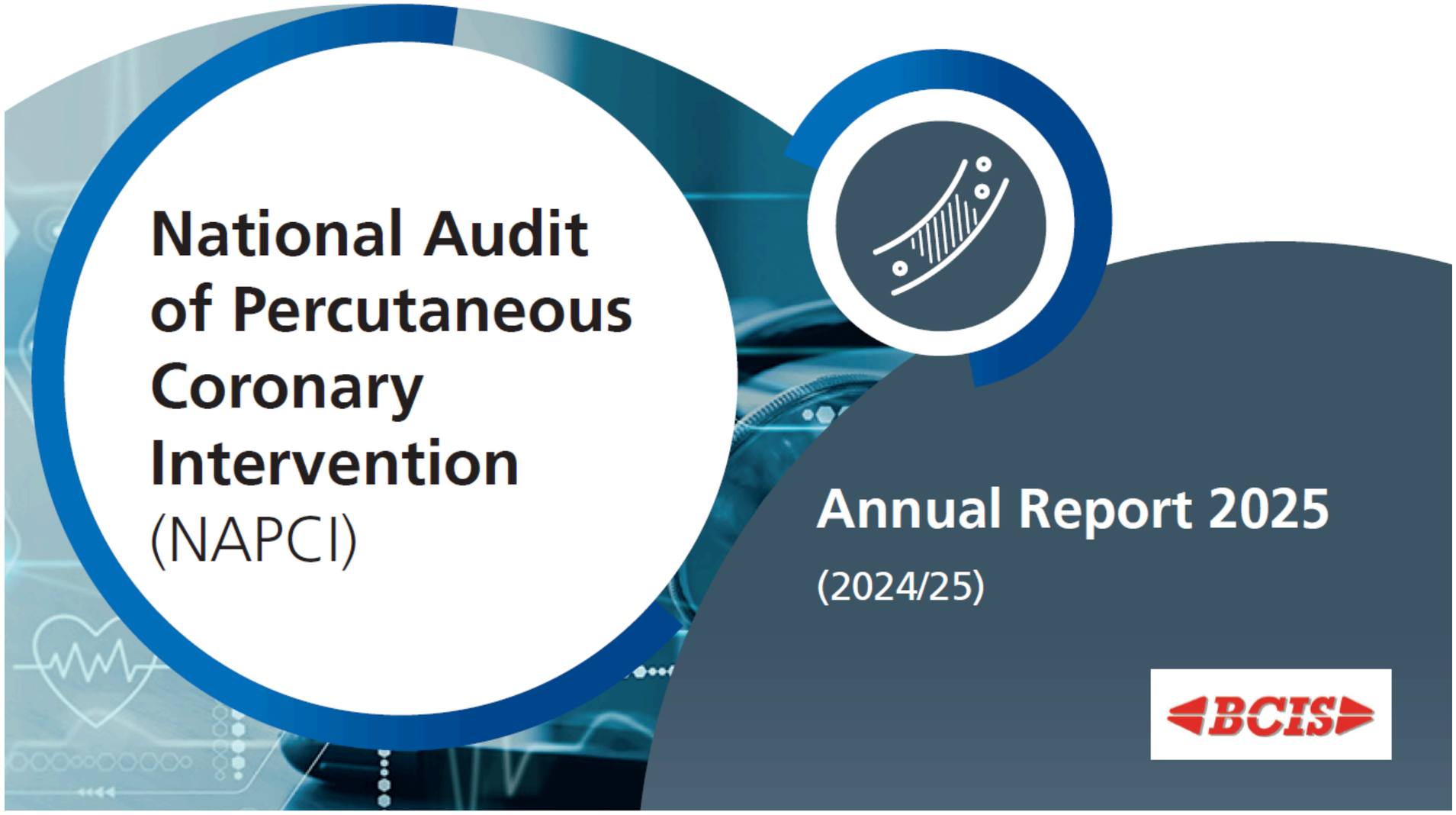
NCAP

NATIONAL CARDIAC AUDIT PROGRAMME

NICOR



National Audit of Percutaneous Coronary Intervention (NAPCI)

Annual Report 2025

(2024/25)

