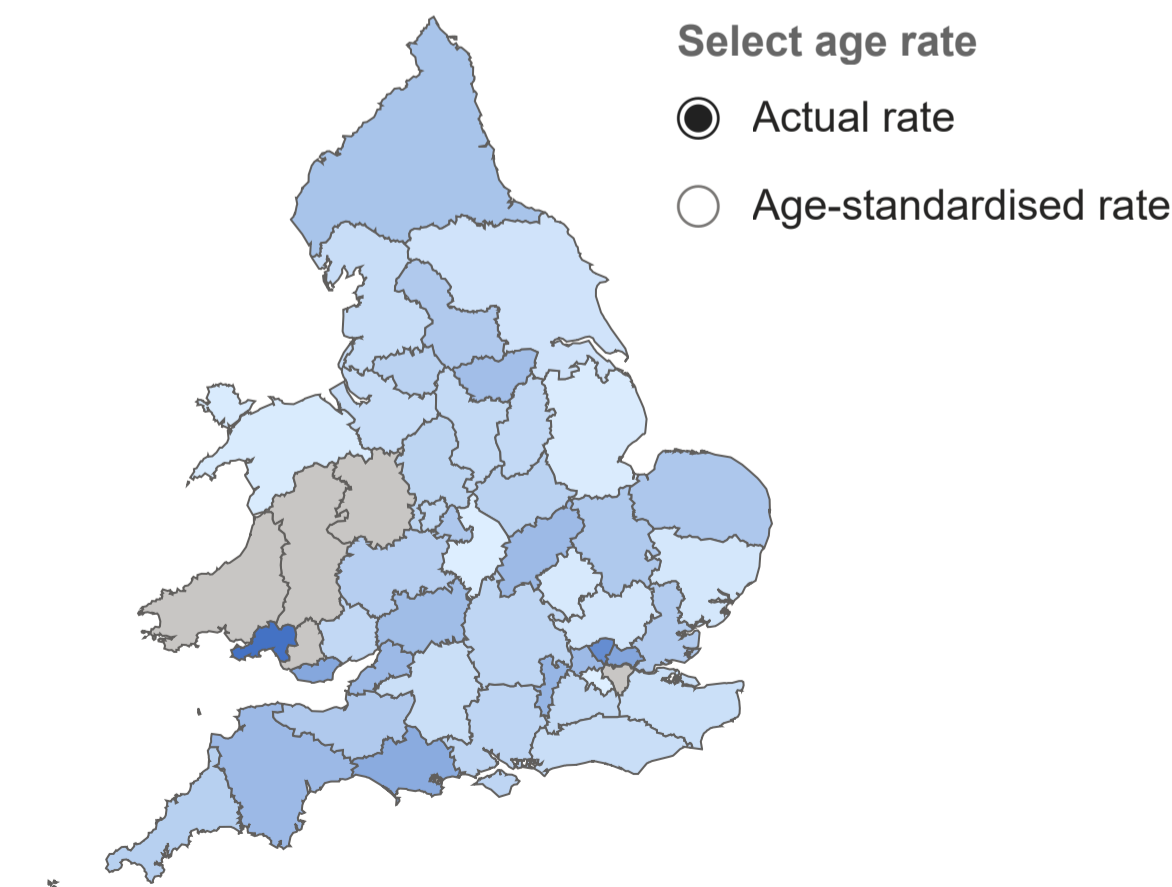
PCI cases per 100k population based on patient home location by ICB/HB (2025/26)



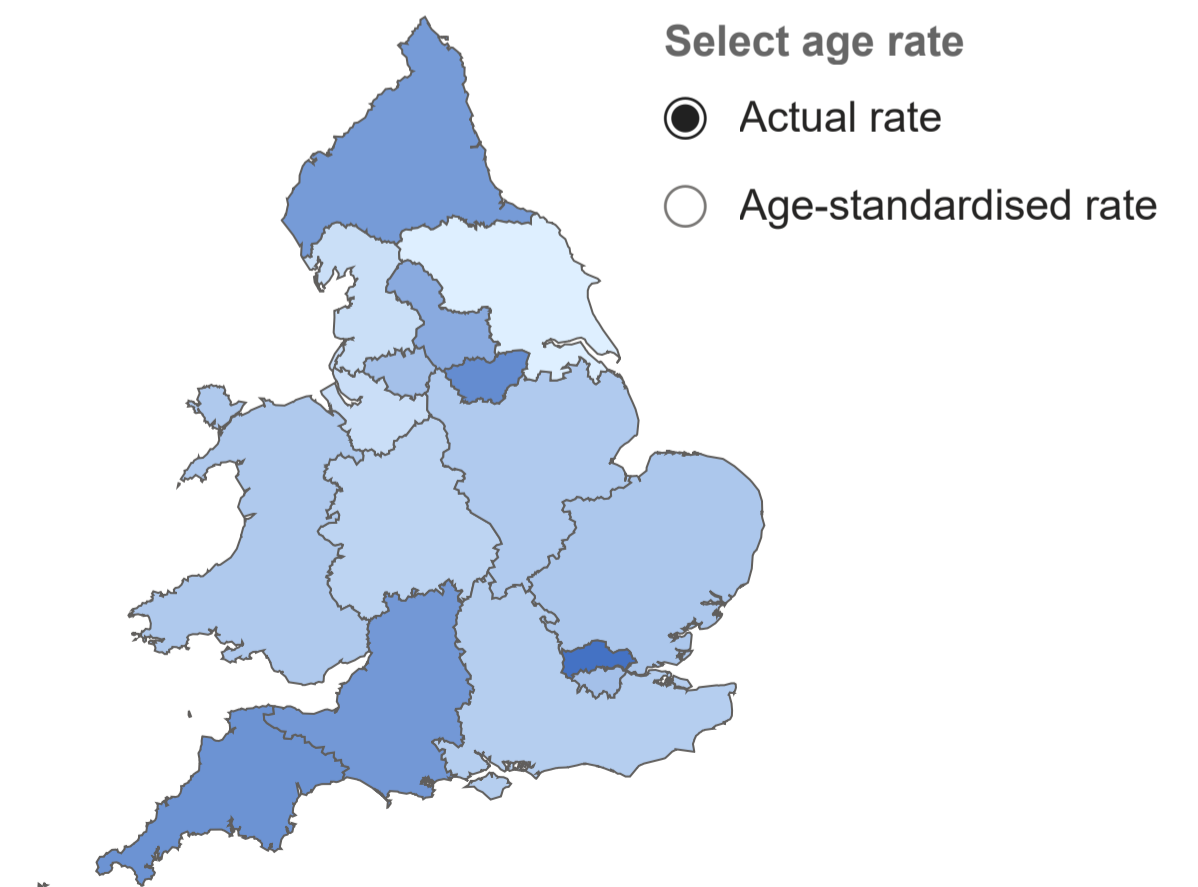
PCI cases per 100k population based on patient home location by Cardiac Network (2025/26)



PCI cases per 100k population based on hospital location by ICB/HB (2025/26)



PCI cases per 100k population based on hospital location by Cardiac Network (2025/26)



The times taken to treat higher-risk STEMI heart attacks with primary PCI are critical to patient outcomes



To achieve the best possible outcomes, after an initial call for help or self-presentation at hospital, patients must be rapidly assessed, and an ECG performed. Patients should then receive Primary PCI (PPCI) if a 'higher-risk' STEMI heart attack is confirmed.

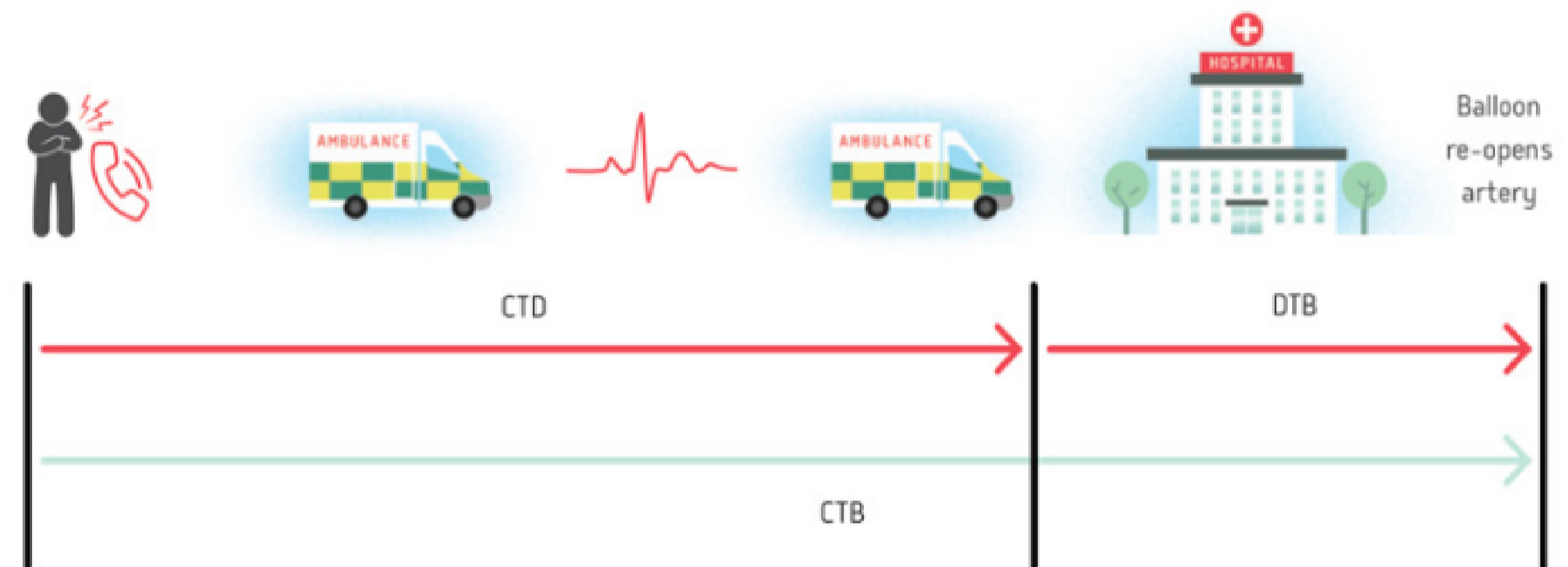
The Call-To-Door (CTD) time covers the period when the patient is brought to hospital by the ambulance services.

The Door-To-Balloon (DTB) time measures how long it takes the hospital to admit a patient and start PPCI treatment. Hospitals not set up to deliver PPCI transfer patients directly to the catheter laboratory of the nearest PCI Centre able to do this.

For patients who present themselves to hospital (usually to the A&E department), the DTB period covers the arrival at hospital to the start of treatment.

Taken together, the CTD and DTB times comprise the overall Call-To-Balloon (CTB) time.

Emergency time periods for the treatment of high-risk STEMI heart attack patients



CTD = Call-To-Door time

From patient 999 call to arrival at hospital

DTB = Door-To-Balloon time

From arrival at hospital to re-opening of artery using reperfusion primary PCI therapy

CTB = Call-To-Balloon time

From patient 999 call to re-opening of artery using reperfusion primary PCI therapy

Many patients with STEMI were not treated within target times



Primary PCI (PPCI) is the gold standard treatment for higher-risk ST-elevation myocardial infarction (STEMI) heart attacks. Delays in treatment lead to increased damage to the heart and greater risk of heart failure and death.

Guidelines recommend PPCI treatment:

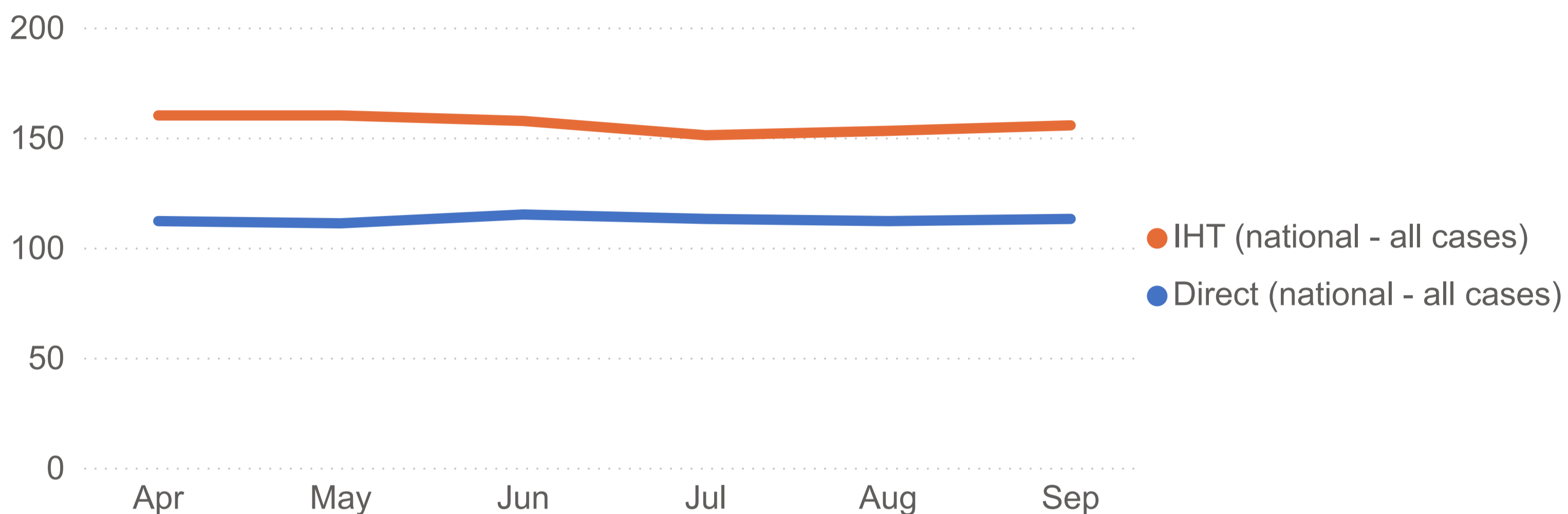
- within 90 minutes of arrival of the patient at the angioplasty centre (the Door-To-Balloon or DTB time)
- within 150 minutes of a patient's call for help (the Call-To-Balloon or CTB time).

Patients are treated much faster if taken 'direct' to a PCI centre, but some require 'inter-hospital transfer' (IHT) from another hospital.

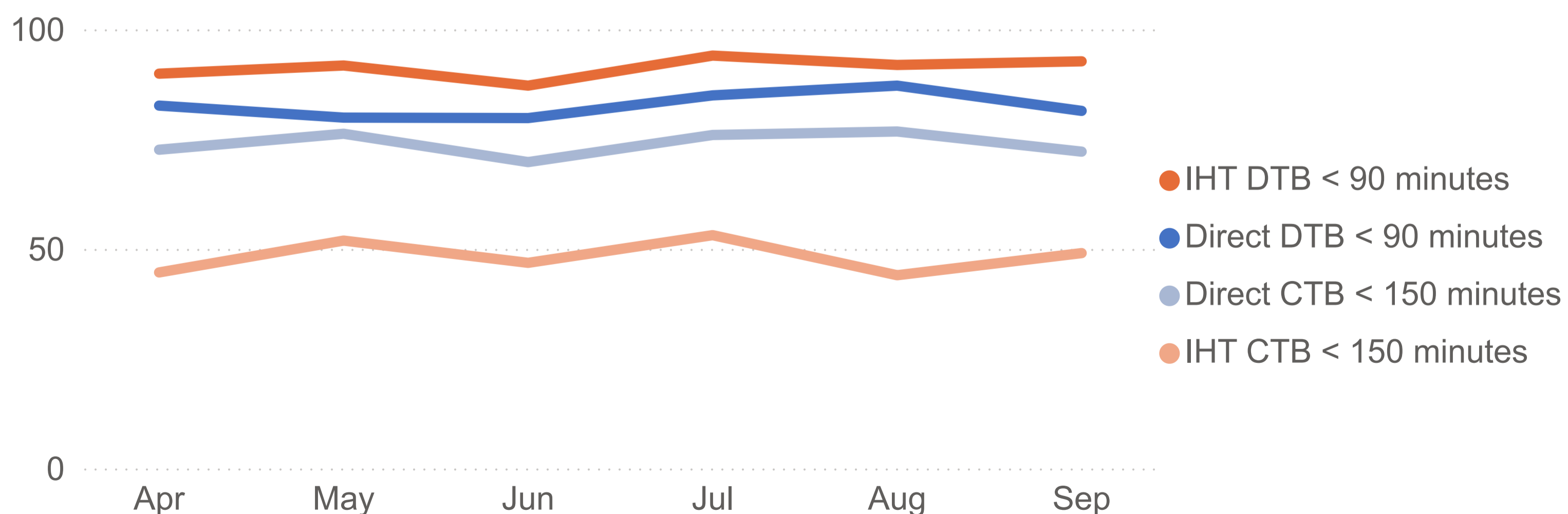
The median CTB times in Q1/Q2 2025/26 for both direct and IHT cases were slightly lower than reported in 2024/25, more so for IHT cases. This is reassuring and reflects changes in NHS England policy prioritising IHT with a category 2 ambulance transfer. CTB times remain much longer for IHT cases (156 mins versus 113 mins for direct admissions).

A significant proportion of patients were still not within guideline times. While more than 80% of direct and 90% of IHT cases met the DTB target time, the proportions treated within the CTB target are much lower (74% for direct and 48% for IHT).

Median CTB time (minutes) for PPCI cases (April - September 2025)



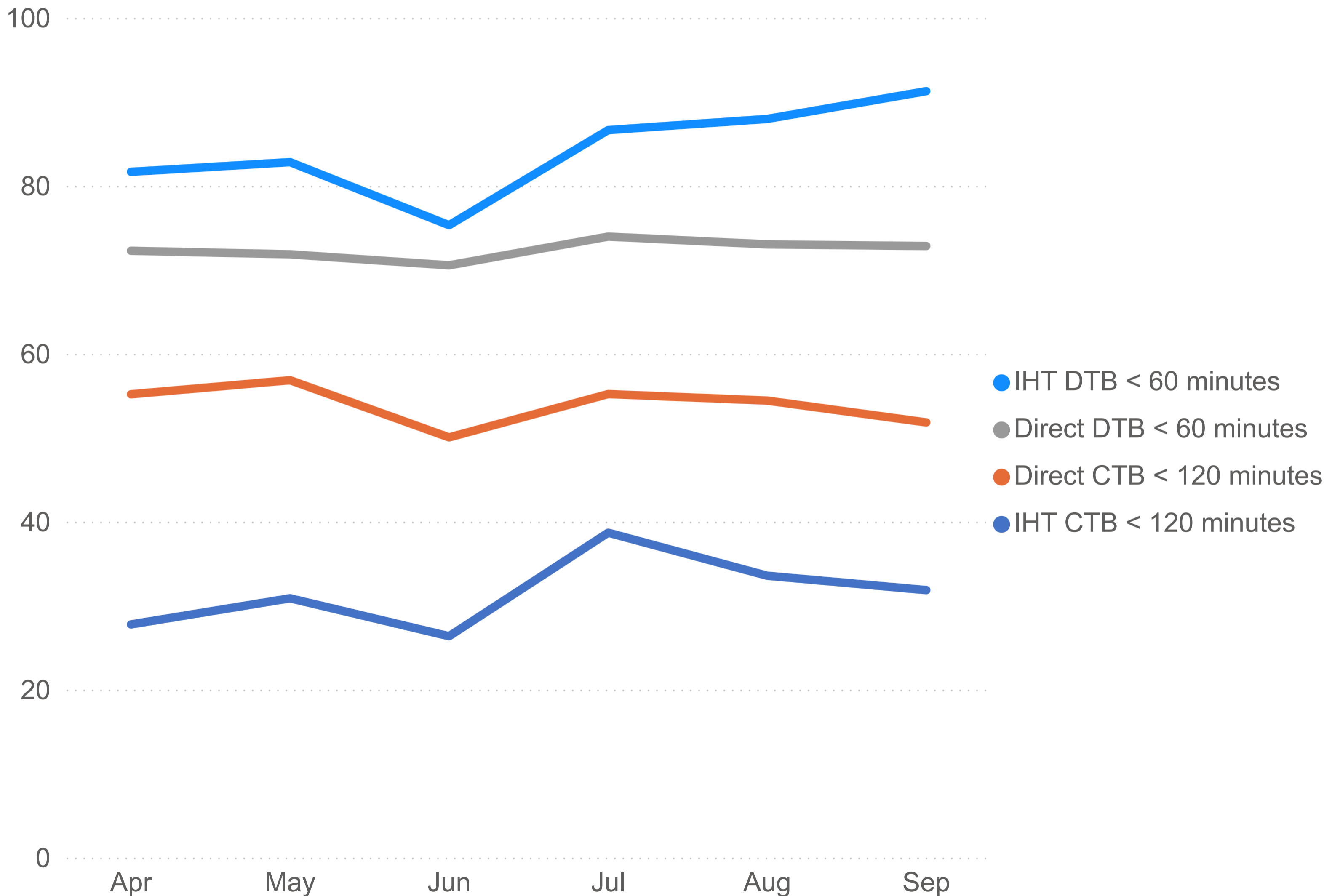
Percentage of PPCI cases meeting CTB and DTB targets (April - September 2025)



Patients requiring inter-hospital transfer were less likely to receive timely PCI but more were treated within DTB target times once they arrived at the PPCI centre



Percentage of cases meeting tighter CTB and DTB targets (April - September 2025)



Although the original treatment time targets were set to maximise the number of patients treated within 150 minutes of a call for help (CTB <150 mins), and within 90 minutes of arriving at hospital (DTB <90 mins), the ideal is for patients to undergo the PPCI procedure within 120 minutes of a call for help or 60 minutes of arrival at a PCI-capable hospital.

Again, significantly fewer PCI patients requiring inter-hospital transfer (IHT) achieved the tighter CTB time of 120 minutes in Q1/Q2 2025/26 than if admitted directly to a PCI-capable hospital (31% compared to 54%).

Because the catheter laboratory teams have been able to prepare for the arrival of an IHT, proportionately more of these cases are treated within the DTB tighter target time (84% compared to 72% for direct admissions).

Call-To-Balloon (CTB) times varied between Integrated Care Boards, Health Boards, and between Cardiac Networks



The maps show the median Call-To-Balloon (CTB) times for:

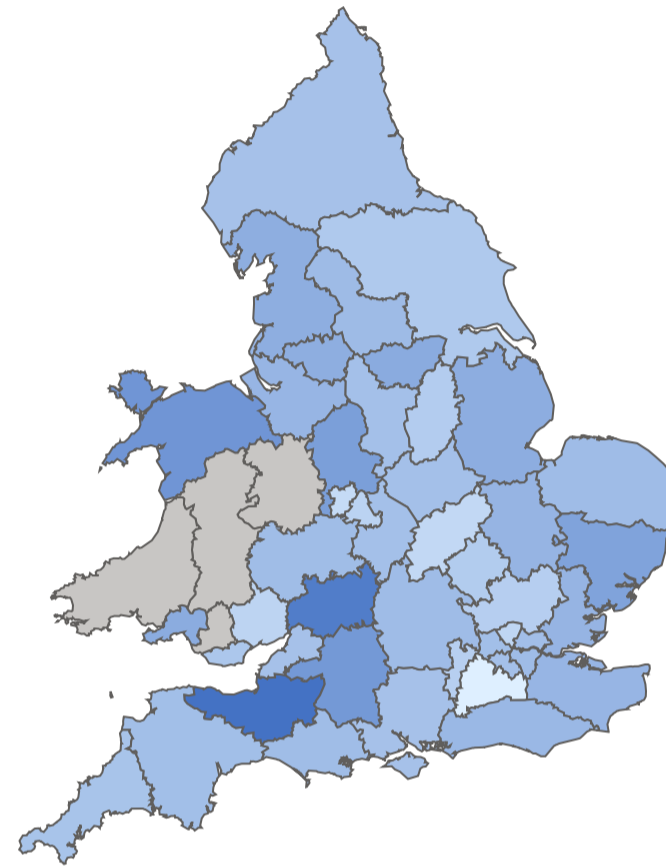
- the 42 Integrated Care Boards (ICBs) in England and 7 Welsh University Health Boards (HBs) (commissioning organisations)
- the 16 Cardiac Networks (operational delivery networks) in England and Wales.