BCIS

Report at a glance

91933 PCI procedures (6% down on 2017/18)
25% reduction in elective PCI is the biggest change but a slight fall in PCI for acute coronary syndrome (ACS) cases since 2017/18
2.5 fold difference between areas with the lowest and highest PCI volumes per 100,000
69% of patients with ST-elevation myocardial infarction (STEMI) taken directly to a Primary Percutaneous Coronary Intervention (PPCI) centre were treated within a Call-To-Balloon (CTB) time of 150 minutes
163 minutes median CTB for inter-hospital transfers was significantly longer than that for direct admissions to the PPCI centre (119 minutes)
32% of complex PCI cases used intracoronary imaging (up from 16% in 2019/20)
76% of PCI for left main stem artery cases used intracoronary imaging (up from 62% in 2018/19)
57% of primary PCI for STEMI cases were prescribed the more effective P2Y12 drugs (up from 44$ in 2019/20)
Use of prasugrel grew faster than ticagrelor but is still below the level recommended by guidelines
43% of PCI cases for in-stent restenosis used drug-eluting balloons (up from 1% in 2018/19)

Recommendations

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 following new guidance from NHS England, upgrading transfer of these patients to category 2. This followed data from NICOR highlighting a failure to achieve target guideline-recommended Call-To-Balloon times. Nevertheless they still lag substantially behind those for patients directly admitted to a cardiac centre and this will require careful monitoring.

2. Centres undertaking PCI for left main stem artery or complex lesions should use intra-coronary imaging in 75% or more of cases

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. Ethnicity data is recorded in only 79% of cases with 24% of centres recording ethnicity in fewer than 75% of cases.

Introduction

The National Audit of Percutaneous Coronary Intervention (NAPCI) is part of the National Cardiac Audit Programme (NCAP) which is run by the National Institute for Cardiovascular Outcomes Research (NICOR).

This report provides details of the percutaneous coronary intervention (PCI) procedures undertaken in England and Wales during the financial year 2024/25, along with longer-terms trends on the scale and the quality of PCI services. **The report focuses on a number of specific quality improvement (QI) metrics in relation to the delivery of PCI services derived from international standards and guidelines.** It is designed to be of value to stakeholders and importantly it allows patients and their relatives to better understand how PCI services are delivered. **The slides in the report are interactive so you can select and explore the data that interest you.**

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

a. 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 .
b. 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. 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. The COP analysis will resume once the risk model performance is assessed and, if necessary, recalibrated.[1,2]

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.