Lighter shades = better performance (i.e. lower median CTB treatment times).

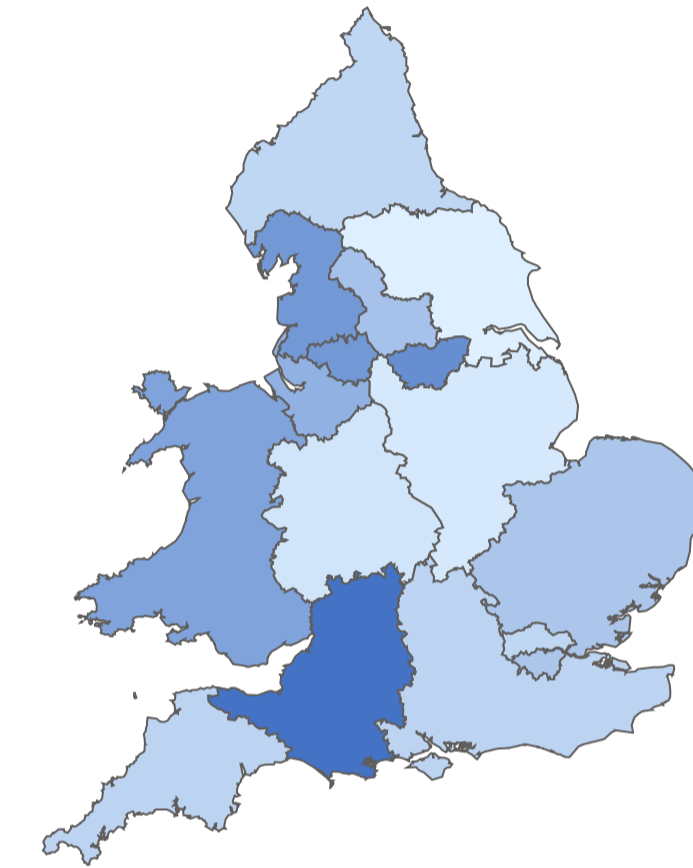
Select an area in the ICB map to see its specific data in the lower graph.

Note: The ICB median is based on the average of the hospital medians in that area. More information on CTB and DTB times can be found in the 'heart attack' audit report.

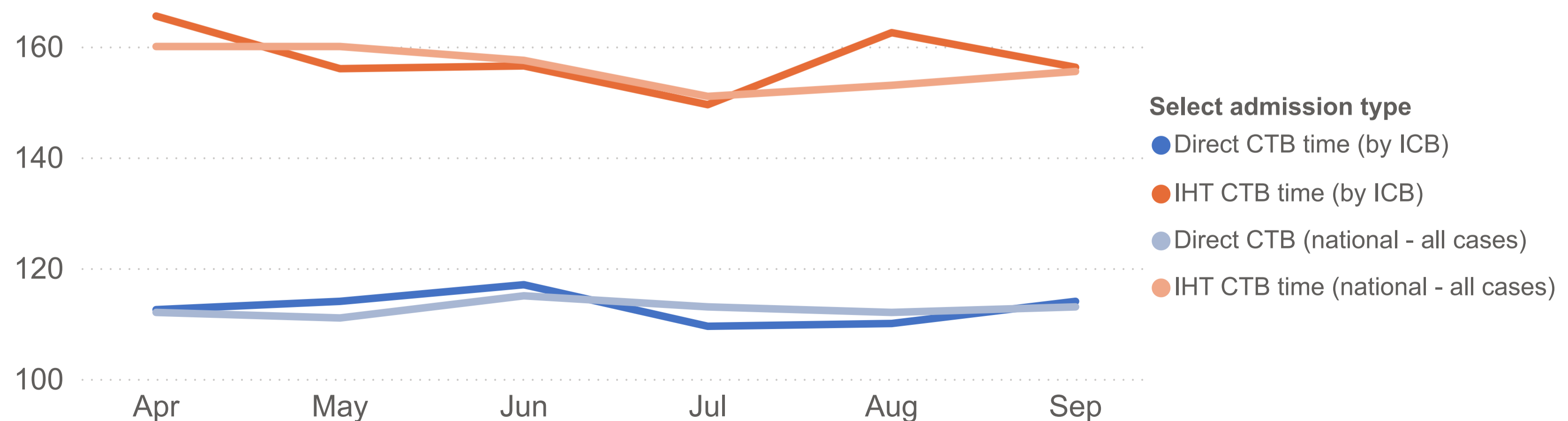
Median CTB times for PPCI based on hospital location by ICB/HB (April - September 2025)



Median CTB times for PPCI based on hospital location by Cardiac Network (April - September 2025)



Median PPCI CTB times (minutes) by ICB (April - September 2025)



There was substantial variation in Call-To-Balloon times between hospitals



There is considerable variation in the median Call-To-Balloon (CTB) time between hospitals offering a PPCI service to patients with STEMI. The best-performing hospitals deliver PCI in half the time of the worst-performing.

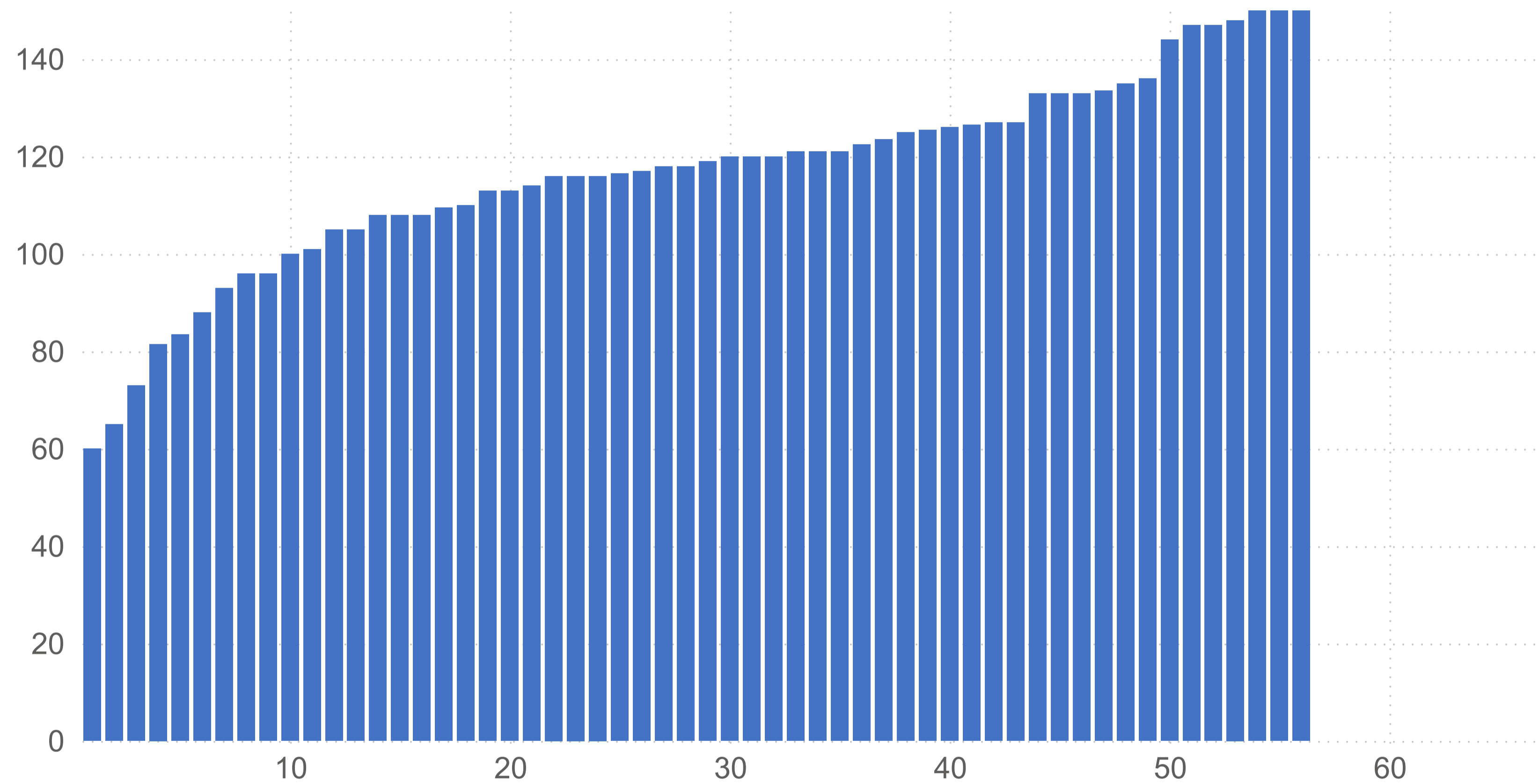
Hospitals can optimise their own care pathways to reduce the Door-To-Balloon (DTB) component. Work at a regional level is required to reduce the Call-To-Door (CTD) component.

For patients who present to a hospital without immediate PCI services, rapid diagnosis and inter-hospital transfer (IHT) of the patient to the PPCI service is essential.

Select a hospital or cardiac network to see its specific data.

Note: The times shown are for all patients, regardless of whether they arrive directly to the hospital in question, or are transferred from another hospital.

Median CTB times (minutes) for PPCI by hospital (April - September 2025)



Select hospital

Select Cardiac Network

Use of intracoronary imaging for complex PCI procedures continued to increase



Complications during or following a PCI procedure (e.g. stent thrombosis or restenosis), may result in an adverse outcome (e.g. a heart attack) or require a further intervention, such as another PCI or a coronary artery bypass grafting (CABG).

The risk of complications is minimised by ensuring the stent is well-expanded and well-apposed to the vessel wall, the vessel is stented into a healthy segment, and there are no residual tears (dissections) left at the stent edge.

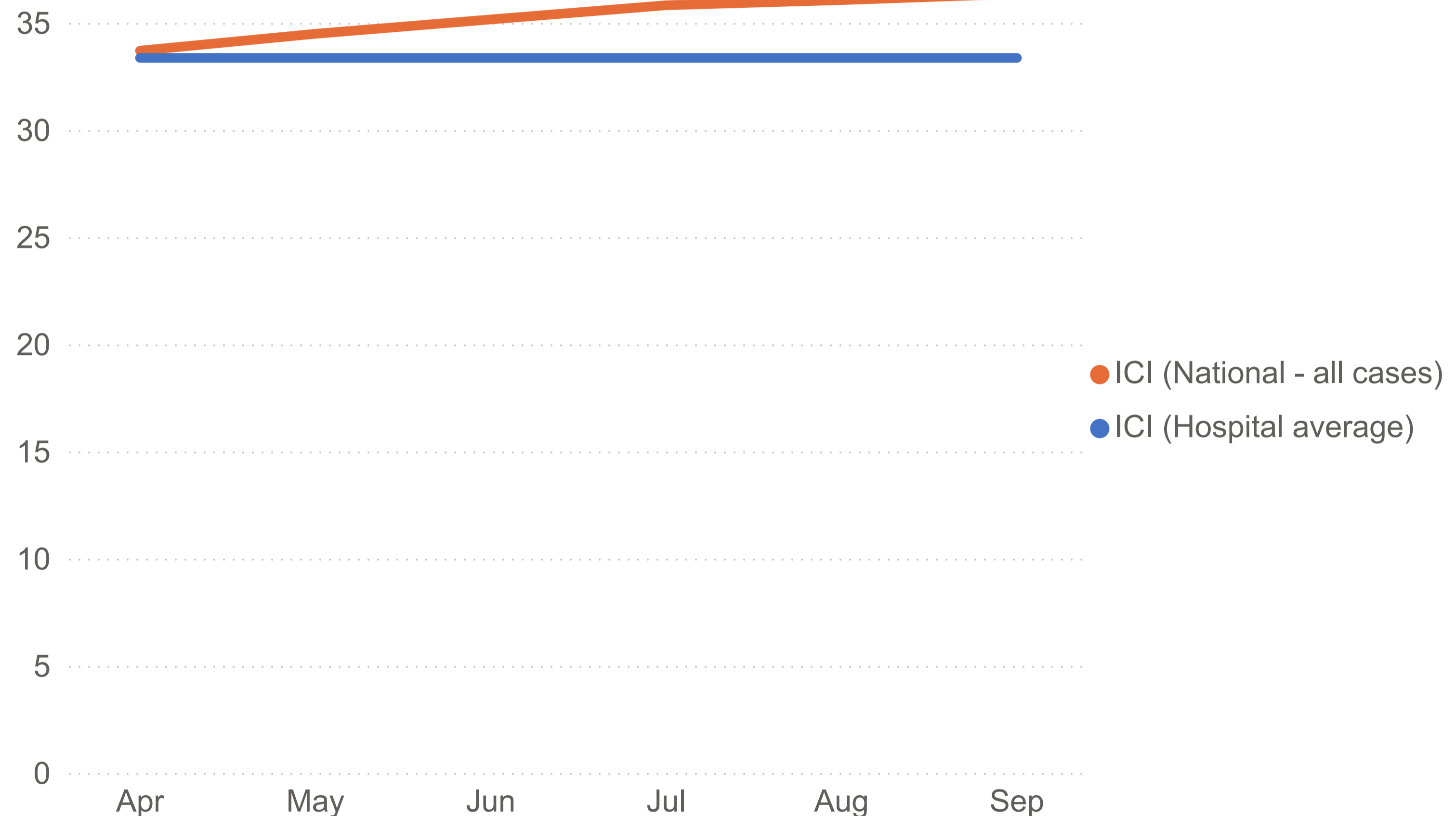
Intracoronary imaging (ICI) provides information on how well the stent has expanded, whether the stent struts are in contact with the wall and whether the stent has been landed in healthy vessel. This is undertaken with either ultrasound (intravascular ultrasound - IVUS) or laser (optical coherence tomography - OCT).

There is growing recognition that such imaging is particularly important for complex PCI lesions where the absolute risk of complications is much greater although trial data has been inconsistent.

Select a hospital to see its data.

Note: The ICI (Hospital average) line shows the average of the hospital averages or the trend for a selected hospital.

Percentage of complex PCI cases using intracoronary imaging (April - September 2025)



Select hospital

Intracoronary imaging during complex PCI varied substantially between Integrated Care Boards, Health Boards, and between Cardiac Networks



Percentage use of intracoronary imaging in complex PCI by ICB/HB (April - September 2025)

Percentage use of intracoronary imaging in complex PCI by Cardiac Network (April - September 2025)

The maps show use of intracoronary imaging (ICI) during complex percutaneous coronary intervention (PCI) in Q1/Q2 2025/26 for:

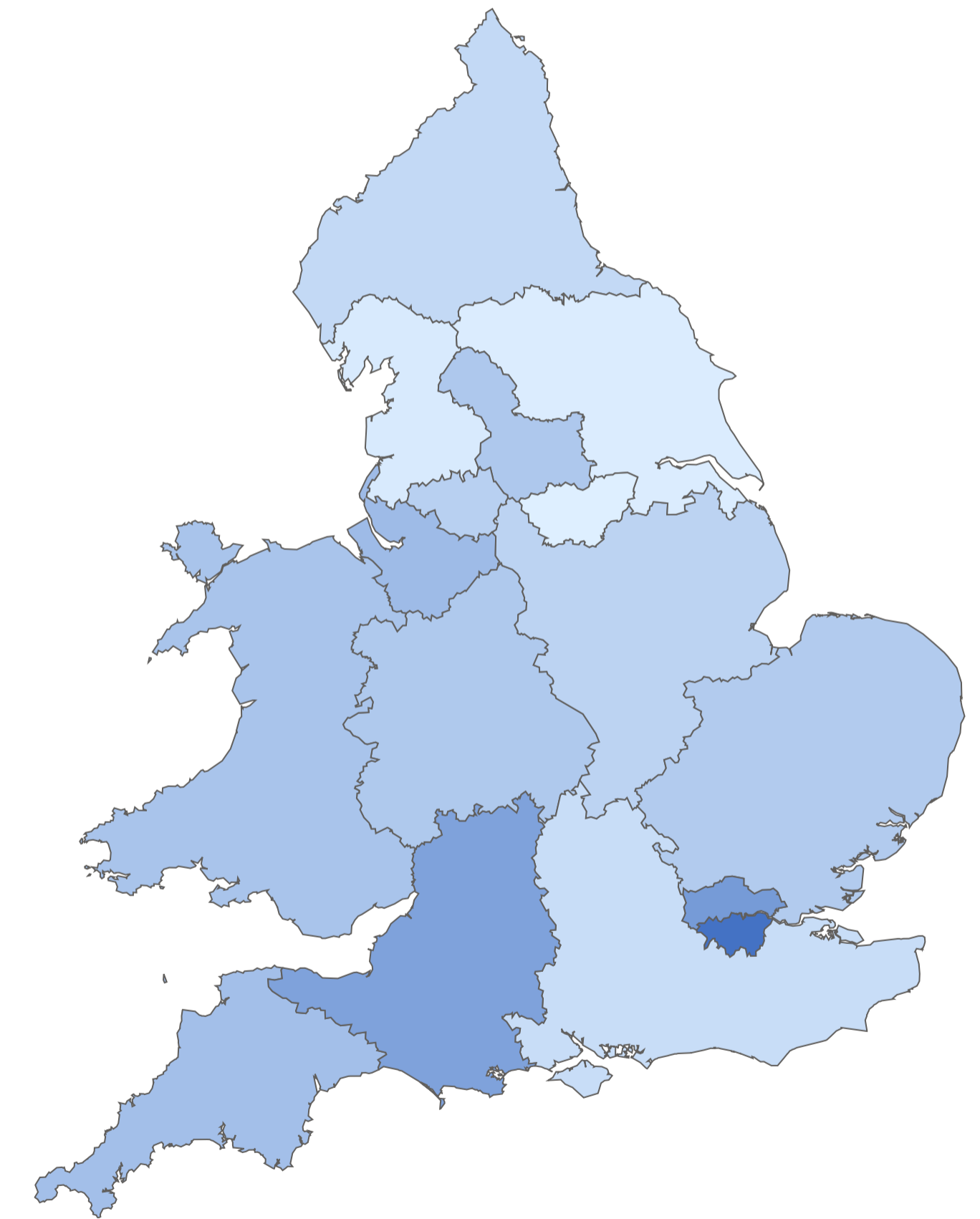
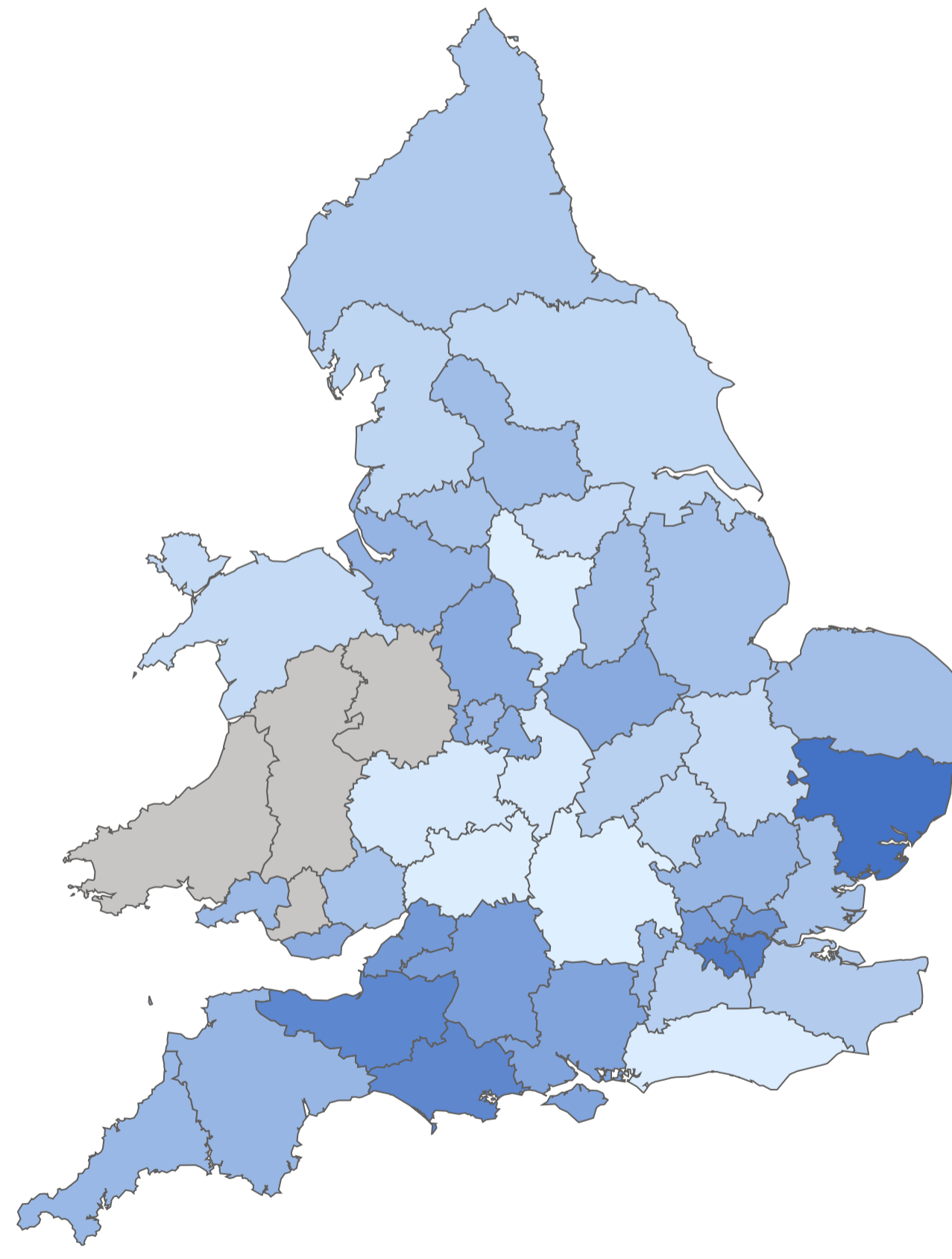
- the 42 Integrated Health Boards (ICBs) in England and 7 University Health Boards (HBs) in Wales (commissioning organisations)
- the 16 Cardiac Networks in England and Wales (service delivery networks).

Darker shades = a higher rate of use of ICI for complex PCI.

There was a significant variation between regions in the use of ICI for these complex cases (from 10% to 69% for ICB/HBs and from 20% to 63% for CNs).

Hover over the maps to see specific data.

Note: Data are based on the location of the hospital rather than patient home location.