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

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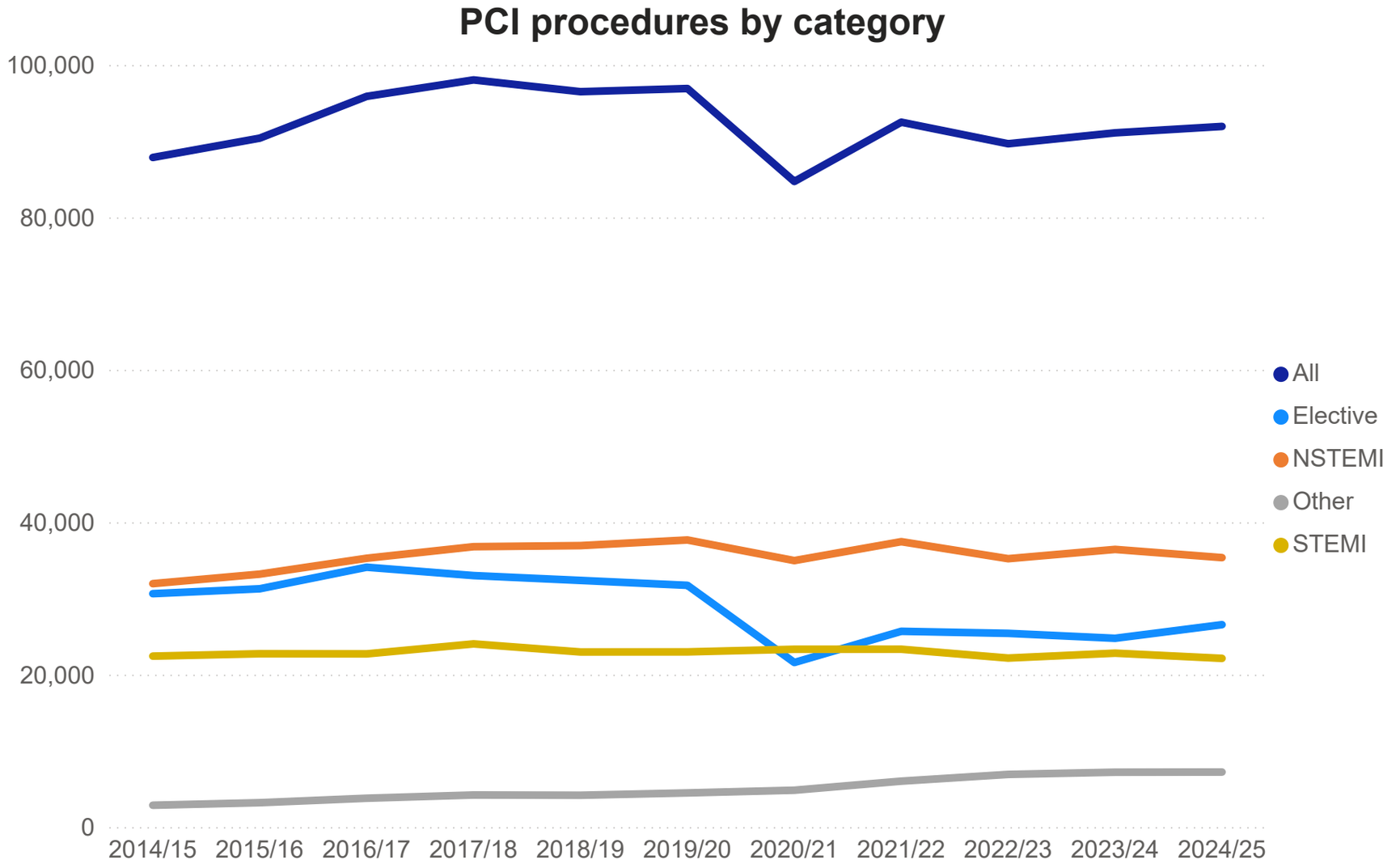
The number of PCI procedures increased slightly in 2024/25 but is 6% lower than in 2017/18

Just under 92,000 percutaneous coronary intervention (PCI) procedures were performed in England and Wales during 2024/25, 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.