Intracoronary imaging use for complex cases varied between hospitals



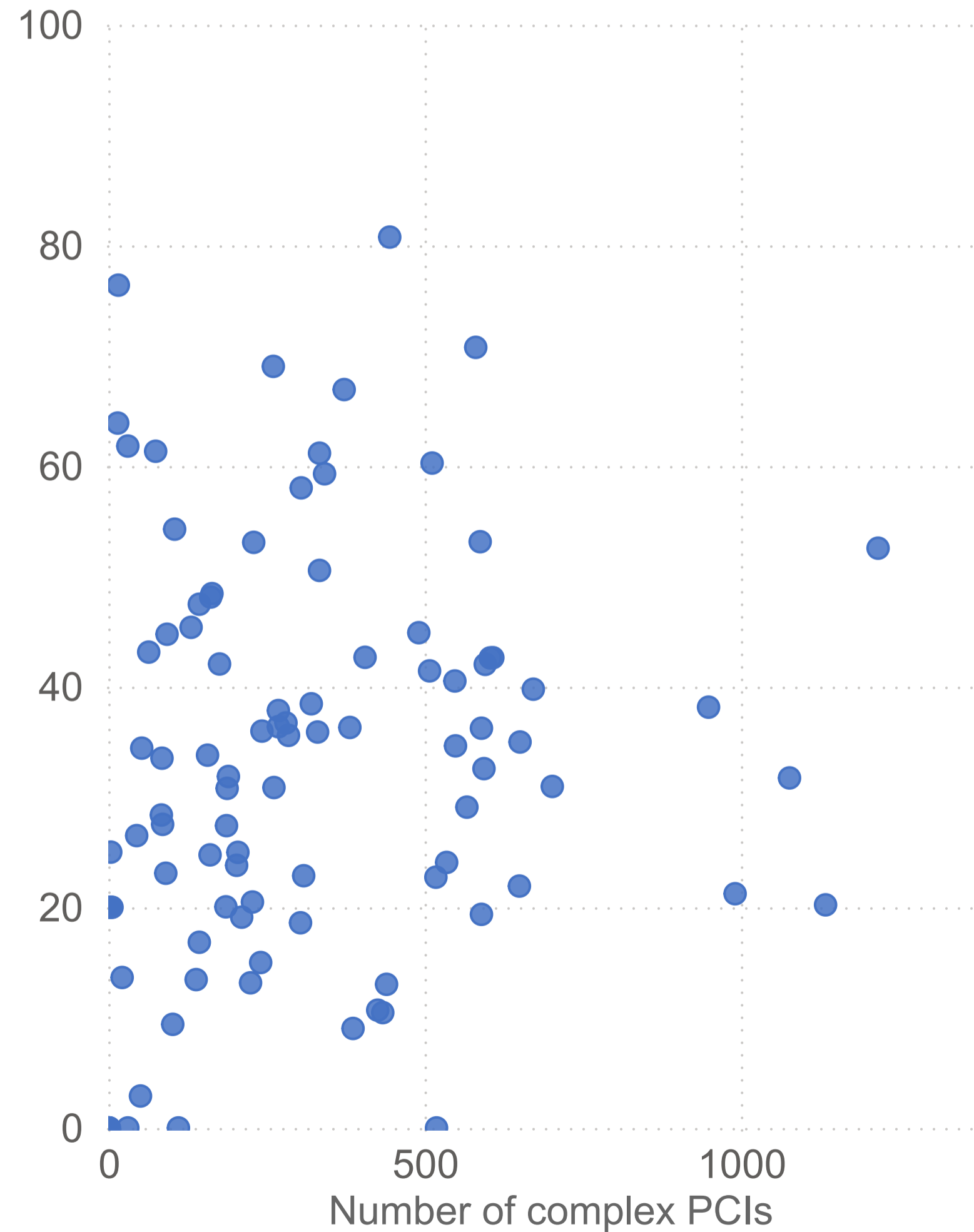
There was huge variation in the use of intracoronary imaging for complex PCI between hospitals (from 18% to 60% for those undertaking more than 200 complex PCI procedures).

Select a hospital below or hover over a dot in the scatter plot to see specific data.

Note: The ICI (Hospital average) line shows the average of the hospital averages or the trend for a selected hospital.

Select hospital

Percentage use of intracoronary imaging during complex PCI by hospital (April - September 2025)



There was no further increase in the use of intracoronary imaging in PCI for left main stem (LMS) lesions



The left main stem (LMS) coronary artery supplies blood to the left ventricle and atrium. Abrupt closure or blockage of the LMS is almost always fatal.

The technique for treating the LMS depends on the distribution, nature and severity of the coronary disease within the LMS. This can be better determined by intracoronary imaging (ICI) than angiography alone. Moreover, ICI enables optimal evaluation of the results of the percutaneous coronary intervention (PCI) to treat the LMS.

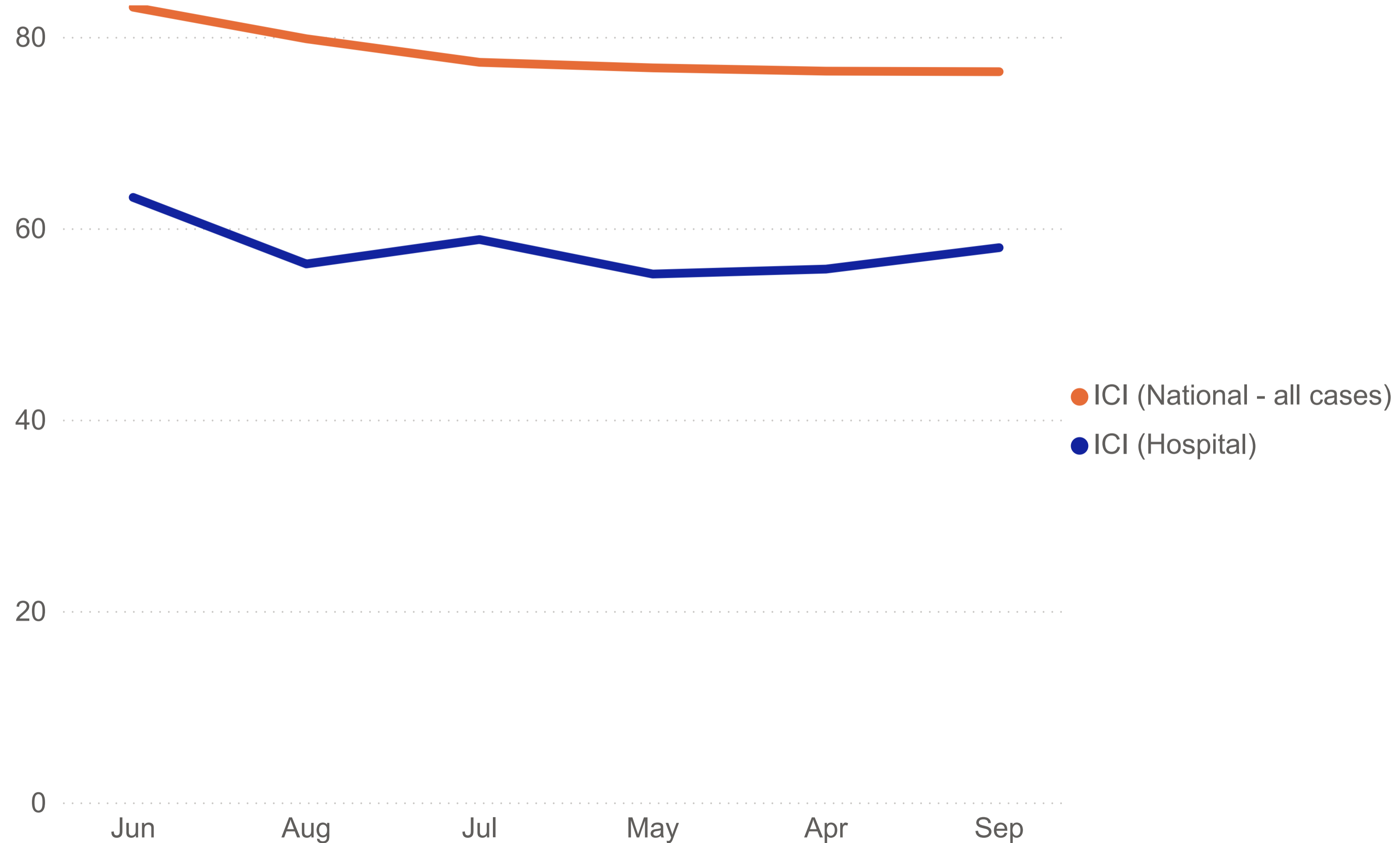
The rate of use of ICI in this setting has increased over time but there was no further increase seen in Q1/Q2 2025/26.

Select a hospital below to see specific data.

Note: The ICI (Hospital) line shows the average of the hospital averages or the trend for a selected hospital.

Select hospital

Percentage use of intracoronary imaging for LMS PCI (April - September 2025)



Intracoronary imaging during left main stem PCI varied substantially between Integrated Care Boards, Health Boards, and between Cardiac Networks



This slide shows the rate of use of intracoronary imaging (ICI) during left main stem (LMS) percutaneous coronary intervention (PCI) for:

- the 42 Integrated Health Boards (ICBs) in England and 7 University Health Boards (HBs) in Wales (commissioning organisations)
- the 16 Cardiac Networks in England and Wales (service delivery networks).

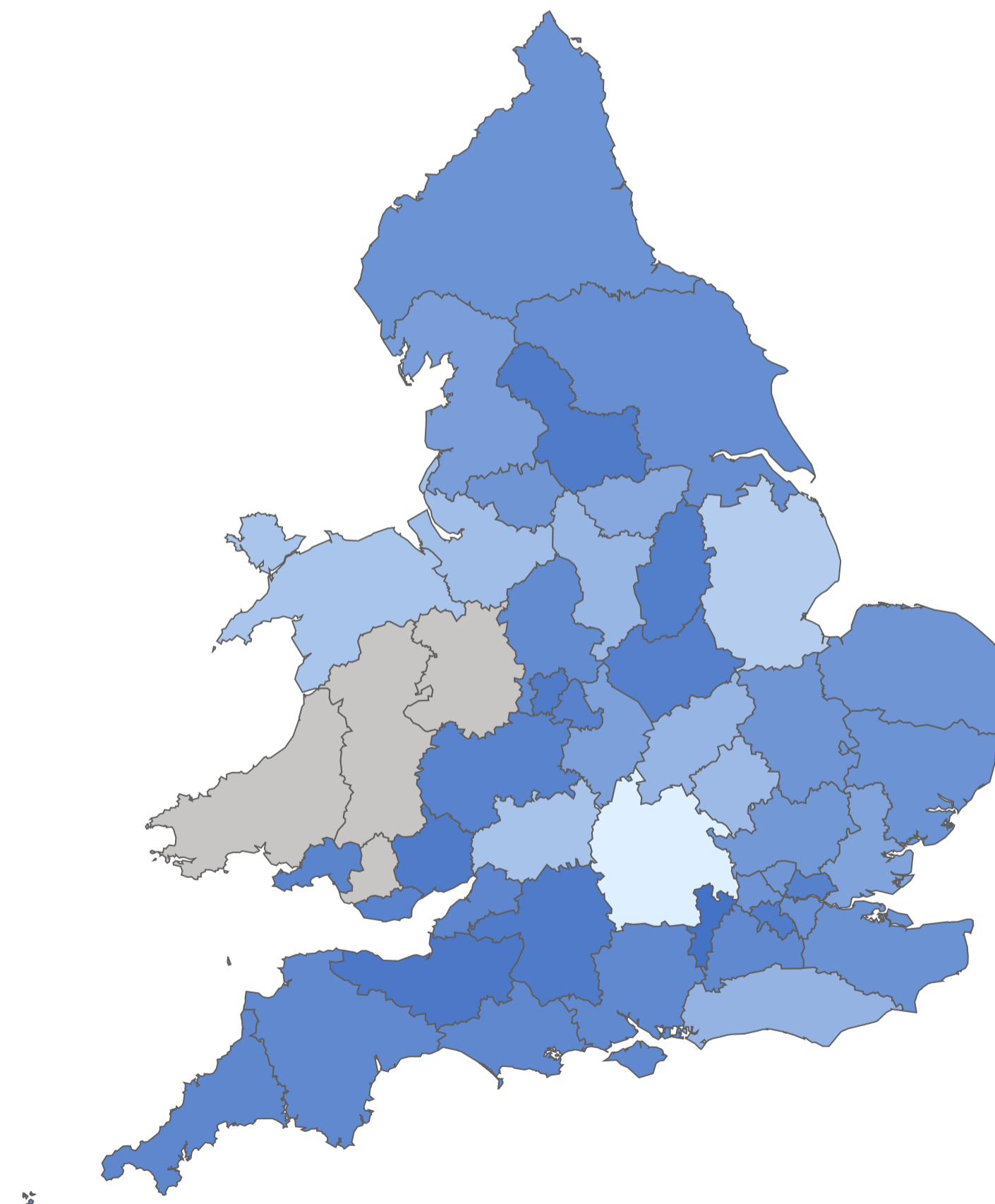
Darker shades = a higher rate of use.

The use of ICI during LMS PCI varied from 99% in hospitals in the NHS Frimley ICB to only 8% in NHS Buckinghamshire, Oxfordshire and Berkshire West ICB. Hospitals in Wales average 87% use.

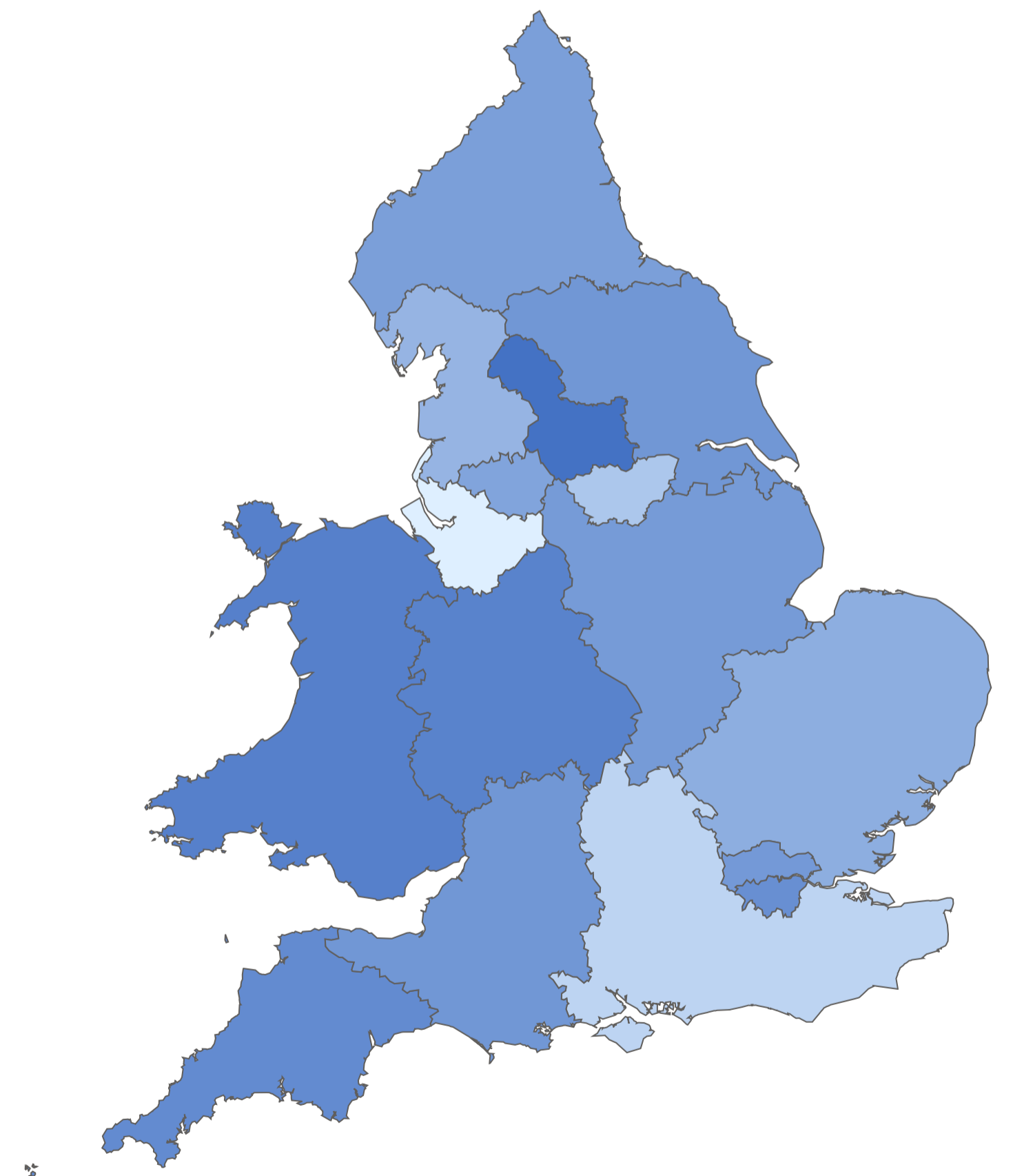
Hover over the maps to see specific data.

Note: Area data are based on the location of the hospital rather than the patient home location.

Percentage use of intracoronary imaging during LMS PCI by ICB/HB (April - September 2025)



Percentage use of intracoronary imaging during LMS PCI by Cardiac Network (April - September 2025)



Intracoronary imaging for LMS PCI varied substantially between hospitals



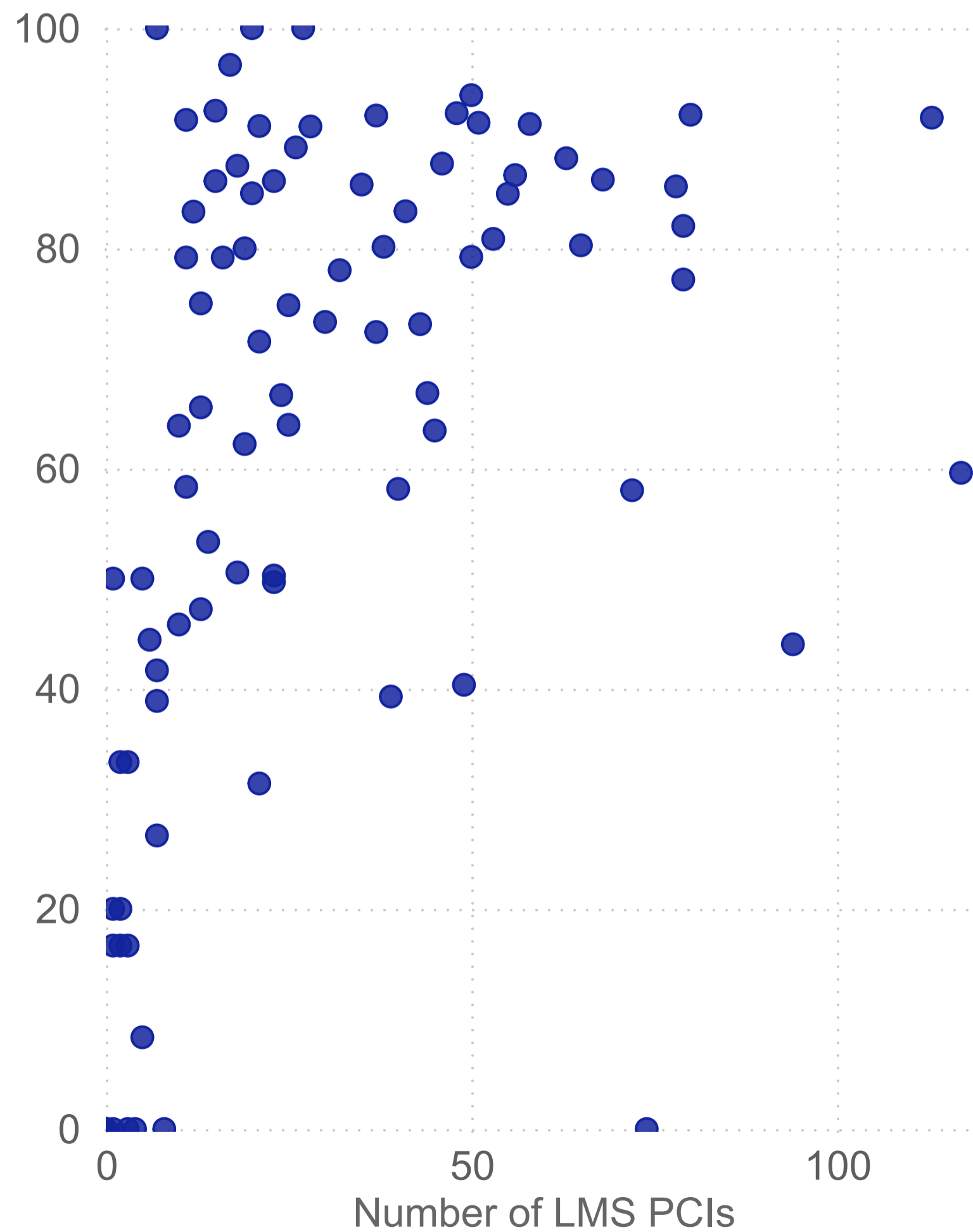
There was huge variation in the use of intracoronary imaging for LMS PCI between hospitals (from 0% to 100% for those undertaking more than 50 LMS PCI procedures).

Select a hospital below to see specific data.

Note: The ICI (Hospital) line shows the average of the hospital averages or the trend for a selected hospital.

Select hospital

Percentage use of intracoronary imaging for LMS PCI by hospital (April - September 2025)



The prescription of the antiplatelet drugs prasugrel and ticagrelor, in PCI for acute coronary syndromes, did not increase between April and September 2025



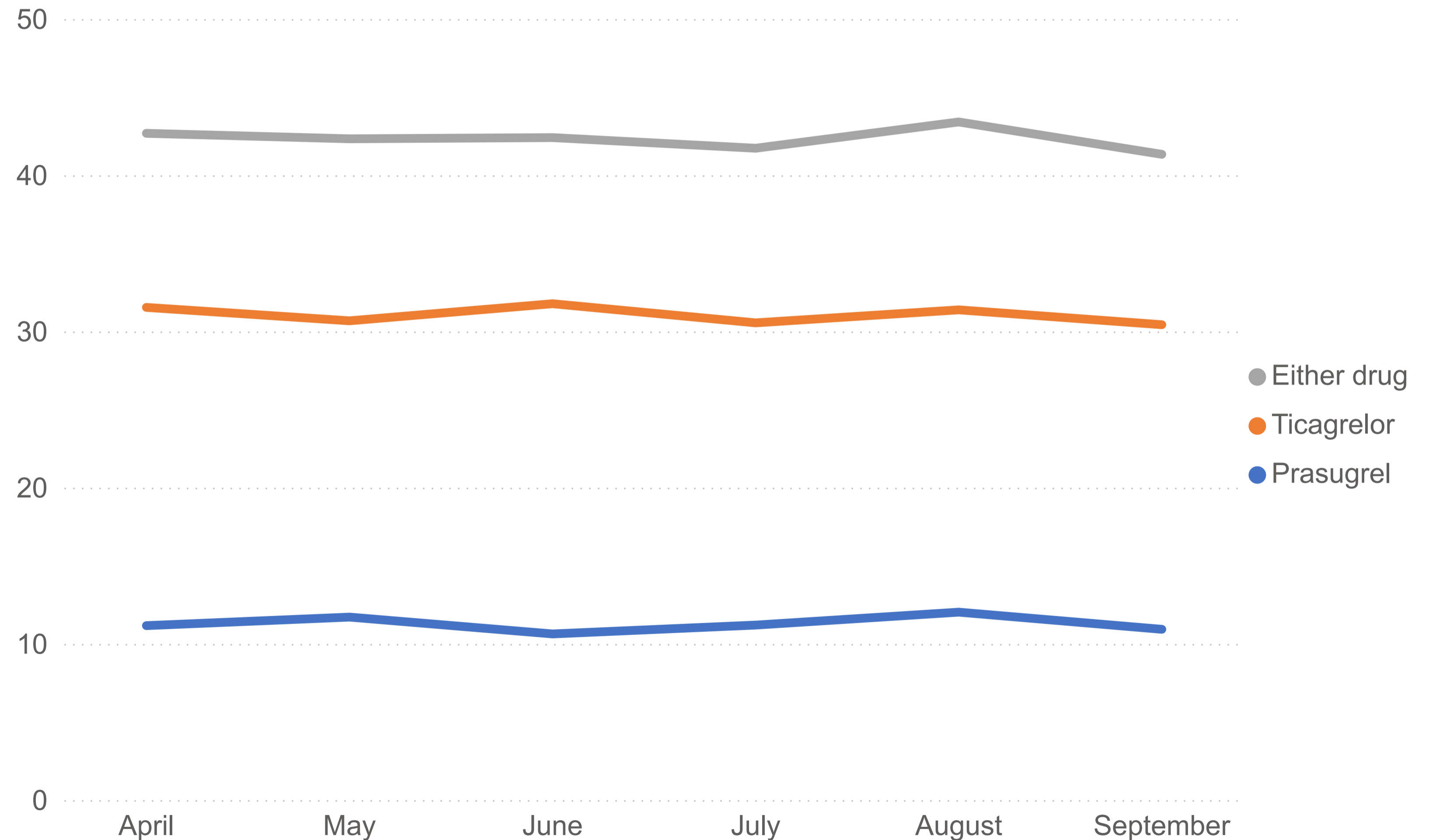
Antiplatelet drugs are used in acute coronary syndromes (ACS) and following percutaneous coronary intervention (PCI) to reduce the risks of further cardiovascular events.

Two different types of antiplatelet are used, aspirin and a P2Y12 inhibitor. Traditionally the P2Y12 inhibitor that has been used is clopidogrel, but recent trials have shown that prasugrel and ticagrelor are associated with better outcomes. One trial has shown better outcomes with prasugrel compared to ticagrelor. For more details, see references.

Current European Society of Cardiology [guidelines](#) recommend that prasugrel or ticagrelor are used in preference to clopidogrel in patients undergoing PCI in whom there are no contra-indications, and prasugrel in preference to ticagrelor.