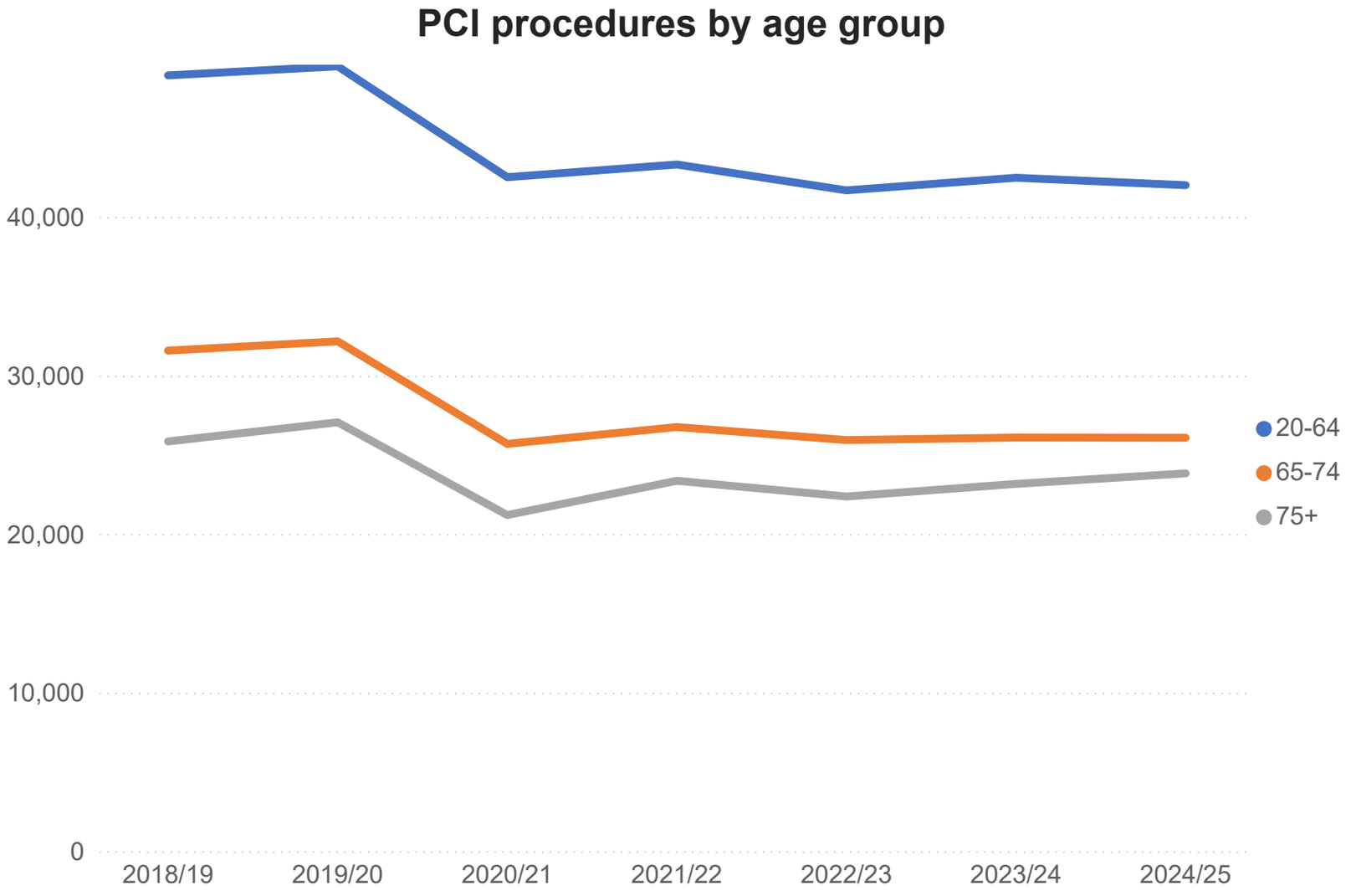


Patients aged under 65 are the largest group undergoing PCI

Patients aged up to 65 accounted for most PCI procedures in 2024/25.

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.