The use of either ticagrelor or prasugrel after PCI for ACS has not increased in Q1/Q2 2025/26. There has been no further increase in the prescription of prasugrel.

Percentage use of prasugrel and ticagrelor for PCI in acute coronary syndromes (April - September 2025)



There was significant variation in prasugrel and ticagrelor use in PCI for an acute coronary syndrome between ICBs/HBs, and between Cardiac Networks



Percentage use of prasugrel or ticagrelor in ACS treated by PCI by ICB/HB (April - September 2025)

Percentage use of prasugrel or ticagrelor in ACS treated by PCI by Cardiac Network (April - September 2025)

The maps show the use of newer P2Y12 antiplatelet drugs in patients with an acute coronary syndrome (ACS) treated by percutaneous coronary intervention (PCI) for:

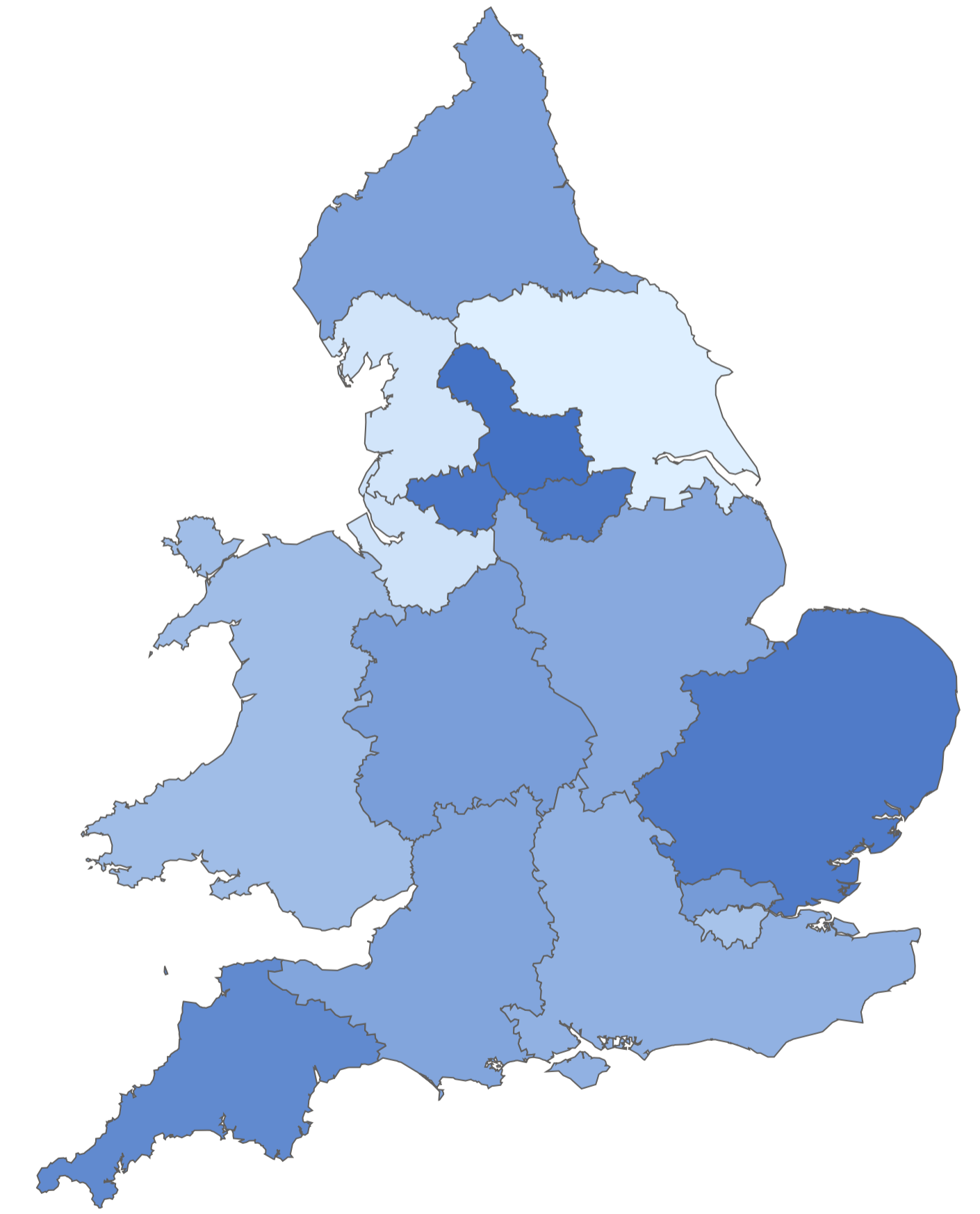
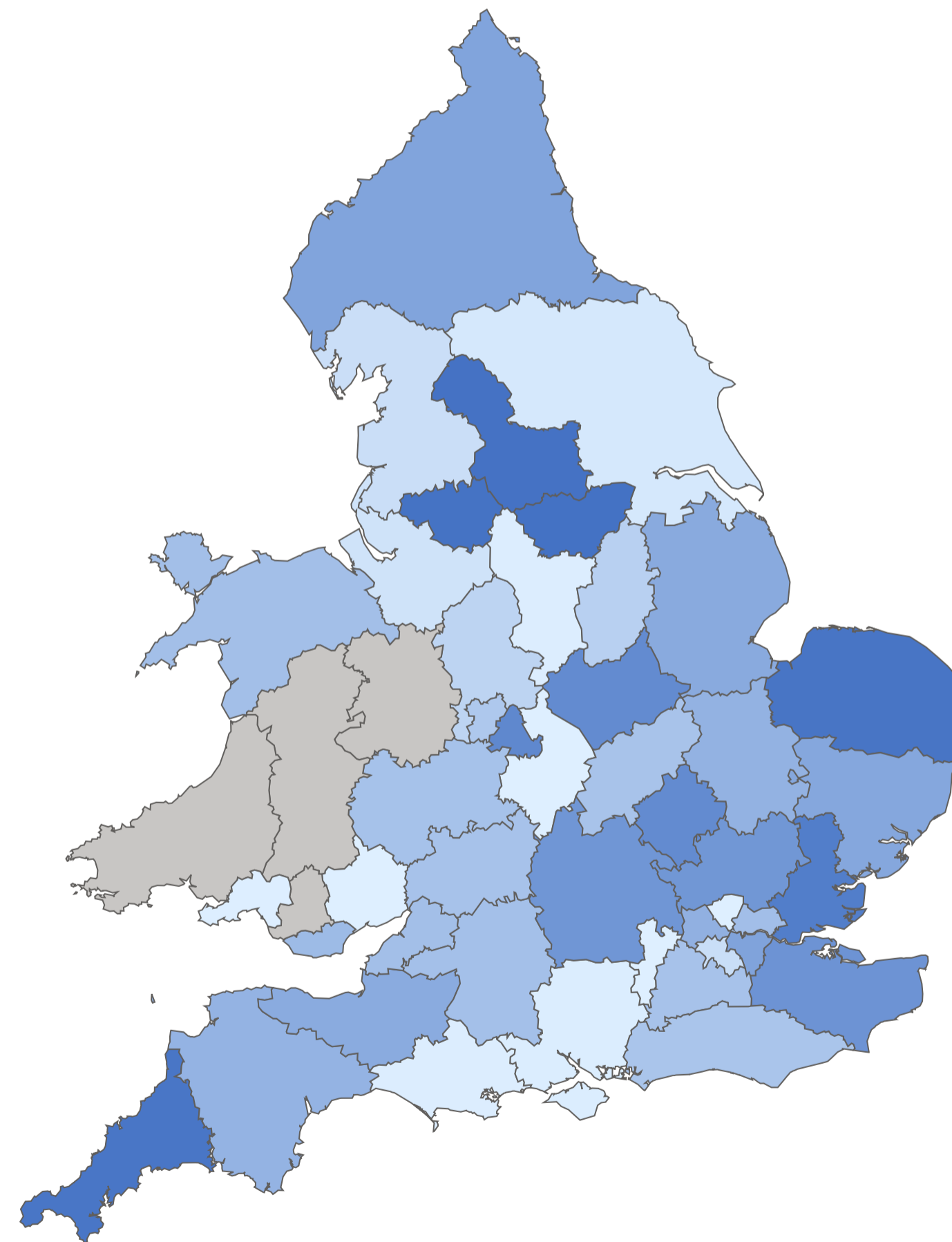
- the 42 Integrated Health Boards (ICBs) in England and 7 University Health Boards (HBs) in Wales (commissioning organisations)
- the 16 Cardiac Networks in England and Wales (service delivery networks).

A darker shade = a higher level of prescription of these drugs to ACS patients undergoing PCI.

Newer P2Y12 antiplatelet drugs were used in:

- **86% of cases in NHS South Yorkshire ICB**
- **hardly any cases in NHS North Central London, NHS Frimley, NHS Coventry and Warwickshire and NHS Derby and Derbyshire ICBs.**

Note: Area data are based on the location of the hospital rather than the patient home location.



The use of new P2Y12 antiplatelet drugs in PCI for an acute coronary syndrome varied significantly by hospital

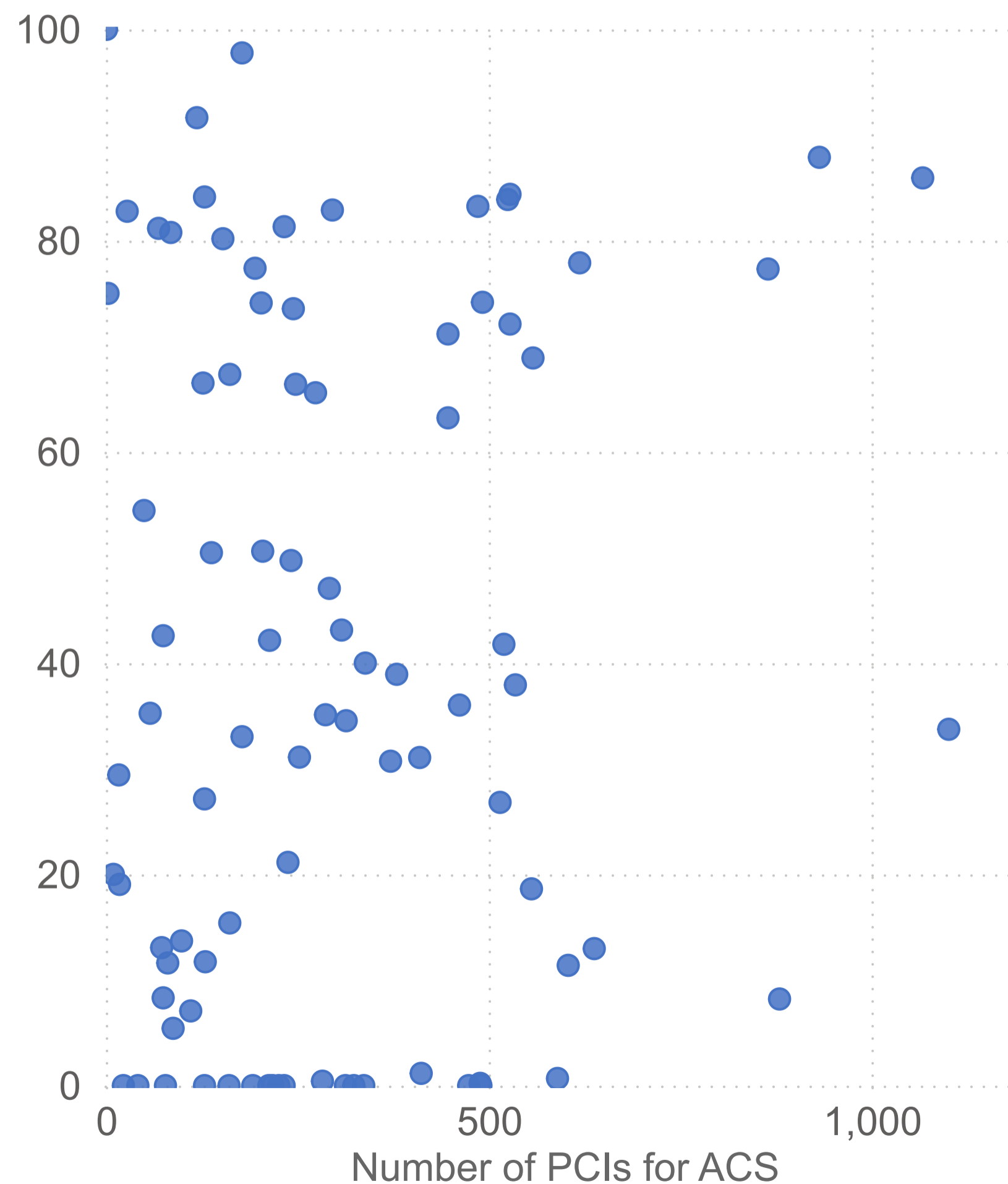


There was huge variation in the prescribing of new P2Y12 antiplatelet drugs in PCI for acute coronary syndrome (ACS), from 0% of cases to 100%.

Select a hospital below or hover over the scatter plot to see specific data.

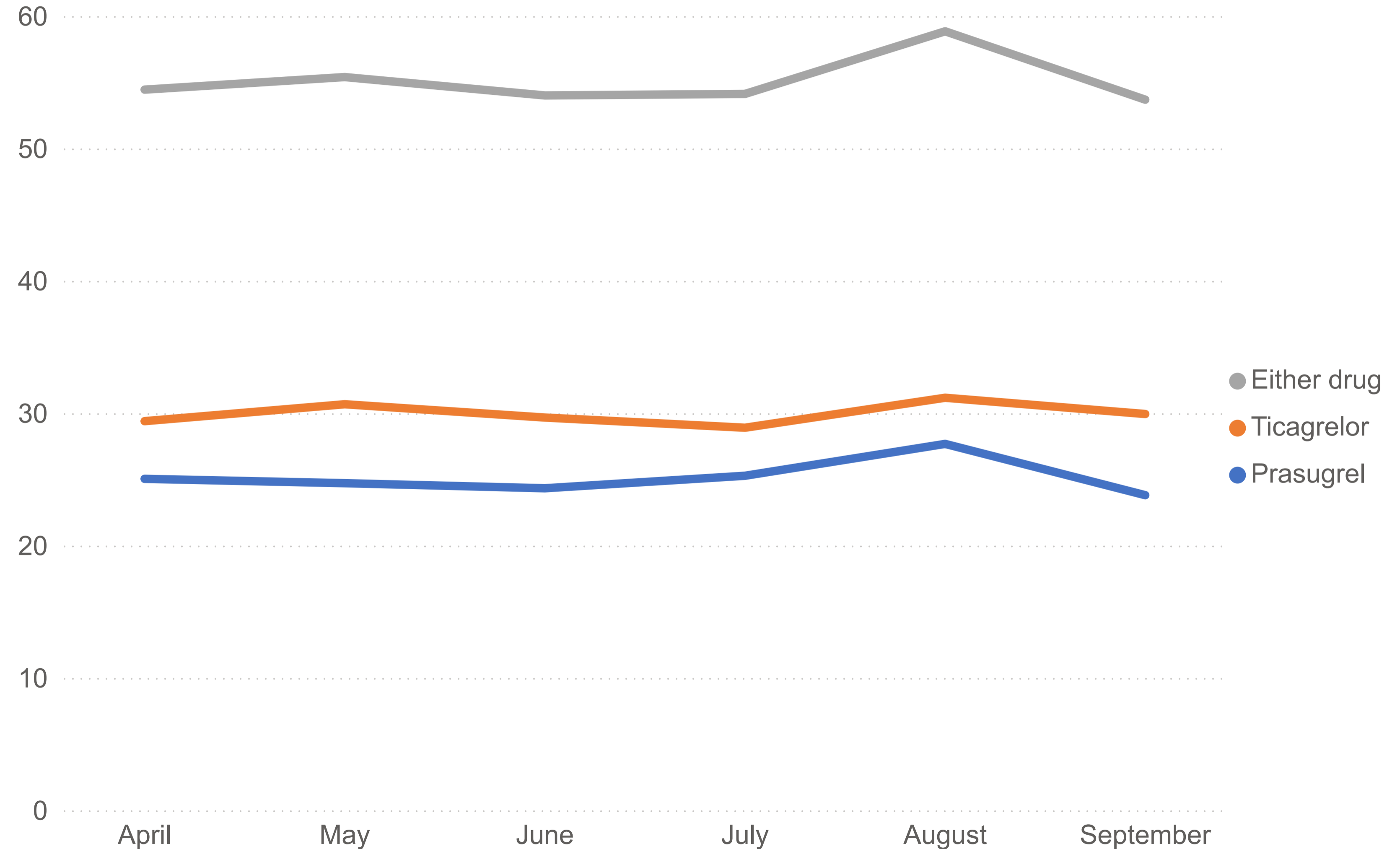
Select hospital

Percentage use of prasugrel or ticagrelor for ACS by hospital (April - September 2025)





Percentage use of prasugrel and ticagrelor in PPCI for STEMI (April - September 2025)



There was no substantial increase in the use of one of the new drugs in primary PCI (PPCI) for higher-risk ST-elevation myocardial infarction (STEMI) heart attacks. Around 60% of patients receiving one of these drugs in Q1/Q2 2025/26.

This was no significant increase in the use of prasugrel in this time period.

P2Y12 antiplatelet drug usage in primary PCI for STEMI varied from 1% to 88% across different areas



The maps show the use of new P2Y12 antiplatelet drugs in patients with ST-elevation myocardial infarction (STEMI) heart attacks treated by primary percutaneous coronary intervention (PPCI) for:

- the 42 Integrated Health Boards (ICBs) in England and 7 University Health Boards (HBs) in Wales (commissioning organisations)
- the 16 Cardiac Networks in England and Wales (service delivery networks).

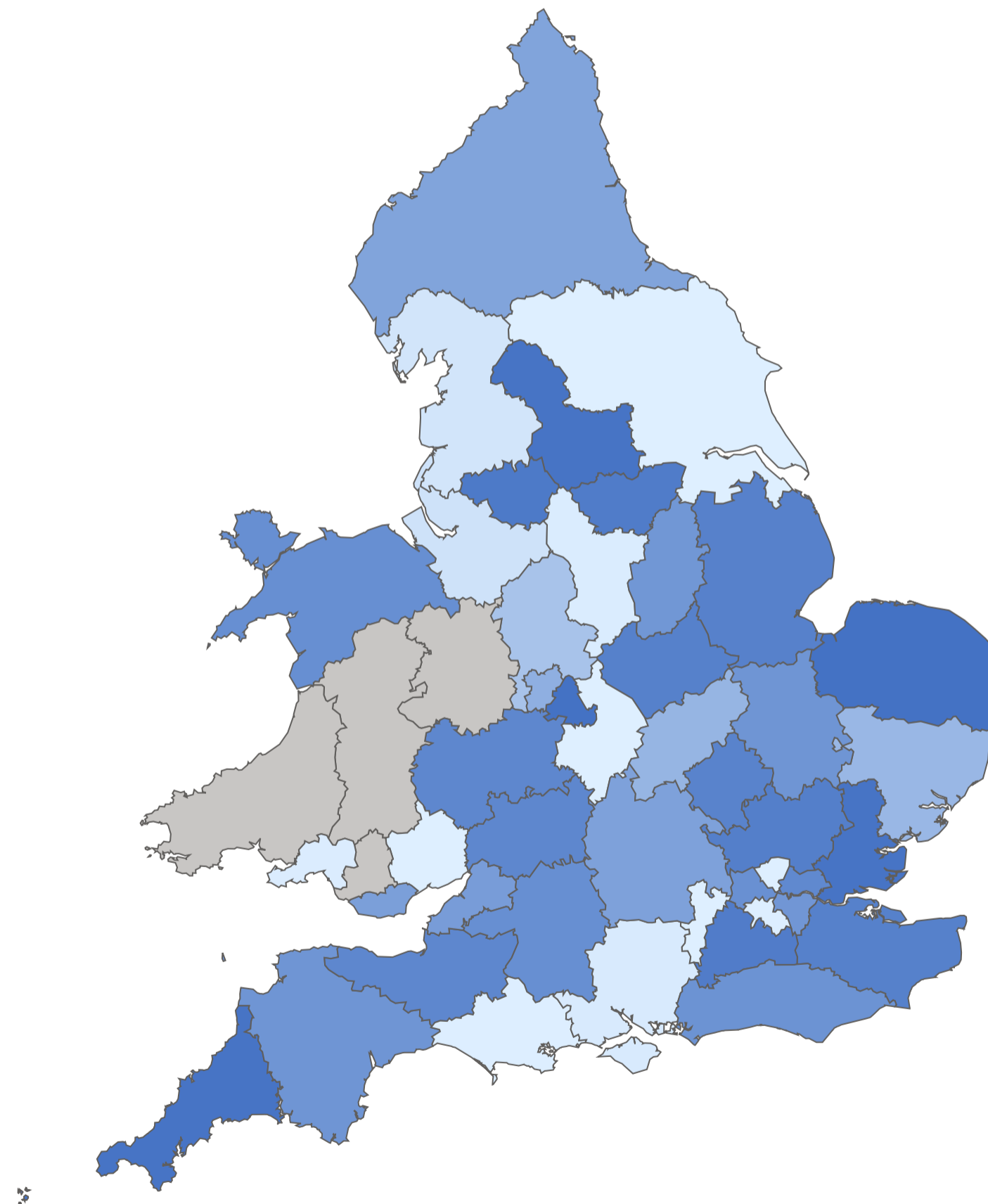
Darker shades = a higher rate of use.

Prescribing of new P2Y12 antiplatelet drugs in STEMI patients varied from 91% in West Yorkshire Cardiac Network to 0% in Humber and North Yorkshire Cardiac Network.

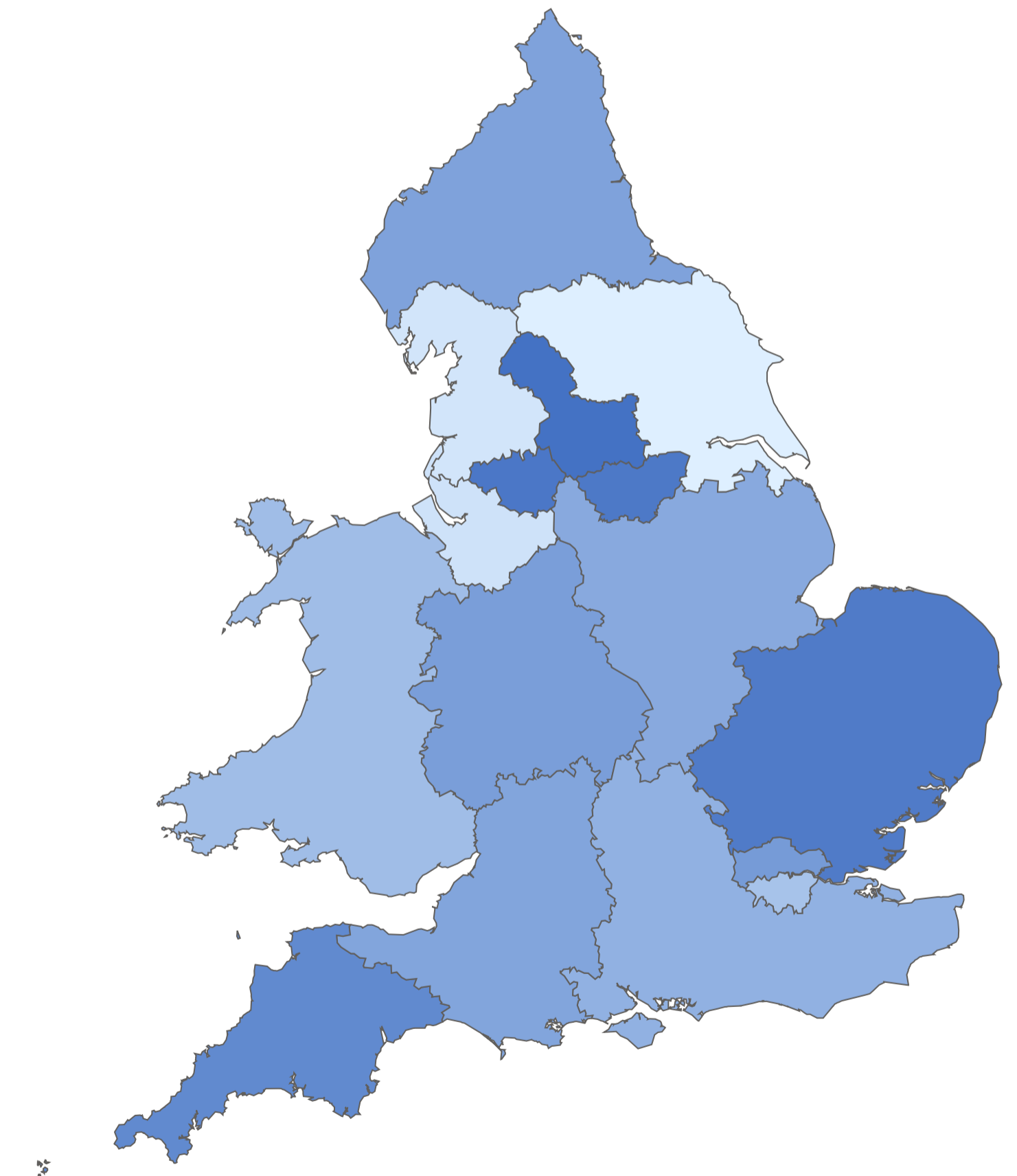
Hover over the maps to see specific data.