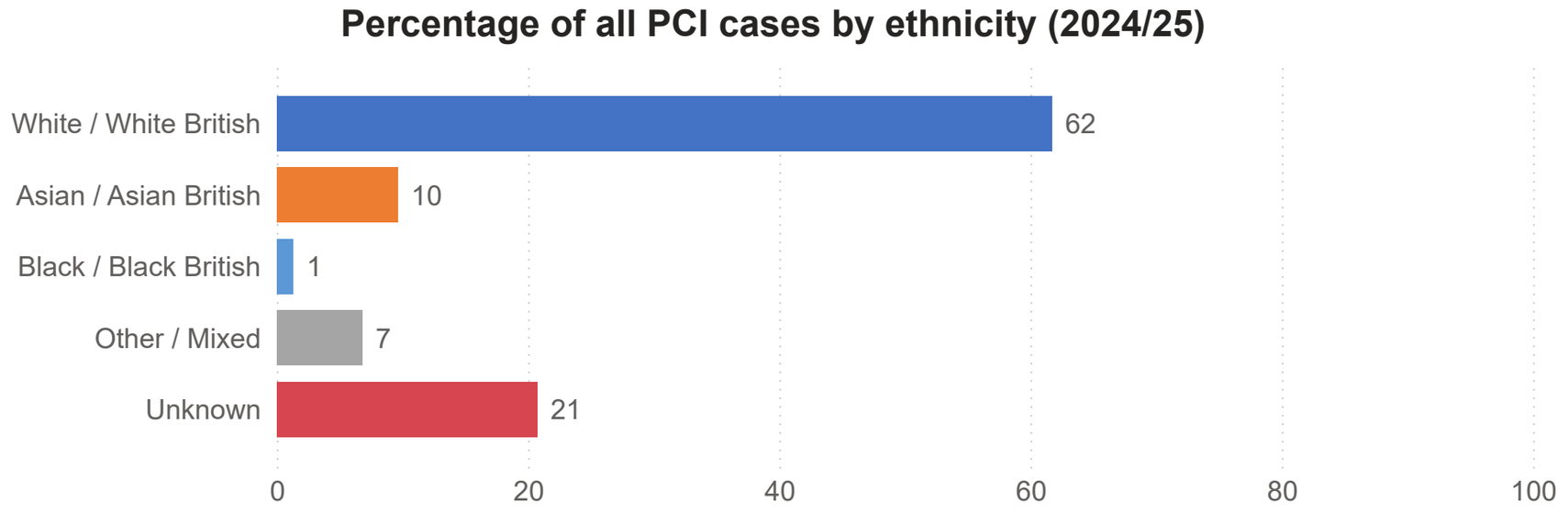


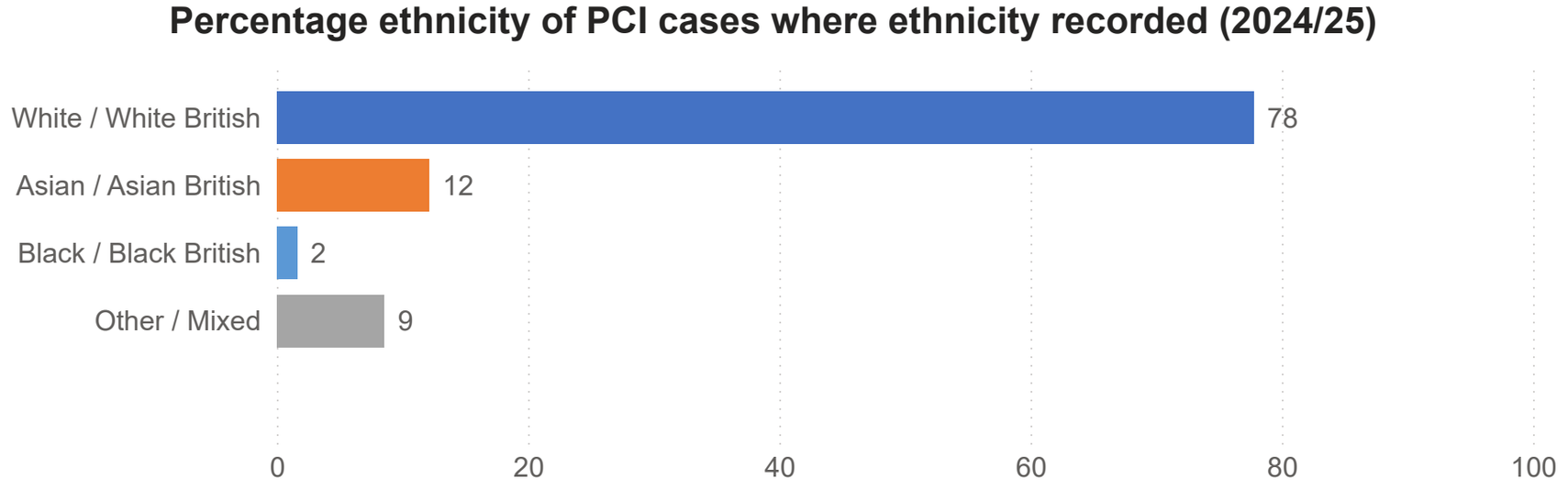
Patient ethnicity remains unknown for 21% of PCI cases

For patients where ethnicity data was provided, the breakdown in 2024/25 was:

- **78% White British**
- **12% Asian / Asian British**
- **2% Black/ Black British.**

Ethnicity data was not submitted for over 20% of PCI patients. All hospitals should provide complete and accurate data to the audit.





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Many hospitals need to improve their recording of PCI patient ethnicity

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.