Note: Area data are based on the location of the hospital rather than the patient home location.

Percentage use of prasugrel and ticagrelor in PPCI by ICB/HB (April - September 2025)



Percentage use of prasugrel and ticagrelor in PPCI by Cardiac Network (April - September 2025)



Some hospitals used newer P2Y12 antiplatelet drugs for all STEMI cases treated by PPCI, but others did not use them at all



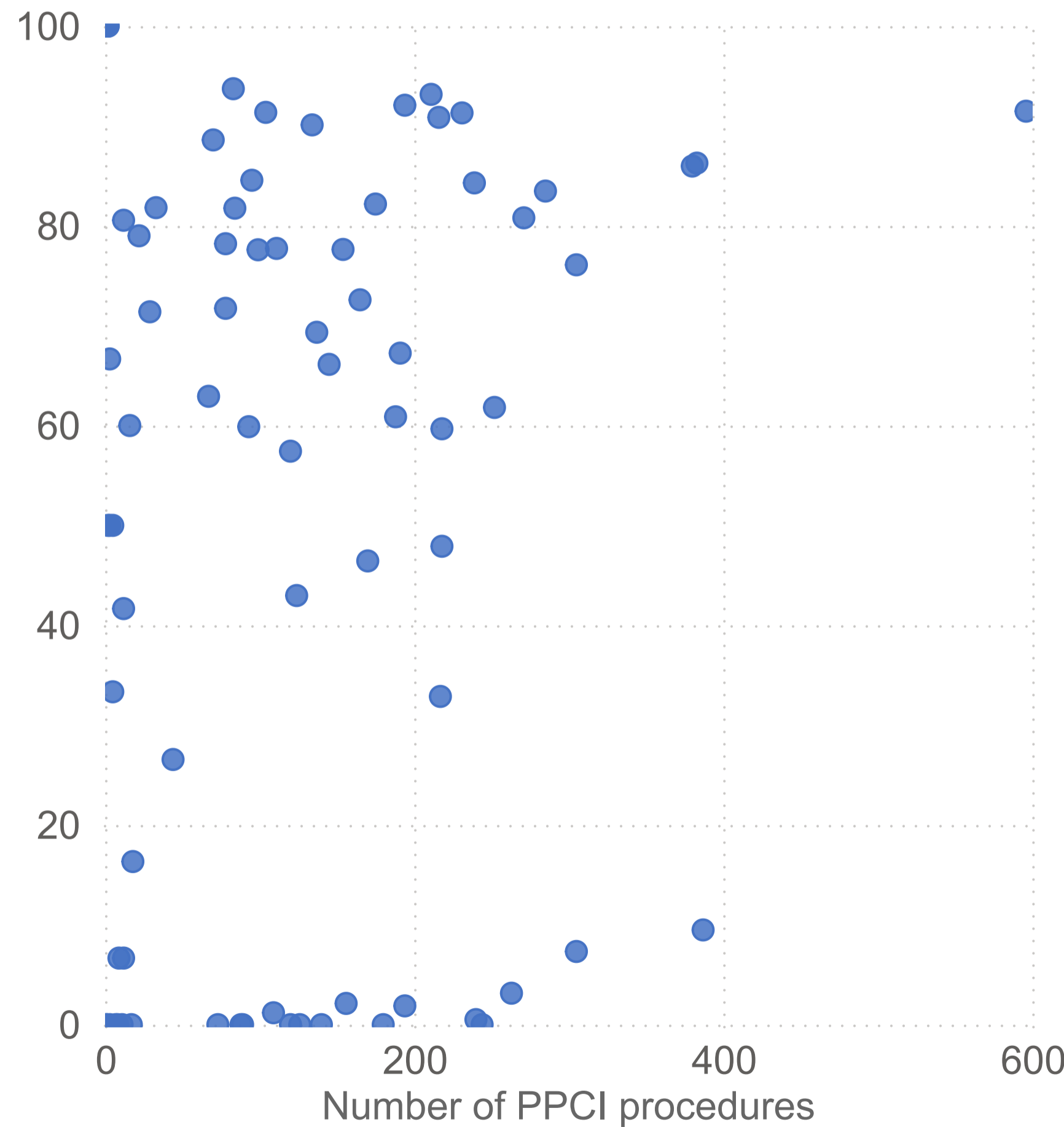
There were wide variations between hospitals in prescription patterns for the use of newer P2Y12 drugs in ST-elevation myocardial infarction (STEMI) treated by primary percutaneous coronary intracoronary (PPCI).

Some hospitals did not use these drugs (presumably preferring to use clopidogrel) but some used them in all cases.

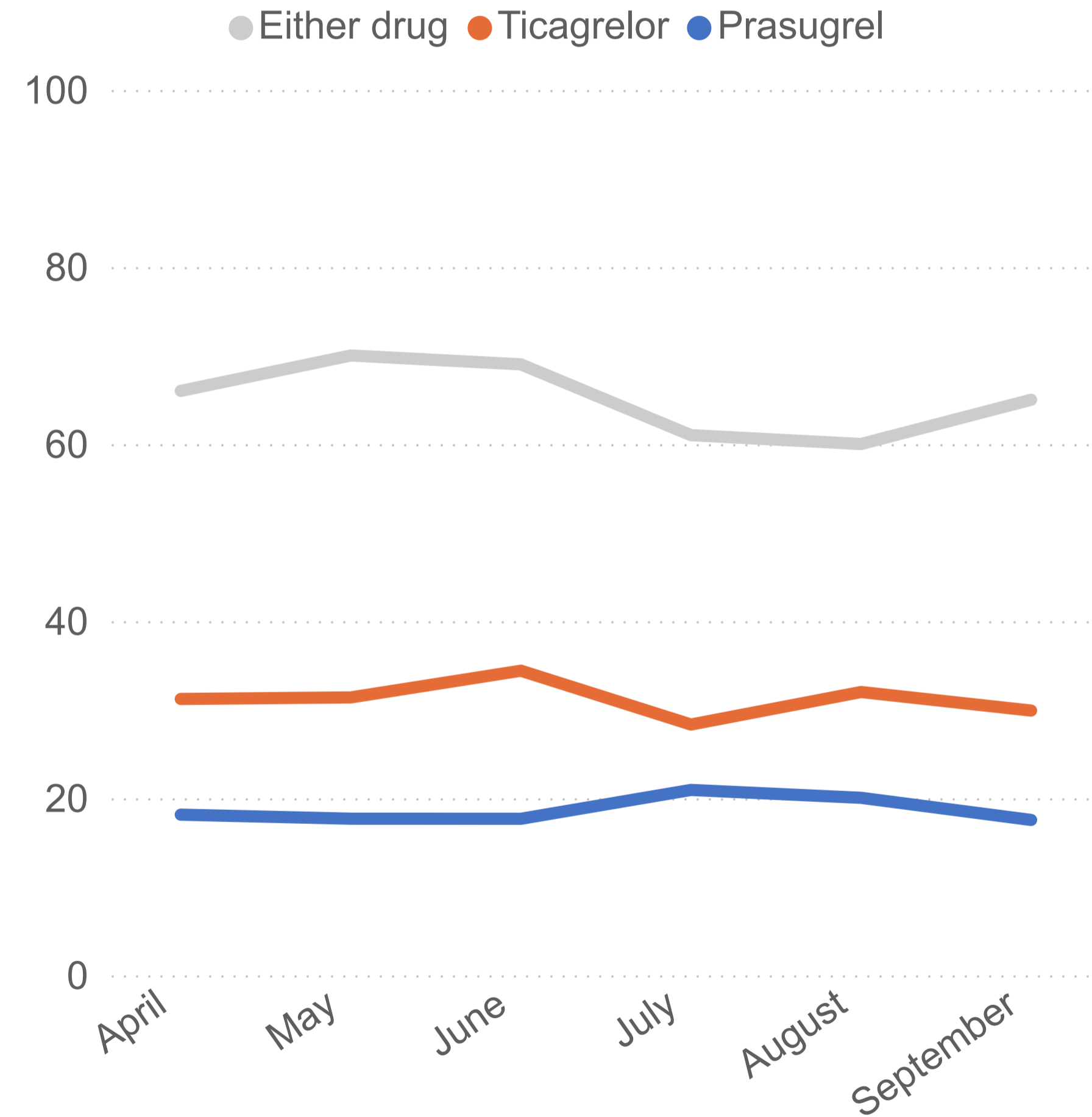
Select a hospital below or hover over the scatter plot to see specific data.

Select hospital

Percentage use of prasugrel or ticagrelor for PPCI, by hospital (April - September 2025)



Percentage use of prasugrel and ticagrelor for PPCI (April - September 2025)



P2Y12 antiplatelet drug prescription across hospitals for patients treated by PPCI for STEMI varied between 100% and 4%



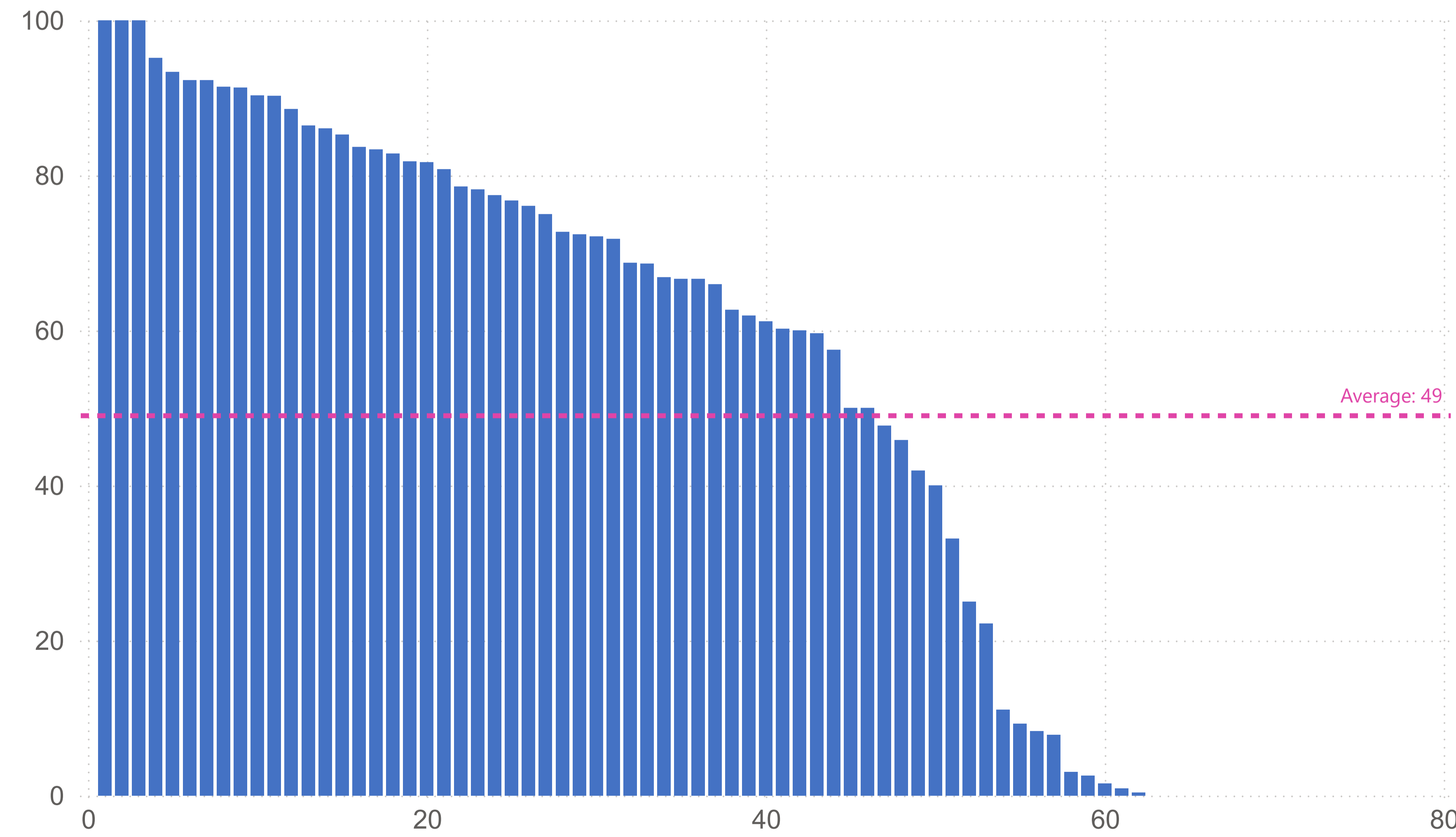
There was huge variation between hospitals in use of new P2Y12 antiplatelet drugs in the treatment of ST-elevation myocardial infarction (STEMI) heart attacks by primary percutaneous coronary intervention (PPCI).

The rate of prescribing was between 100% and 0% of cases. 62 hospitals reported

Select a hospital below to see its data.

Select hospital

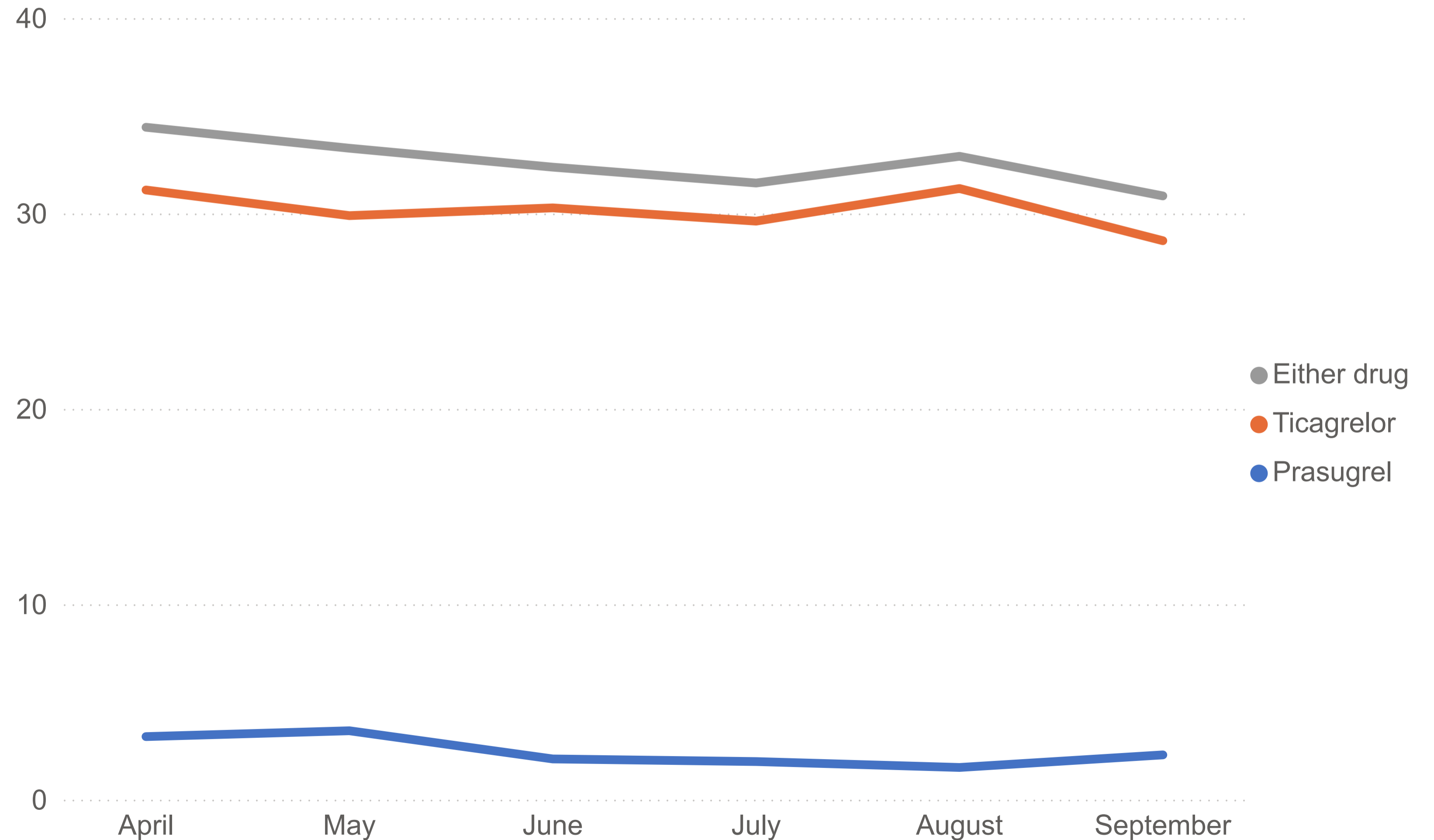
Percentage of use of prasugrel or ticagrelor in STEMI patients undergoing PPCI, by hospital (April - September 2025)



P2Y12 antiplatelet drug usage for NSTEMI cases did not increase during April to September 2025



Percentage use of prasugrel and ticagrelor in PCI for NSTEMI patients (April - September 2025)



The use of newer antiplatelets such as prasugrel or ticagrelor has increased over time in PCI for non-ST-elevation myocardial infarction (NSTEMI) cases but has not increased further in Q1/Q2 2025/26.

UK practice lags behind European Society of Cardiology guidelines which recommend the use of prasugrel over ticagrelor. In Q1/Q2 2025/26, only 2.5% of PCI cases involving NSTEMI patients were treated with prasugrel.

This is unlikely to reflect contraindications to prasugrel and more likely reflects deviation of practice from guideline recommendations.

P2Y12 antiplatelet drug prescription after PCI for NSTEMI varied from 88% to 0% across different ICBs/HBs and Cardiac Networks



The maps show the use of newer P2Y12 antiplatelet drugs in patients with non-ST-elevation myocardial infarction (NSTEMI) heart attacks treated by percutaneous coronary intervention (PCI) for:

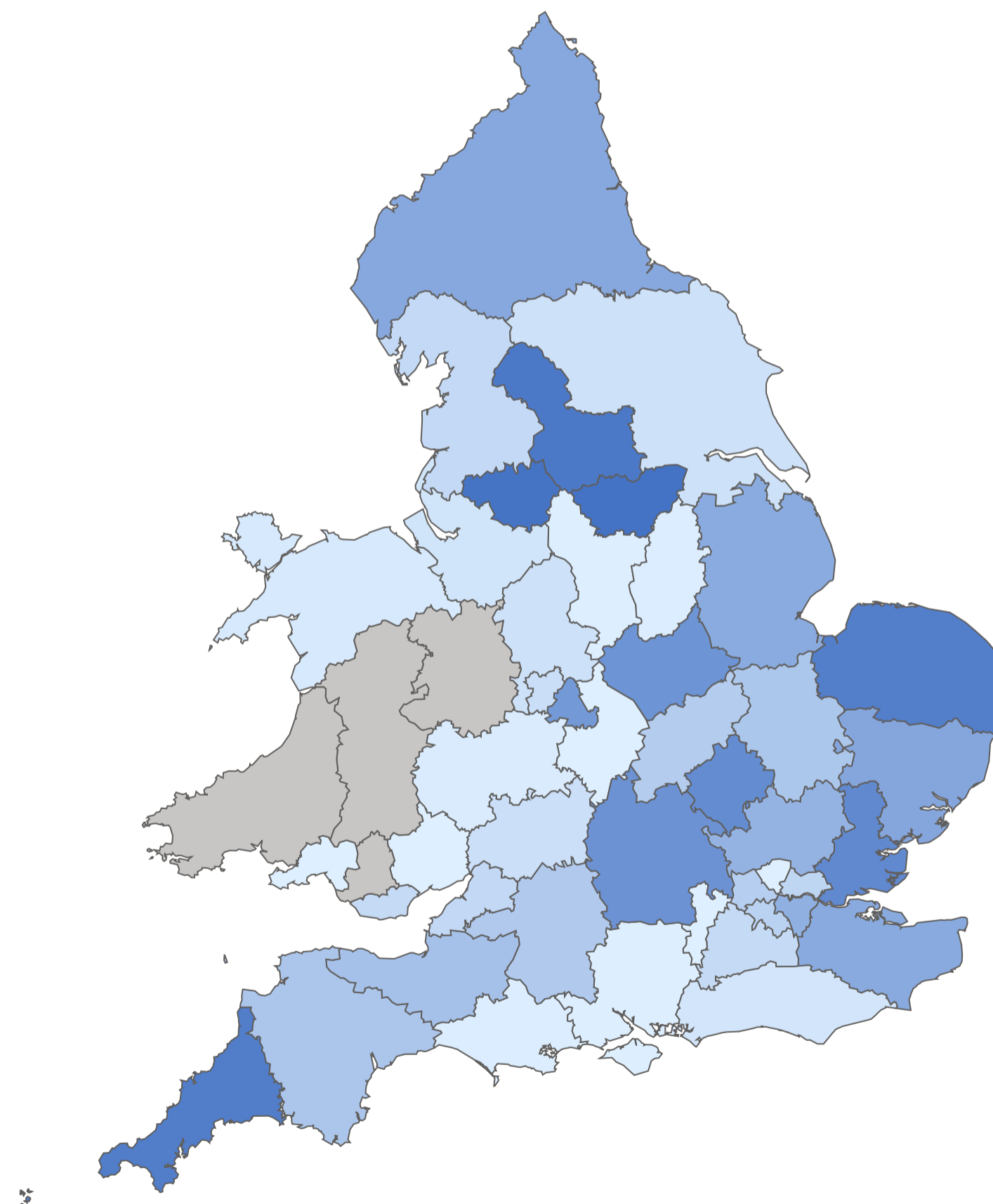
- the 42 Integrated Health Boards (ICBs) in England and 7 University Health Boards (HBs) in Wales (commissioning organisations)
- the 16 Cardiac Networks in England and Wales (service delivery networks).

Darker shades = greater use of these drugs.

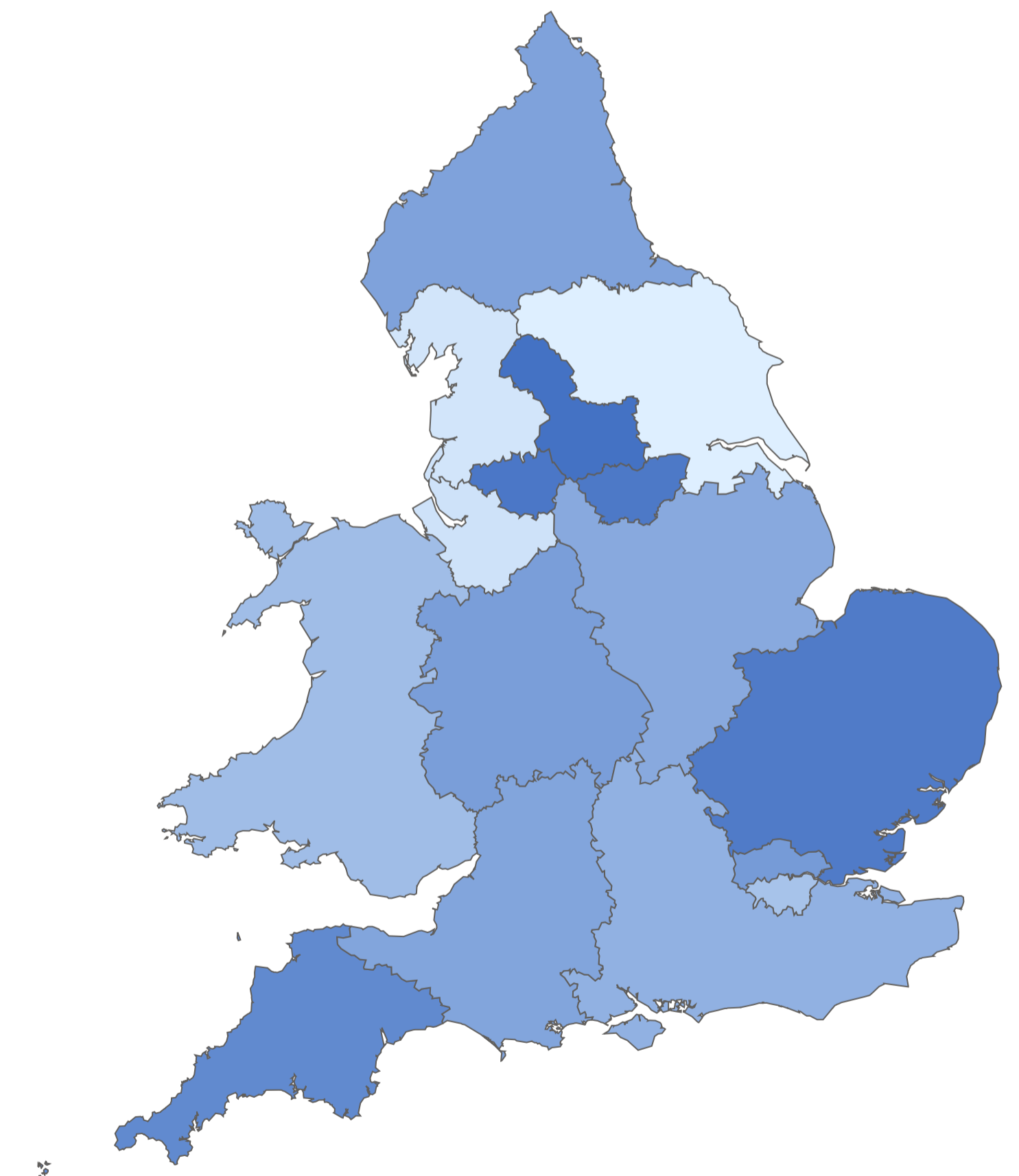
The rate varied from 86% of patients (NHS South Yorkshire ICB) to no patients in NHS Coventry and Warwickshire ICB, NHS North Central London ICB, NHS Frimley ICB, Swansea Bay University HB and Aneurin Bevan University HB.

Note: Area data are based on the location of the hospital rather than the patient home location.

Percentage use of prasugrel and ticagrelor in PCI for NSTEMI by ICB/HB (April - September 2025)



Percentage use of prasugrel and ticagrelor in PCI for NSTEMI by Cardiac Network (April - September 2025)



The use of P2Y12 antiplatelet drugs by hospitals after PCI for NSTEMI varied between 0% and 100% of cases



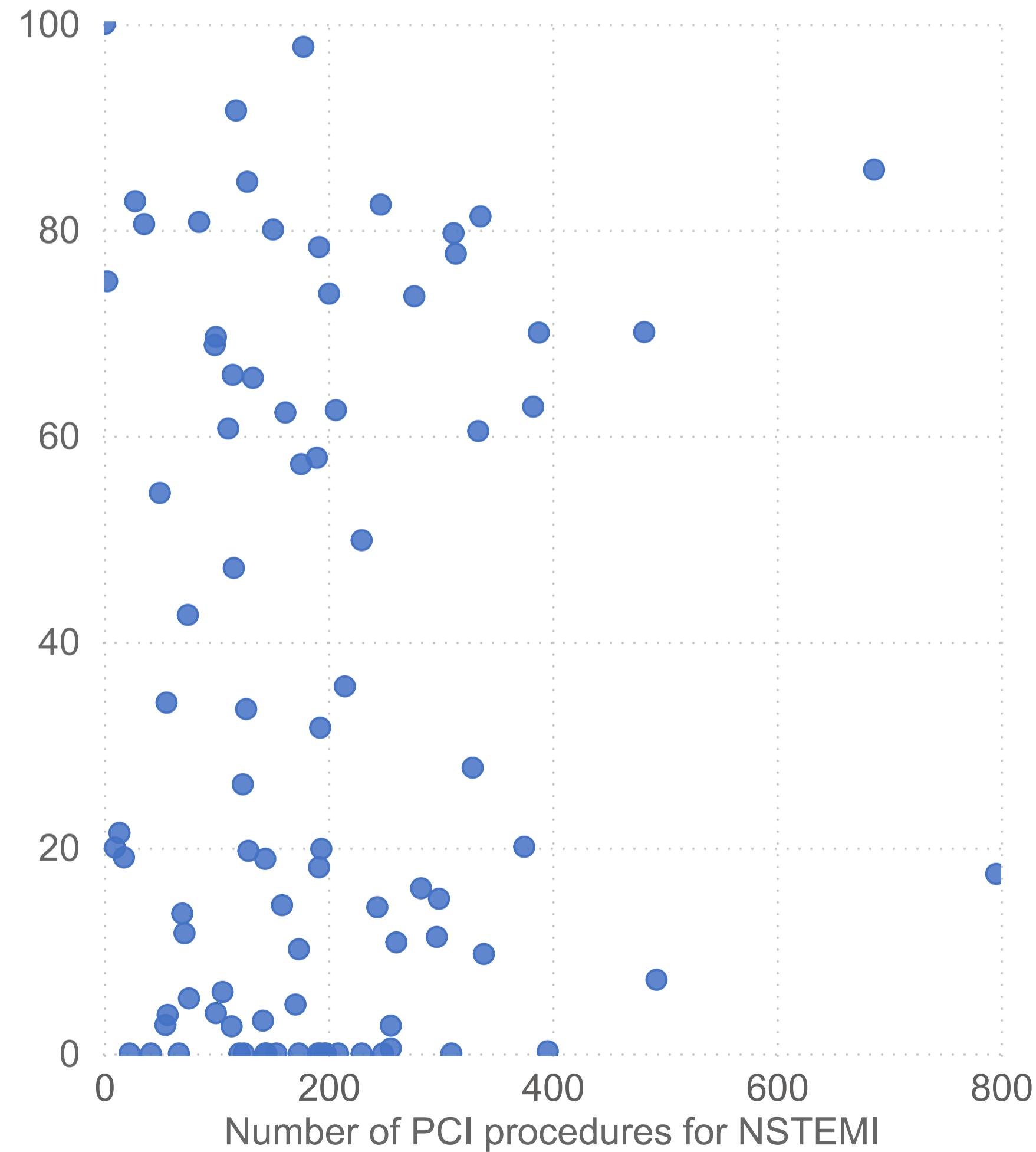
There were huge variations between hospitals in prescribing newer P2Y12 antiplatelet drugs after percutaneous coronary intervention (PCI) in cases of non-ST-elevation myocardial infarction (NSTEMI).

Despite the international recommendations, the use of these newer antiplatelet agents varied between 0% and 98% across hospitals.

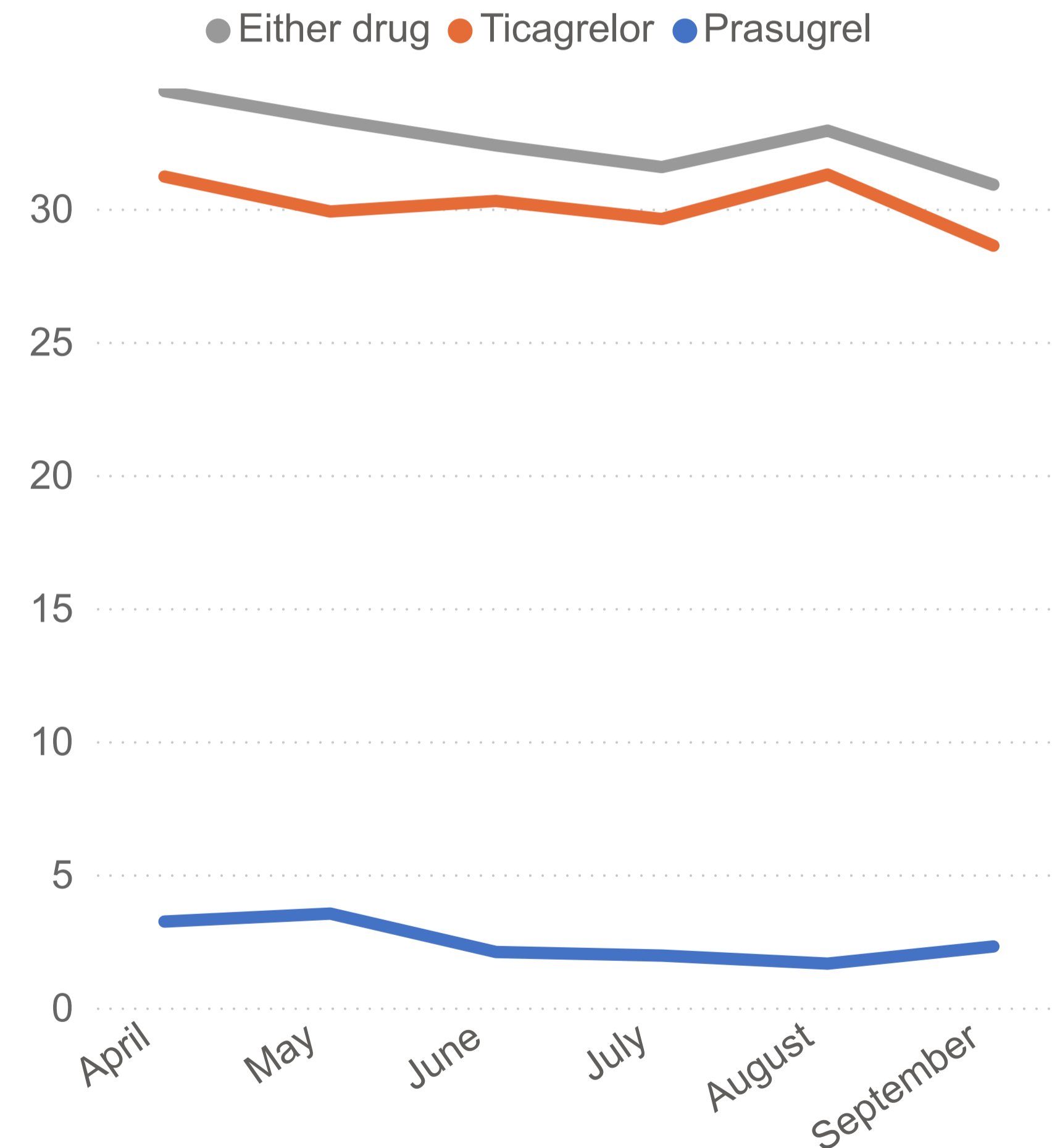
Select a hospital below to see its data or hover over a dot in the scatter plot.

Select hospital

Percentage use of prasugrel or ticagrelor after PCI for NSTEMI, by hospital (April - September 2025)



Percentage use of prasugrel and ticagrelor after PCI for NSTEMI (April - September 2025)



P2Y12 antiplatelet drug usage after PCI for NSTEMI varied between hospitals



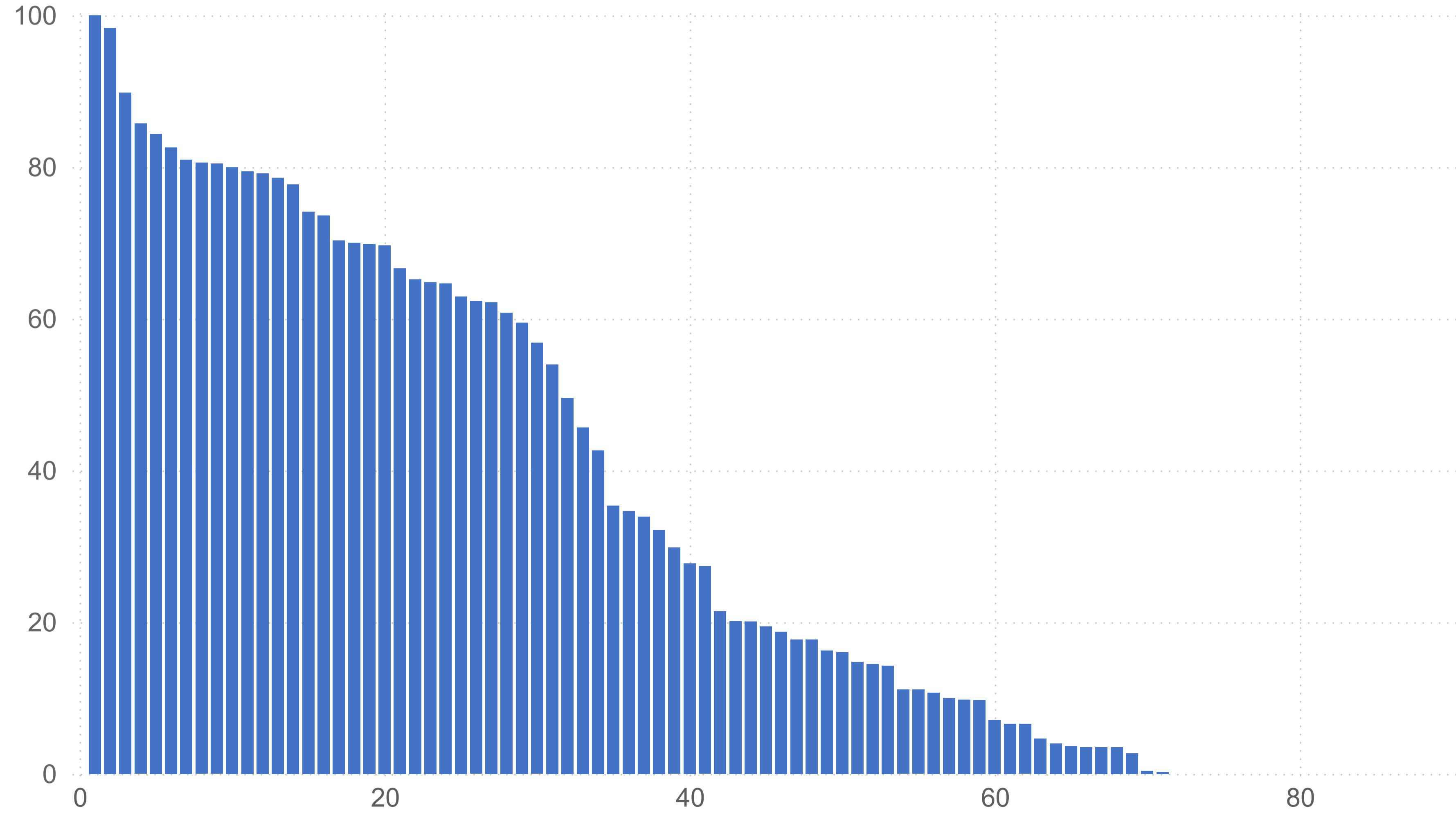
There was huge variation between hospitals in the use of new P2Y12 antiplatelet drugs in patients with non-ST-elevation myocardial infarction (NSTEMI) treated by percutaneous coronary intervention (PCI).

Some hospitals used these drugs in every case and others in none.

Select a hospital below or hover over the graph to see specific data.

Select hospital

Percentage of patients receiving either prasugrel or ticagrelor after PCI for NSTEMI by hospital (April - September 2025)



The use of drug-eluting balloons has increased further to 22% of all PCI cases



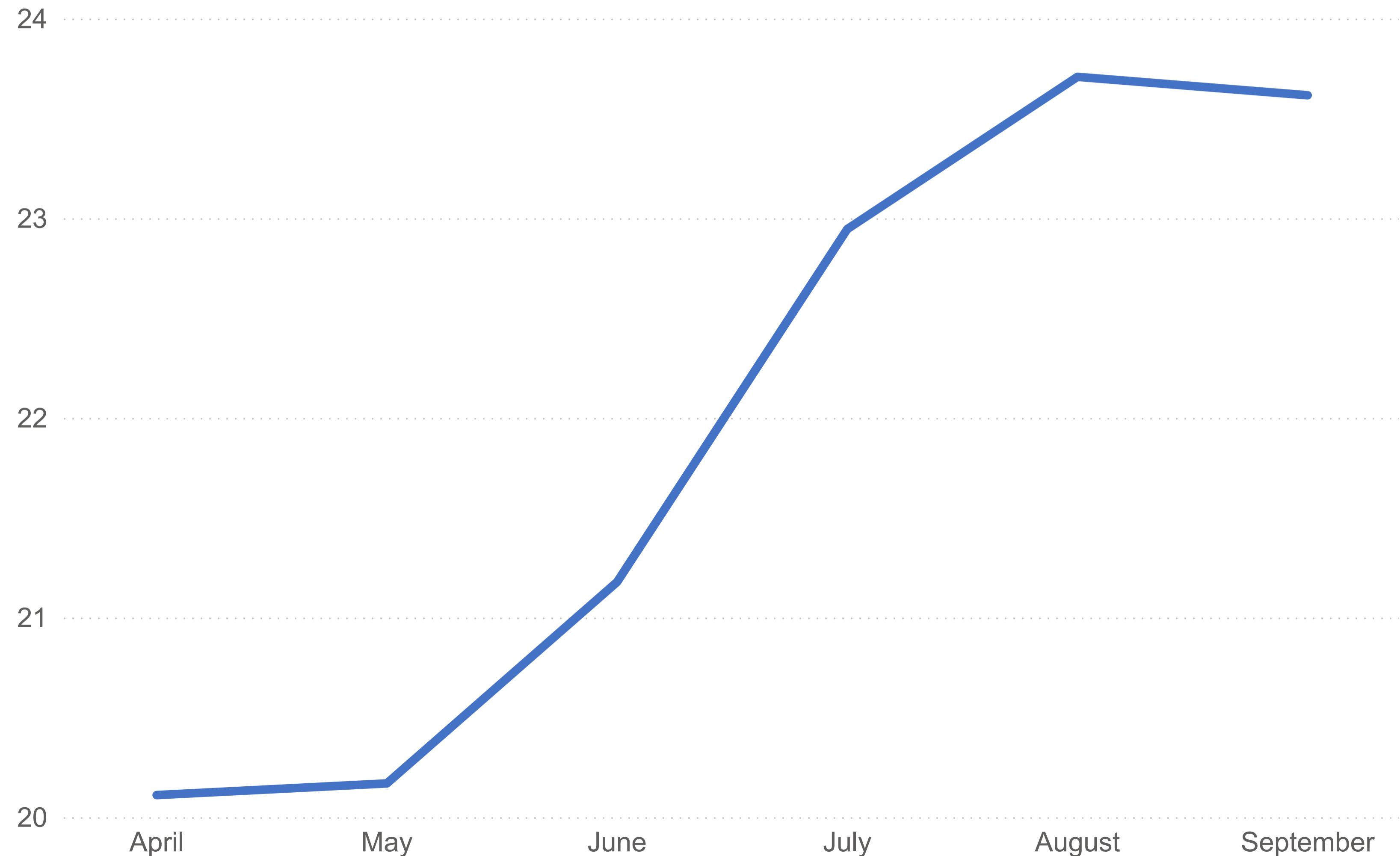
Drug-eluting balloons (DEB) are conventional angioplasty balloons covered with an anti-proliferative drug which is released into the vessel wall during inflation of the balloon, and are increasingly used instead of stents for a number of indications including restenosis where a stent has already been used, small vessels, side branch disease and increasingly in new lesions where a stent may have been used in the past.

In Q1/Q2 2025/26, a drug-eluting balloon (DEB) was used in 22% of all PCI procedures, up from 18% the year before.

However, that figure is significantly different to that reported in the BCIS annual survey, highlighting that the NAPCI audit data are not accurately capturing drug-eluting balloon use during PCI (e.g. some centres may be recording drug-eluting balloons as regular balloons).

The data in the following slides are from the NAPCI audit and may therefore underestimate drug-eluting balloon use.

Percentage use of drug-eluting balloons during PCI procedures in England and Wales (April - September 2025)



Drug-eluting balloon use varied, with many hospitals not using them and some hospitals using them in nearly 50% of cases

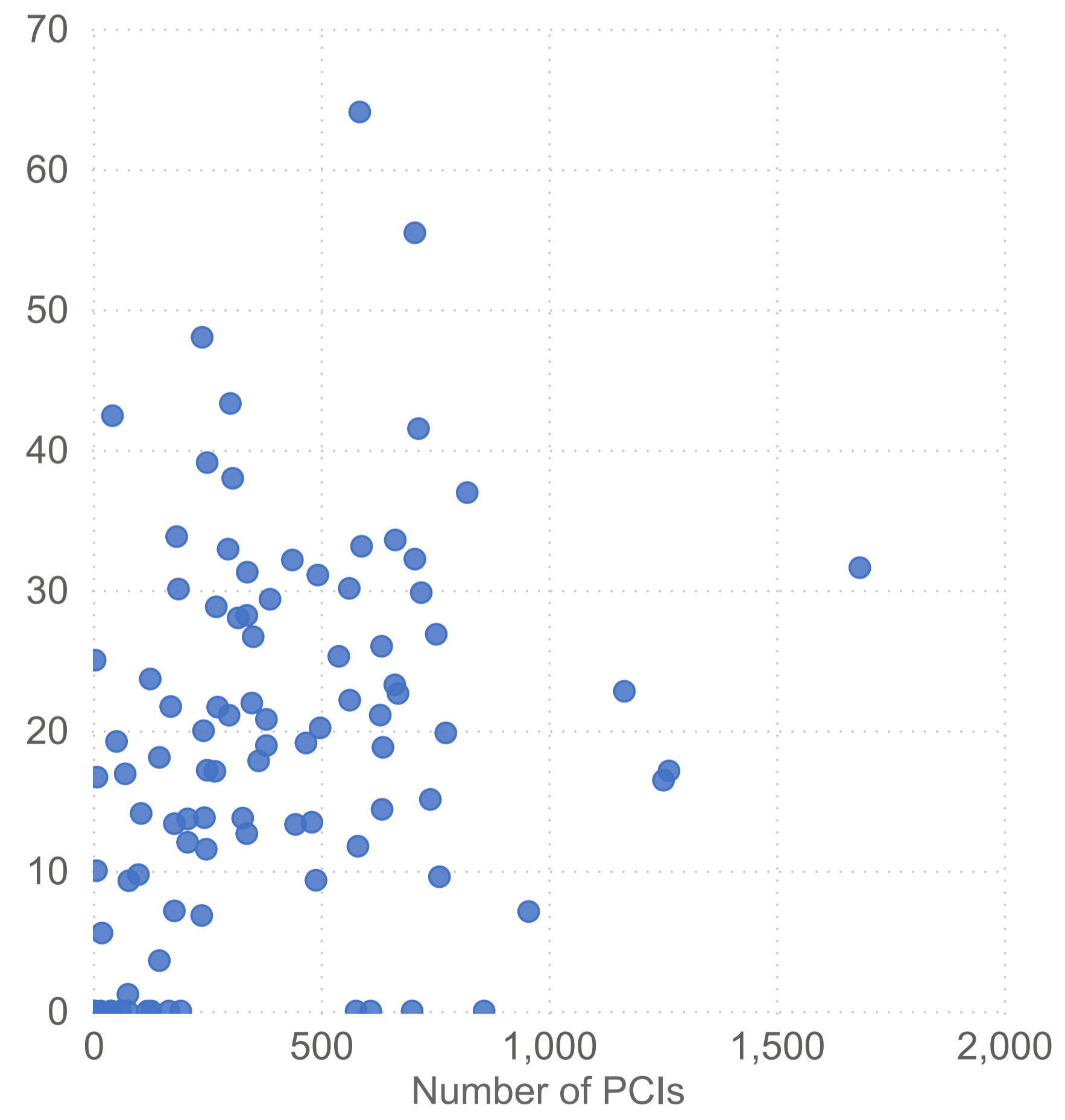


The rate of drug-eluting balloon use by hospital varied from 0% to around 50% of cases.