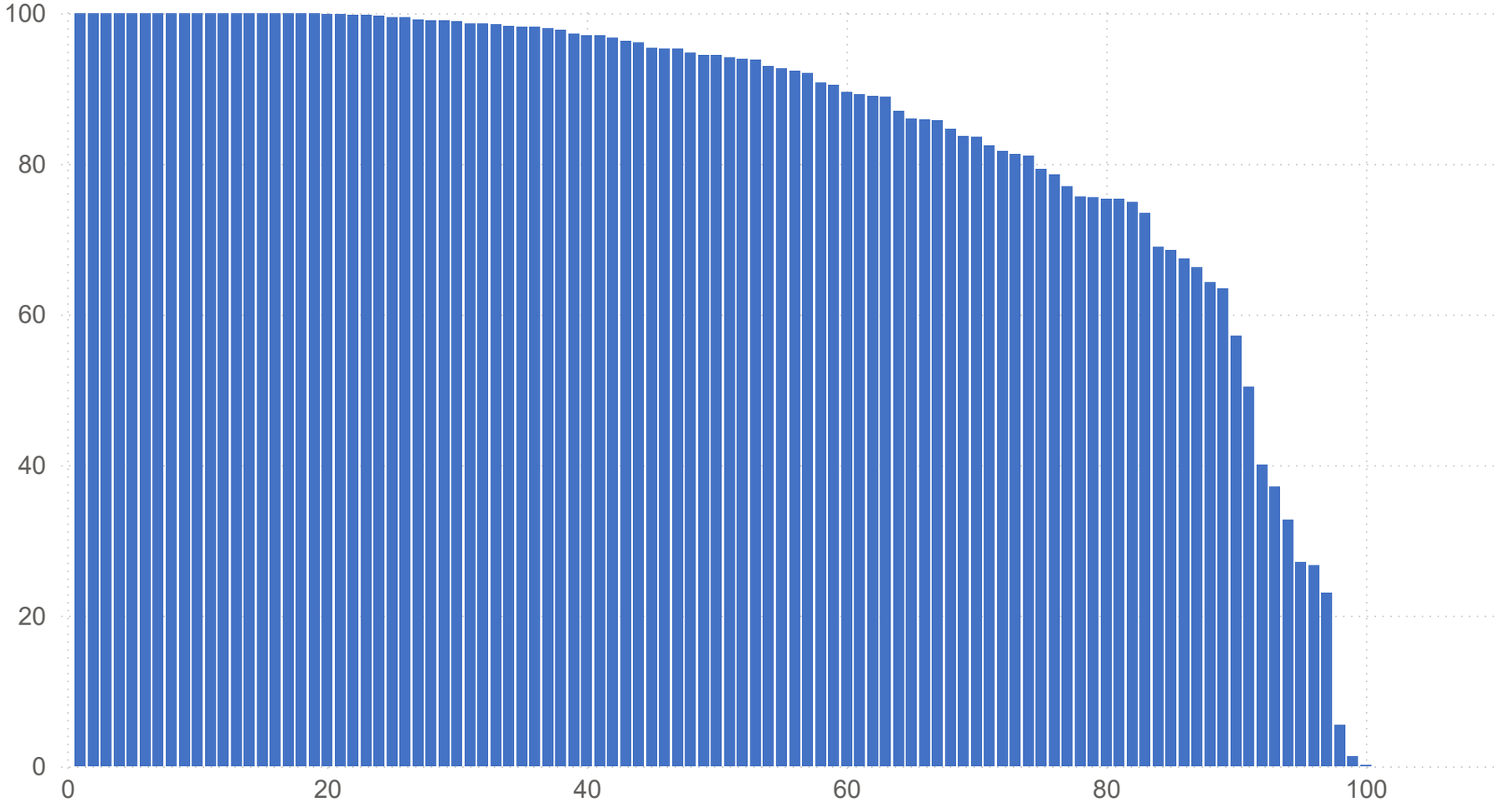
In 2024/25, ethnicity was reported for 79% of patients. Across hospitals, the rate varied from 0% to 100%. Ethnicity should be captured for at least 95% of patients.

Select a hospital below to see its specific data.

Select hospital

All

Percentage of PCI cases for which ethnicity of patient was recorded by hospital (2024/25)



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Rates of PCI vary 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 2024/25, 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.