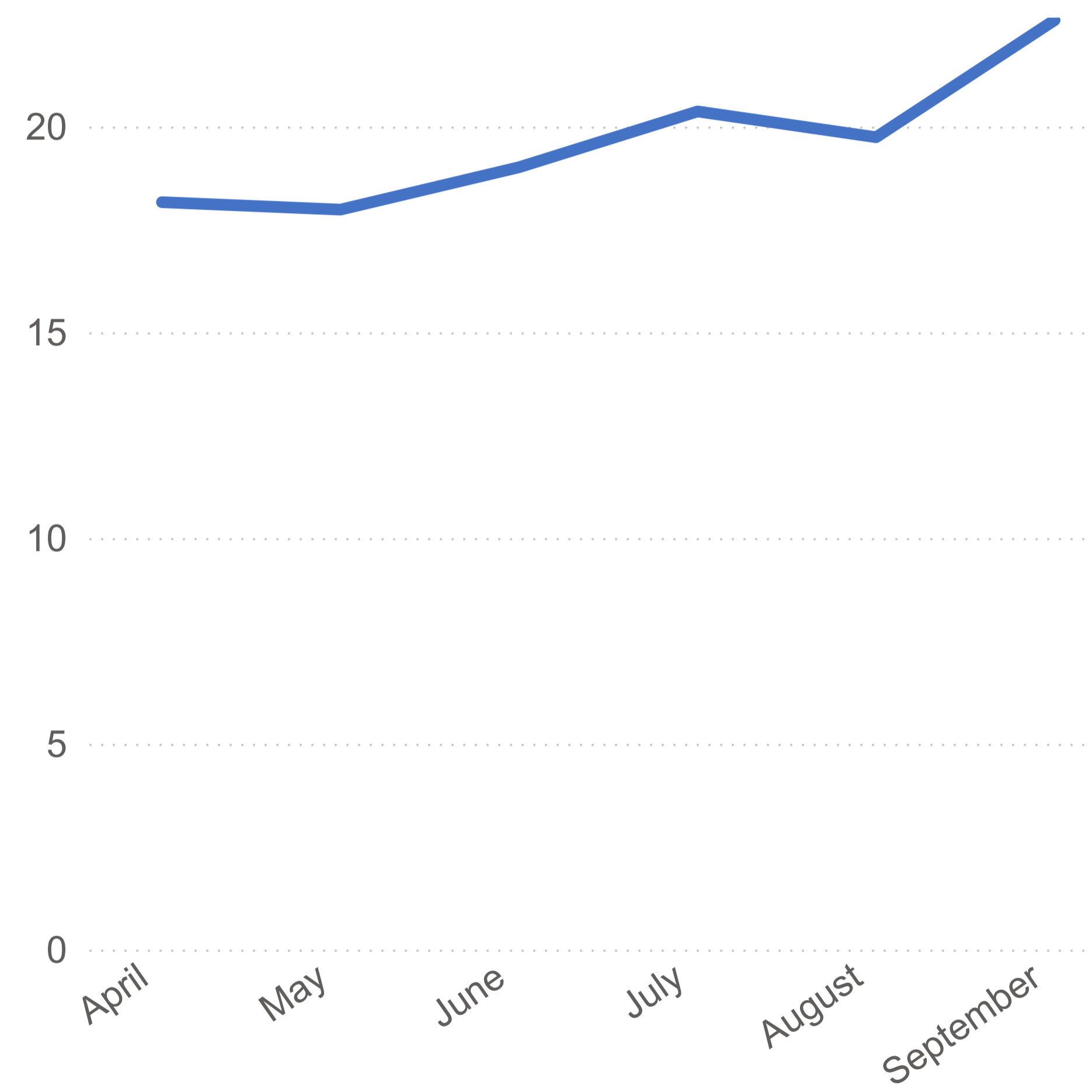
Select a hospital below to see its data or hover over a dot in the scatter plot.

Select hospital

Percentage use of drug-eluting balloons during PCI by hospital (April - September 2025)



Percentage use of drug-eluting balloons during PCI (April - September 2025)



Drug-eluting balloon use in PCI by hospital ranged from zero to over 50%

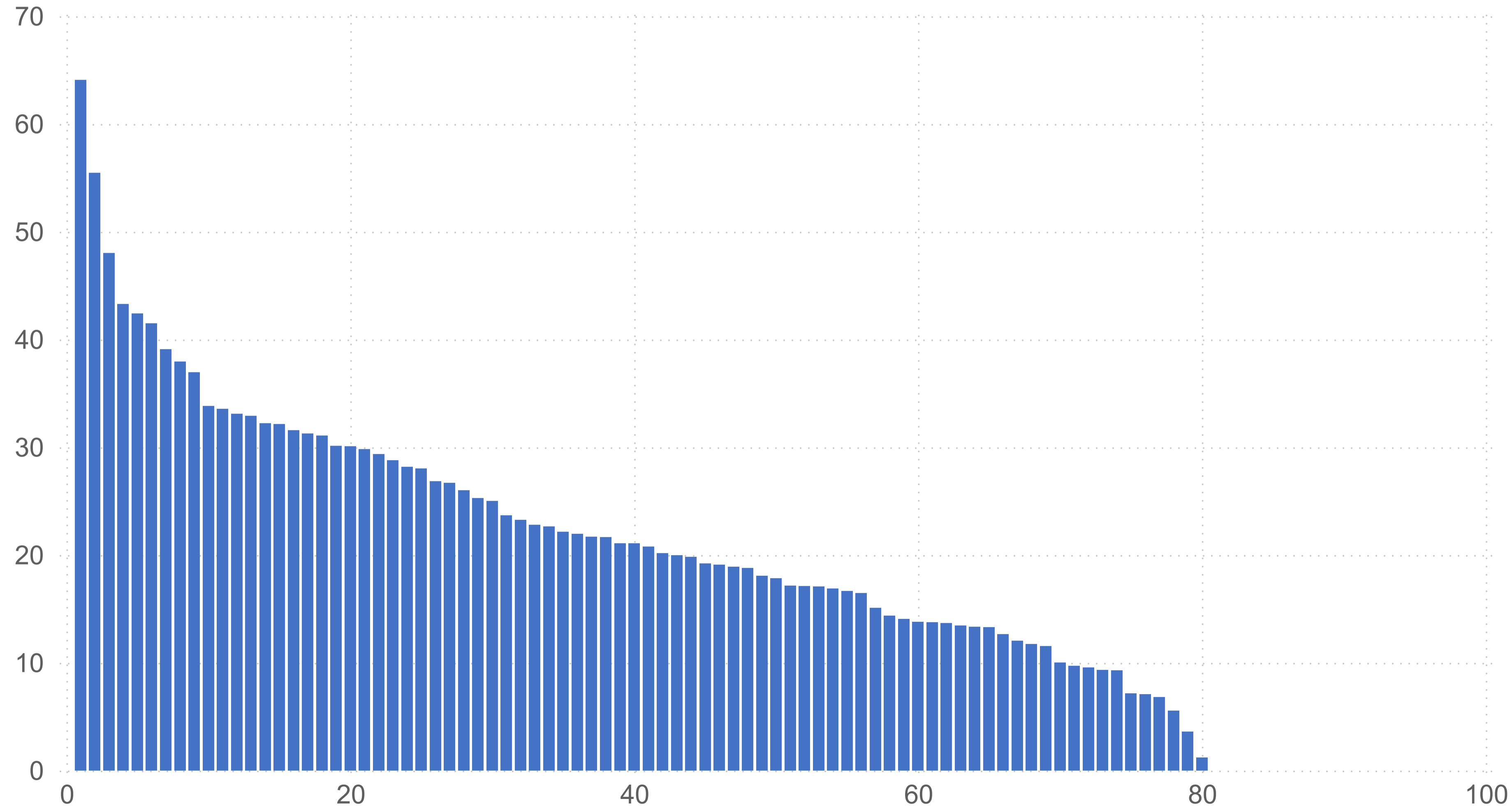


Percentage use of drug-eluting balloons during PCI by hospital (April - September 2025)

The rate of drug-eluting balloon use by hospital varied from 0% to over 60% of cases.

Select a hospital below to see its data or hover over the bars in the graph.

Select hospital



A drug-eluting balloon in PCI cases where stents were used increased to 12% on average, though the use in hospitals varied between 0% and 60%



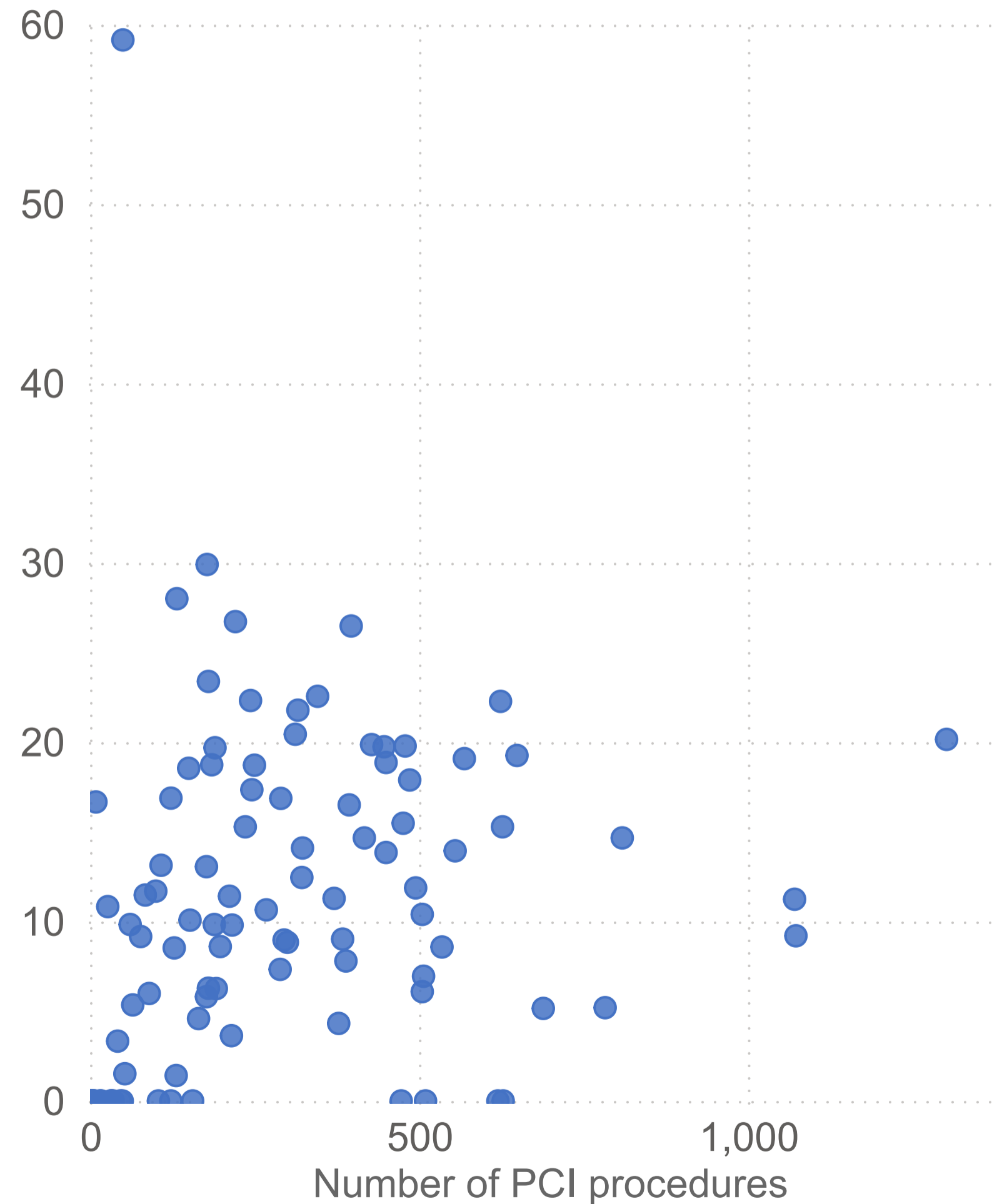
A drug-eluting balloon (DEB) is sometimes used alongside a stent, especially for complex cases like branched arteries, long blockages, or when blood flow is affected after balloon treatment.

The overall use of a DEB alongside a stent increased to 12% in Q1/Q2 2025/26 from virtually no use in 2018/19.

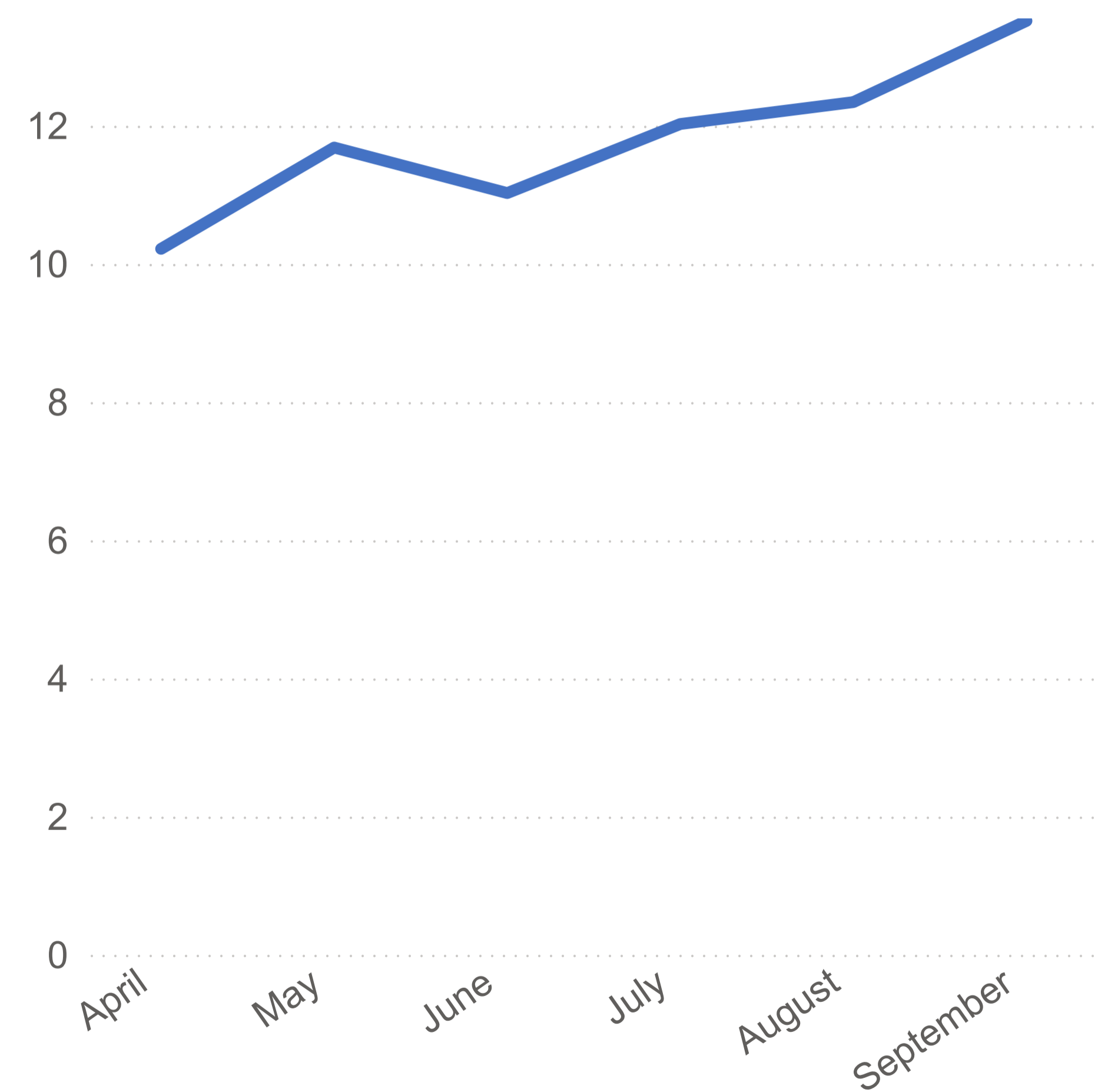
Select a hospital below or hover over the scatter plot to see specific data.

Select hospital

Percentage use of drug-eluting balloons during PCI when a stent was also used by hospital (April - September 2025)



Percentage use of drug-eluting balloons during PCI when a stent was also used (April - September 2025)



Drug-eluting balloon use in PCI when a stent was also inserted varied between 0% and 60% across NHS hospitals

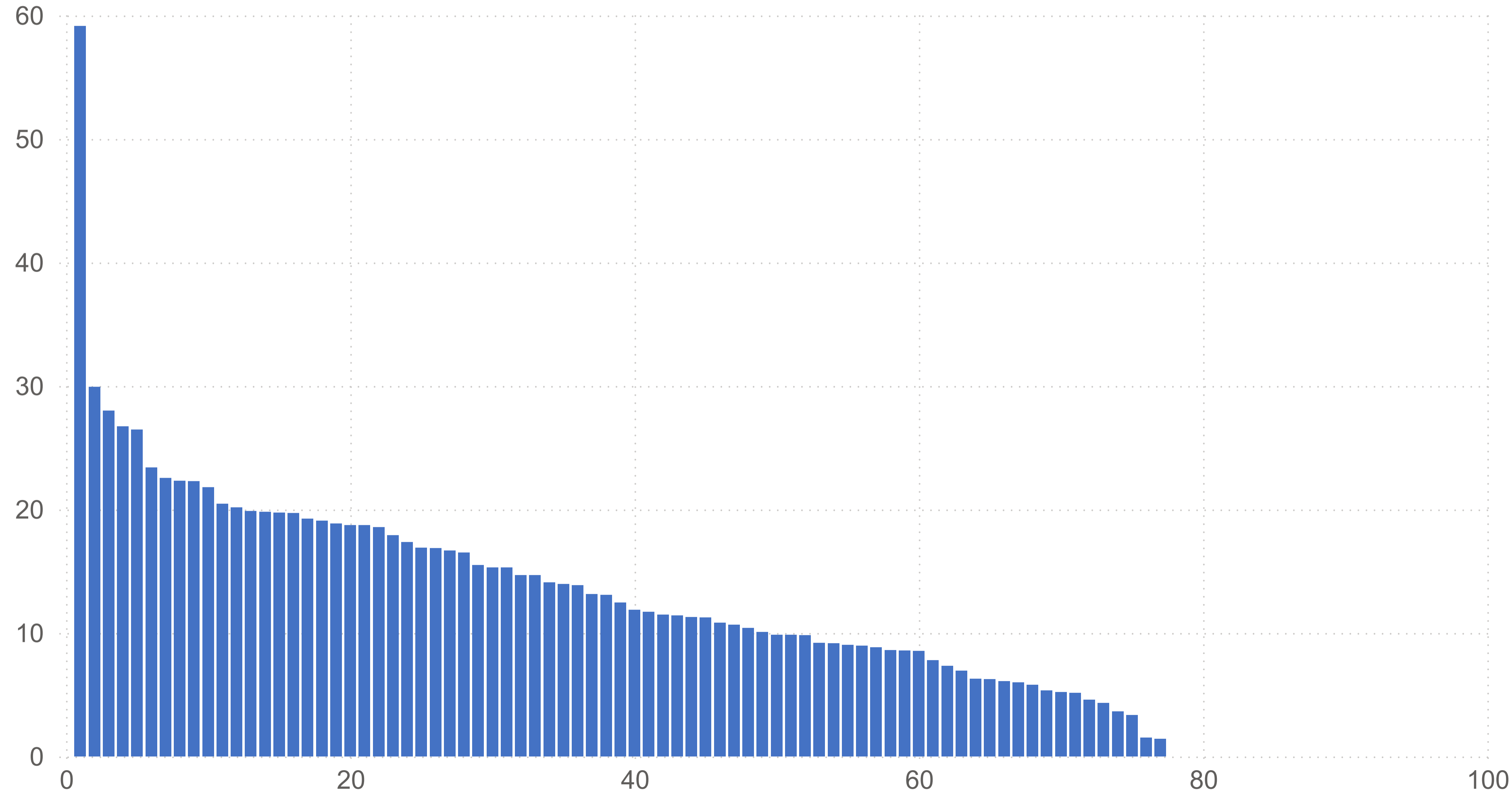


Percentage use of drug-eluting balloons during PCI when a stent was also use, by hospital (April - September 2025)

Between hospitals, the use of a DEB alongside a stent varied between 0% and 59% in NHS hospitals.

Select a hospital below to see its data or hover over a bar on the graph.

Select hospital



Drug-eluting balloon use in PCI cases where no stent is used averaged at 41% but varied between 0% and 100%



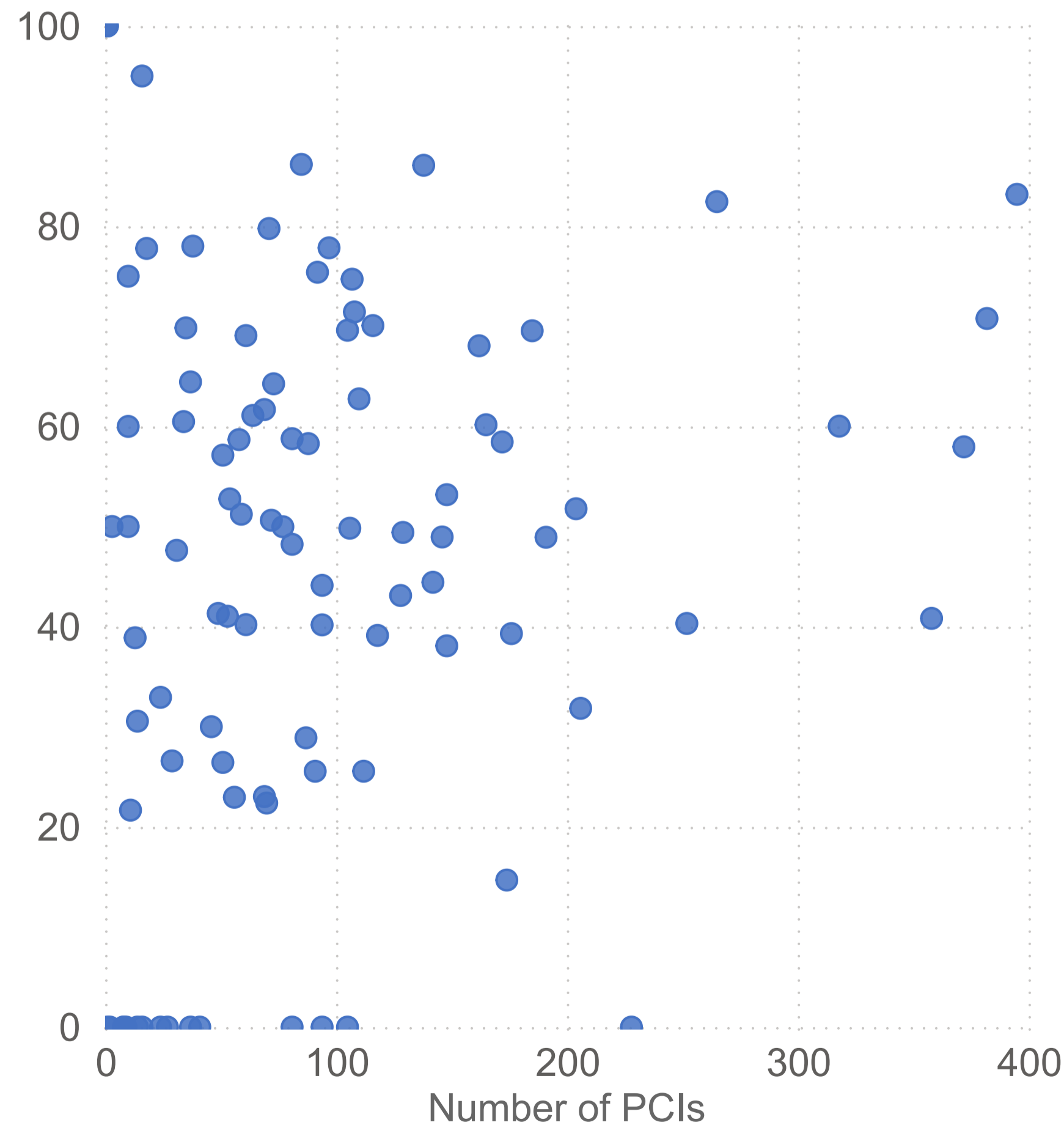
Drug-eluting balloons can be used in conjunction with a stent, or can be used by themselves to treat a lesion.

Use of a drug-eluting balloon (DEB) in PCI without a stent varied between hospitals from zero to 86% in Q1/Q2 2025/26 in hospitals that performed more than 50 cases.

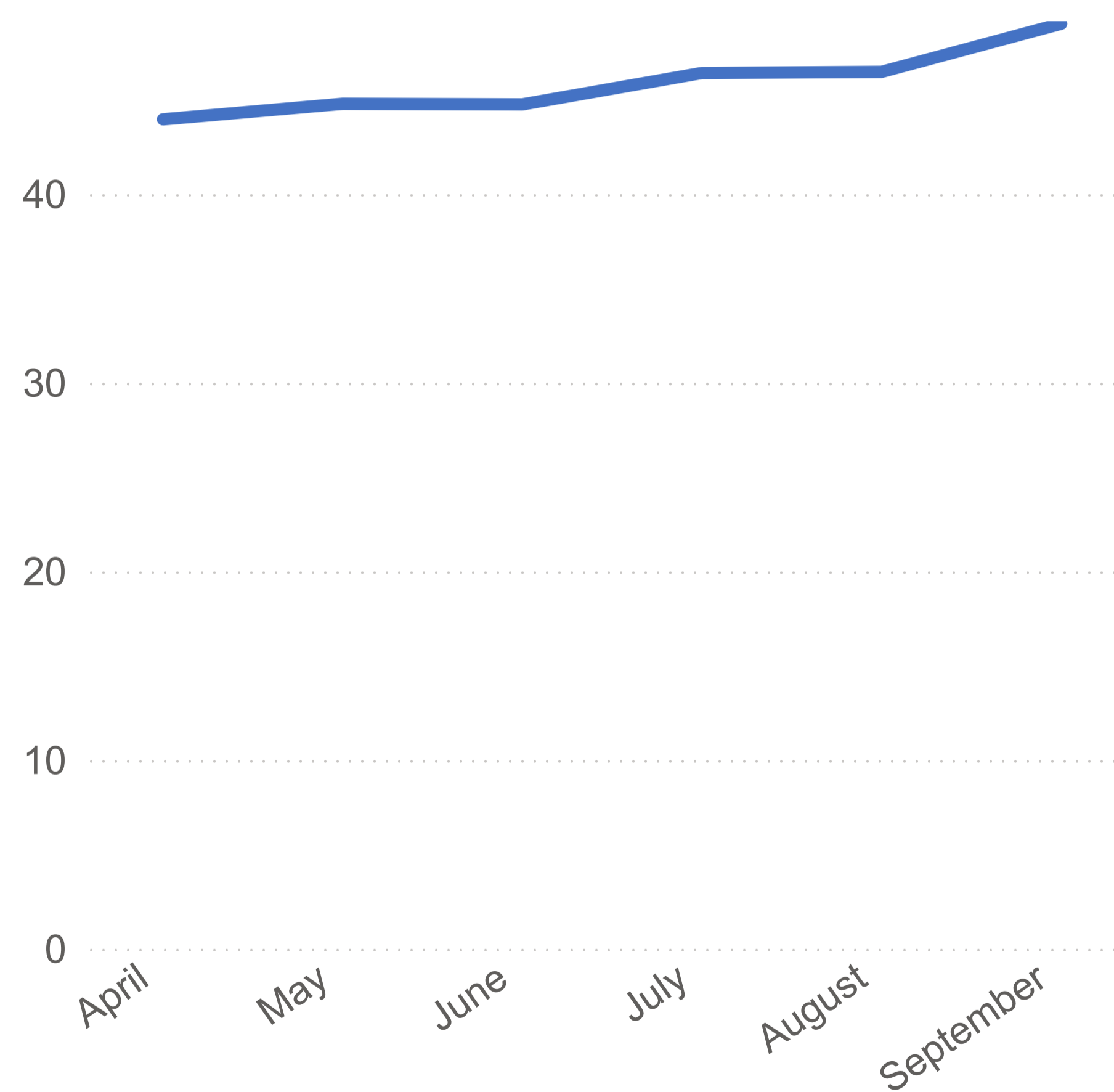
Select a hospital below or hover over the scatter plot to see specific data.

Select hospital

Percentage use of drug-eluting balloons during PCI without stent use by hospital (April - September 2025)



Percentage use of drug-eluting balloons during PCI without stent use (April - September 2025)



45 hospitals used drug-eluting balloons for 50% or more of PCI cases when no stent was used

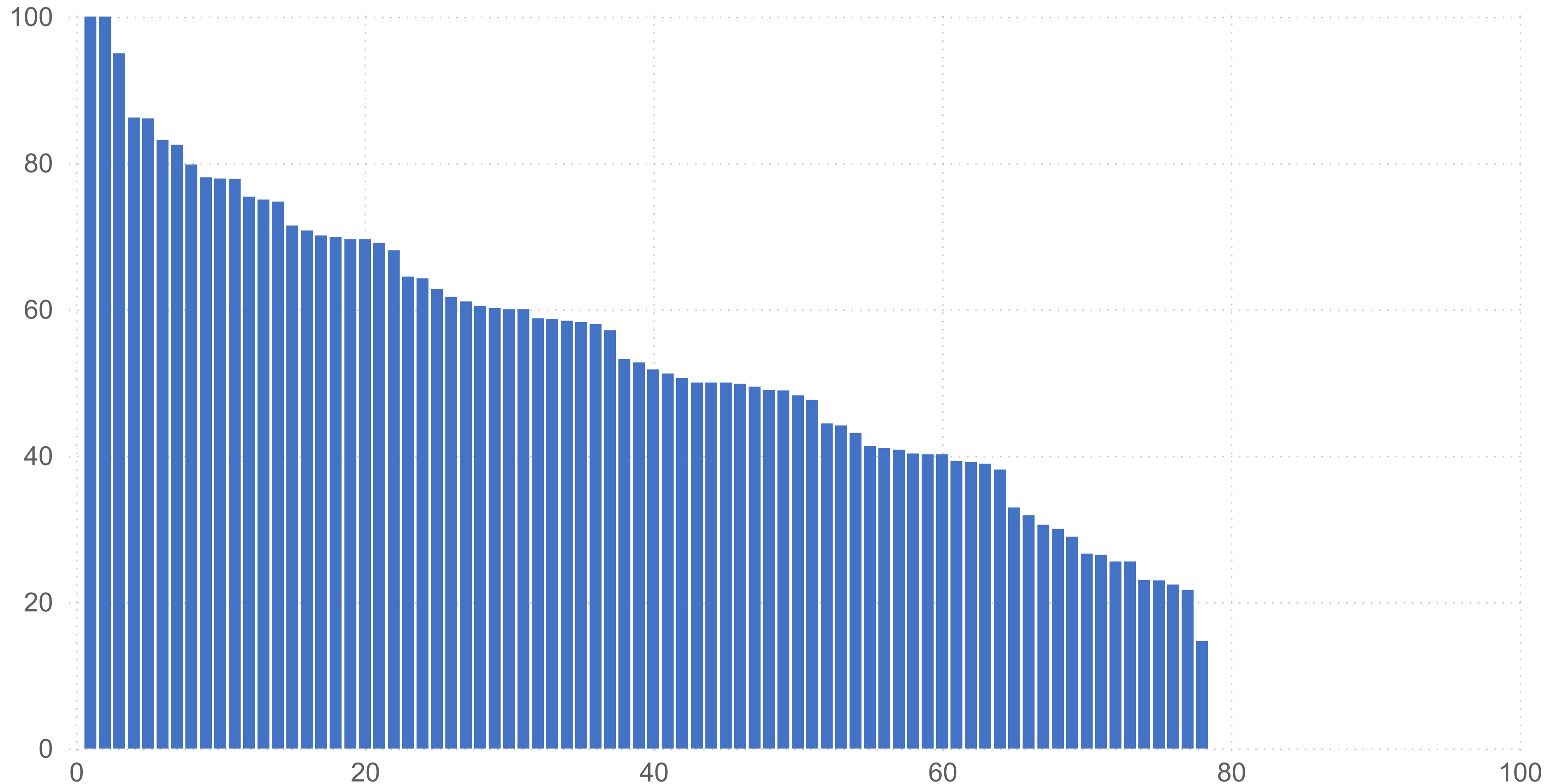


Drug-eluting balloons can be used in conjunction with a stent, or can be used by themselves to treat a lesion.

Use of a drug-eluting balloon (DEB) in PCI without a stent varied between hospitals from zero to 100% in Q1/Q2 2025/26.

Select a hospital below or hover over the graph to see specific data.

Percentage use of drug-eluting balloons during PCI without stent use by hospital (April - September 2025)



Select hospital

Drug-eluting balloons were used in over 40% of cases for the treatment of in-stent restenosis, though many hospitals did not use this method



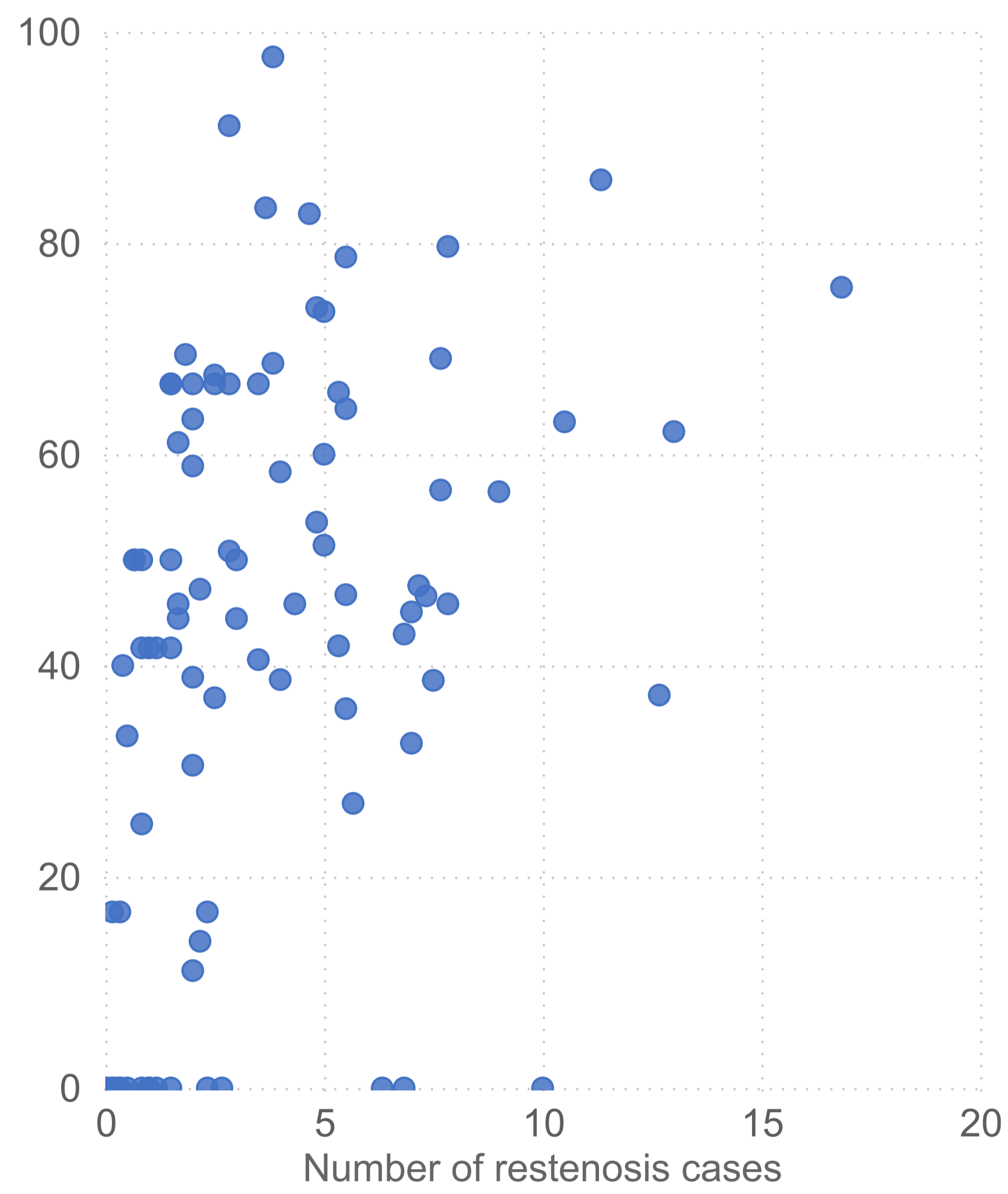
A longer-term complication of PCI is in-stent restenosis (re-narrowing of the artery after treatment). Traditionally this was treated with further stents, but this method slightly increased the risk of future complications such as stent thrombosis and further restenosis due to multiple layers of stents deployed in a vessel.

Drug-eluting balloons (DEB) to treat in-stent restenosis were used for 42% of all PCI cases for in-stent restenosis in Q1/Q2 2025/26, up from 1% in 2018/19 and 36% in 2023/24.

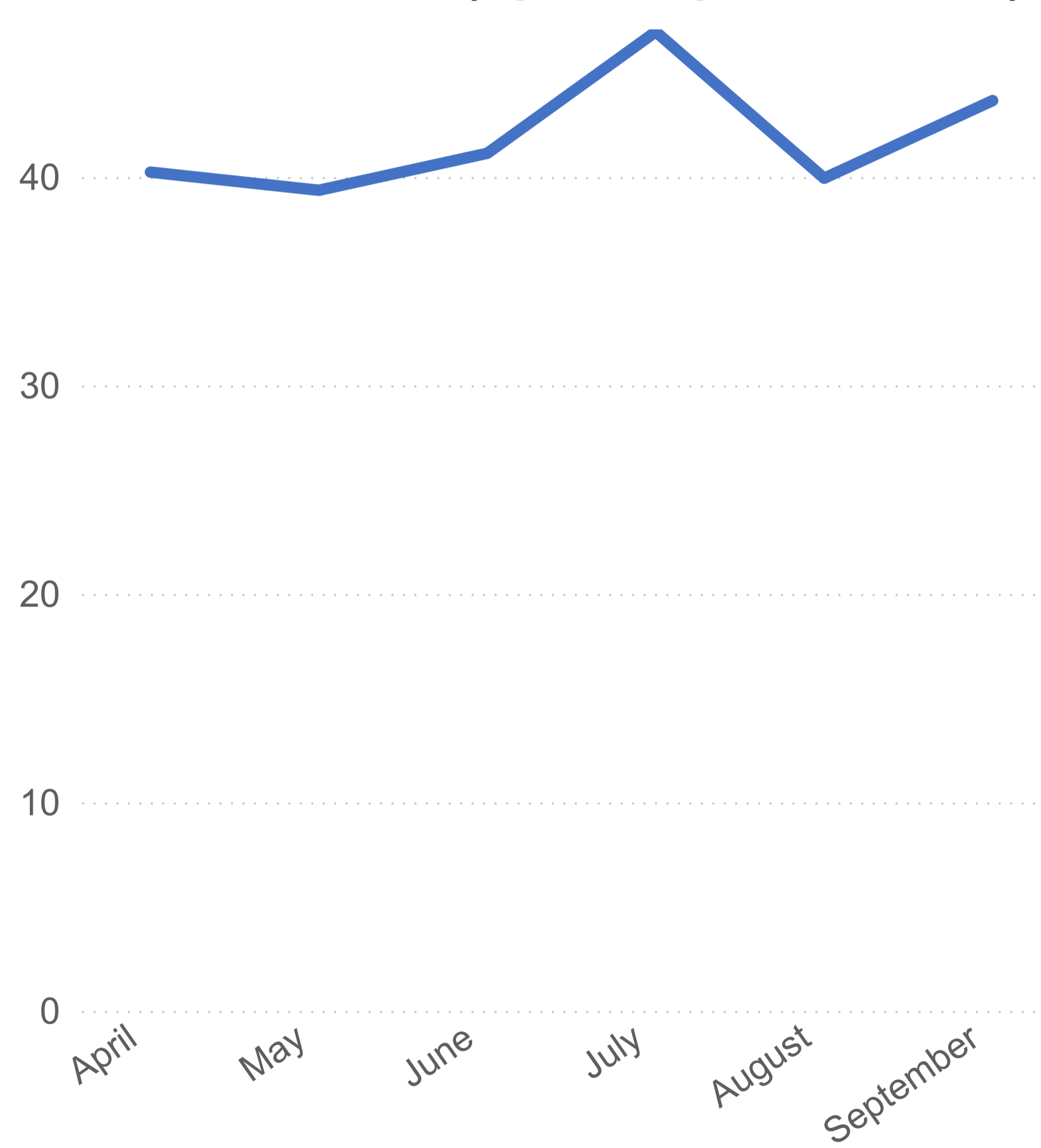
Select a hospital below or hover over the scatter plot to see specific data.

Select hospital

Percentage use of drug eluting balloons in restenosis cases by hospital (April - September 2025)



Percentage use of drug eluting balloons in restenosis cases (April - September 2025)



The use of drug-eluting balloons in the treatment of in-stent restenosis varied from 0% to nearly 100% between hospitals

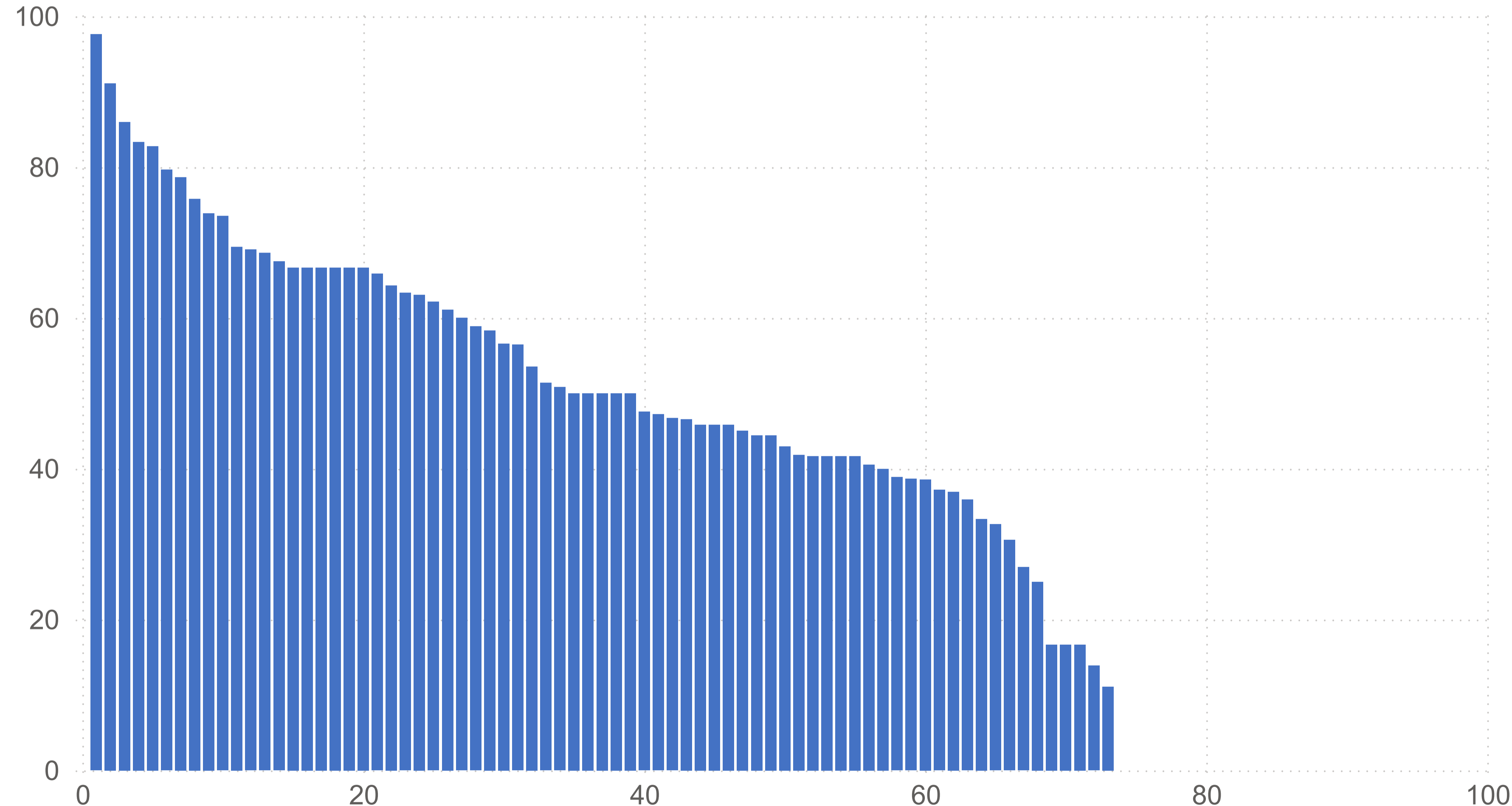


Percentage use of drug-eluting balloons in restenosis cases by hospital (April - September 2025)

The use of drug-eluting balloons (DEB) to treat in-stent restenosis varied hugely between hospitals, with rates between 0% and nearly 100%.

Select a hospital below or hover over the graph to see specific data

Select hospital



References

Introduction

¹ Mohamed MO, Kinnaird T, Curzen N, Ludman P, Wu J, Rashid M, Shoaib A, de Belder M, Deanfield J, Gale CP, Mamas MA. In-Hospital and 30-Day Mortality After Percutaneous Coronary Intervention in England in the Pre-COVID and COVID Eras. *J Invasive Cardiol.* 2021 Mar;33(3):E206-E219.

² McAllister KS, Ludman PF, Hulme W, de Belder MA, Stables R, Chowdhary S, Mamas MA, Sperrin M, Buchan IE; British Cardiovascular Intervention Society and the National Institute for Cardiovascular Outcomes Research. A contemporary risk model for predicting 30-day mortality following percutaneous coronary intervention in England and Wales. *Int J Cardiol.* 2016 May 1;210:125-32.

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Intracoronary imaging for complex and left main stem PCI procedures

¹ Mohamed MO, Polad J, Hildick-Smith D, Bizeau O, Baisebenov RK, Roffi M, Íñiguez-Romo A, Chevalier B, von Birgelen C, Roguin A, Aminian A, Angioi M, Mamas MA. Impact of coronary lesion complexity in percutaneous coronary intervention: one-year outcomes from the large, multicentre e-Ultimaster registry. *EuroIntervention.* 2020 Sep 18;16(7):603-612.

² Mohamed MO, Kinnaird T, Wijeyesundera HC, Johnson TW, Zaman S, Rashid M, Moledina S, Ludman P, Mamas MA. Impact of Intracoronary Imaging-Guided Percutaneous Coronary Intervention on Procedural Outcomes Among Complex Patient Groups. *J Am Heart Assoc.* 2022 Oct 4;11(19):e026500.

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⁴ Lee JM, Choi KH, Song YB, Lee J-Y, Lee S-J, Lee SY, Kim SM, Yun KH, Cho JY, Kim CJ, Ahn H-S, Nam C-W et al, for the RENOVATE-COMPLEX-PCI Investigators. Intravascular imaging-guided or angiography-guided complex PCI. *N Eng J Med.* 2023;388:1668-1679

⁵ Kinnaird T, Johnson T, Anderson R, Gallagher S, Sirker A, Ludman P, de Belder M, Copt S, Oldroyd K, Banning A, Mamas M, Curzen N. Intravascular imaging and 12-month mortality after unprotected left main stem PCI: an analysis from the British Cardiovascular Intervention Society Database. *JACC Cardiovasc Interv* 2020;13:346-357

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¹ Wiviott SD, Braunwald E, McCabe CH, et al; TRITON-TIMI 38 Investigators. Prasugrel versus clopidogrel in patients with acute coronary syndromes. *N Engl J Med.* 2007 Nov 15;357(20):2001-15.

² Wallentin L, Becker RC, Budaj A, et al; PLATO Investigators; Freij A, Thorsén M. Ticagrelor versus clopidogrel in patients with acute coronary syndromes. *N Engl J Med.* 2009 Sep 10;361(11):1045-57.

³ Schüpke S, Neumann FJ, Menichelli M, et al; ISAR-REACT 5 Trial Investigators. Ticagrelor or Prasugrel in Patients with Acute Coronary Syndromes. *N Engl J Med.* 2019 Oct 17;381(16):1524-1534.