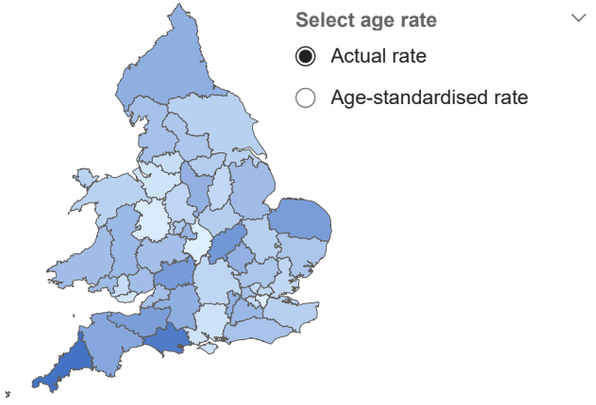
Age-standardised rates are also provided for fairer comparison of rates between areas given that age is a significant risk factor in requiring a PCI procedure.

Select a type of PCI and age rate below or hover

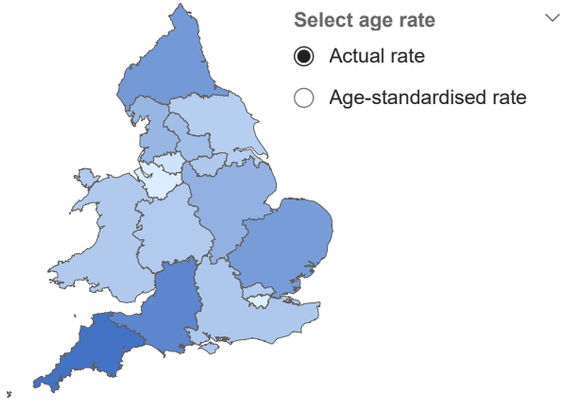
Select type of PCI

All

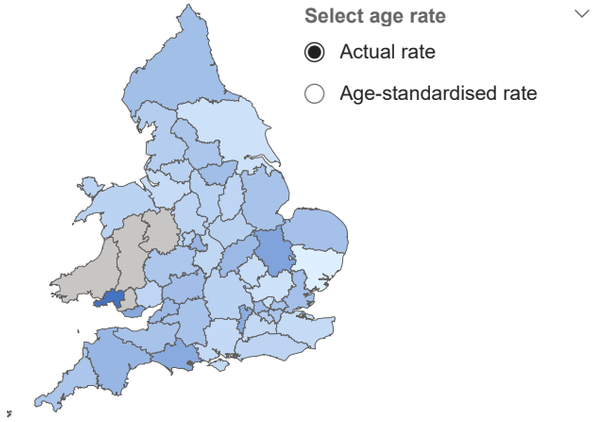
PCI cases per 100k population based on patient home location by ICB/HB (2024/25)



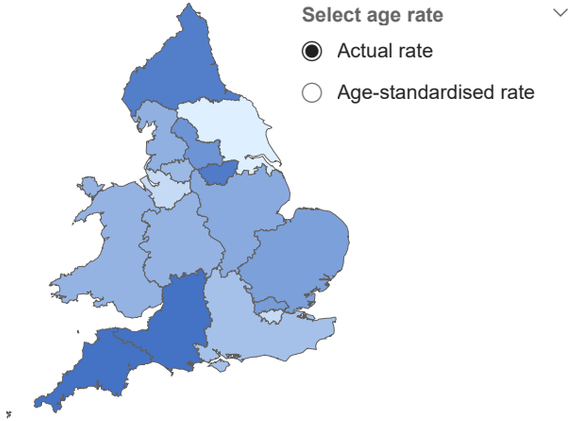
PCI cases per 100k population based on patient home location by Cardiac Network (2024/25)



PCI cases per 100k population based on hospital location by ICB/HB (2024/25)



PCI cases per 100k population based on hospital location by Cardiac Network (2024/25)



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.

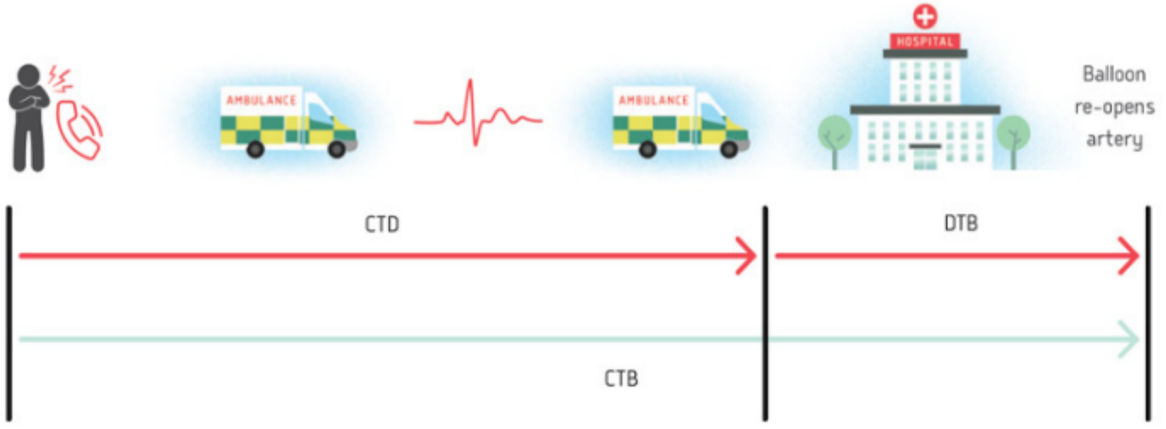
The Call-To-Door (CTD) time covers the period when the patient is brought to hospital by the ambulance services.

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 are 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.

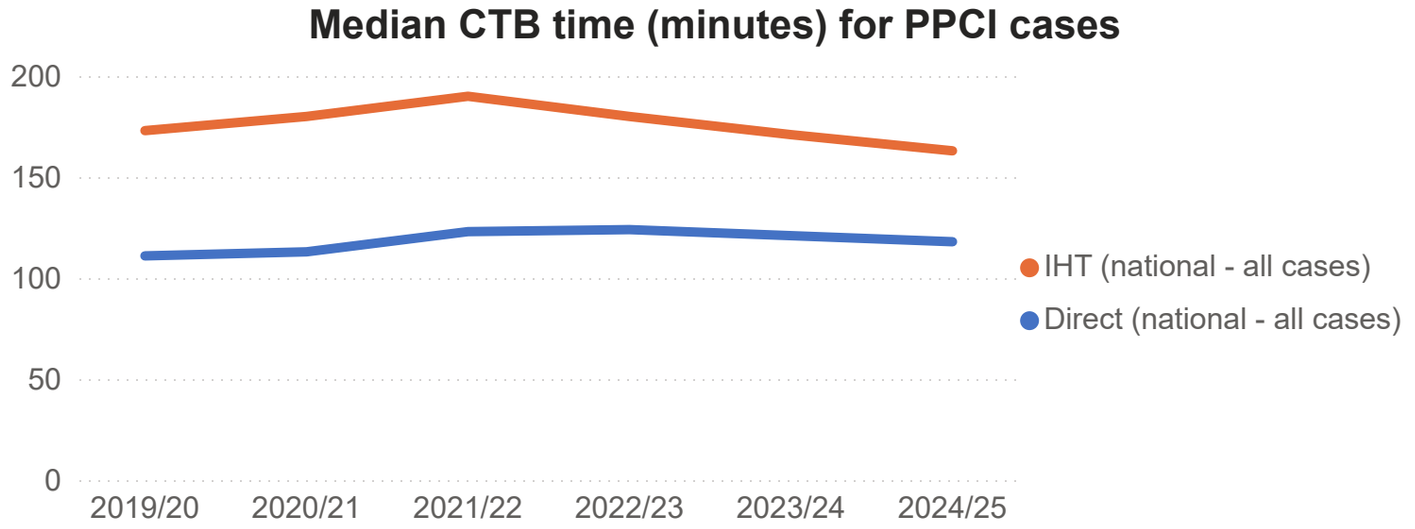
Guidelines recommend PPCI treatment:

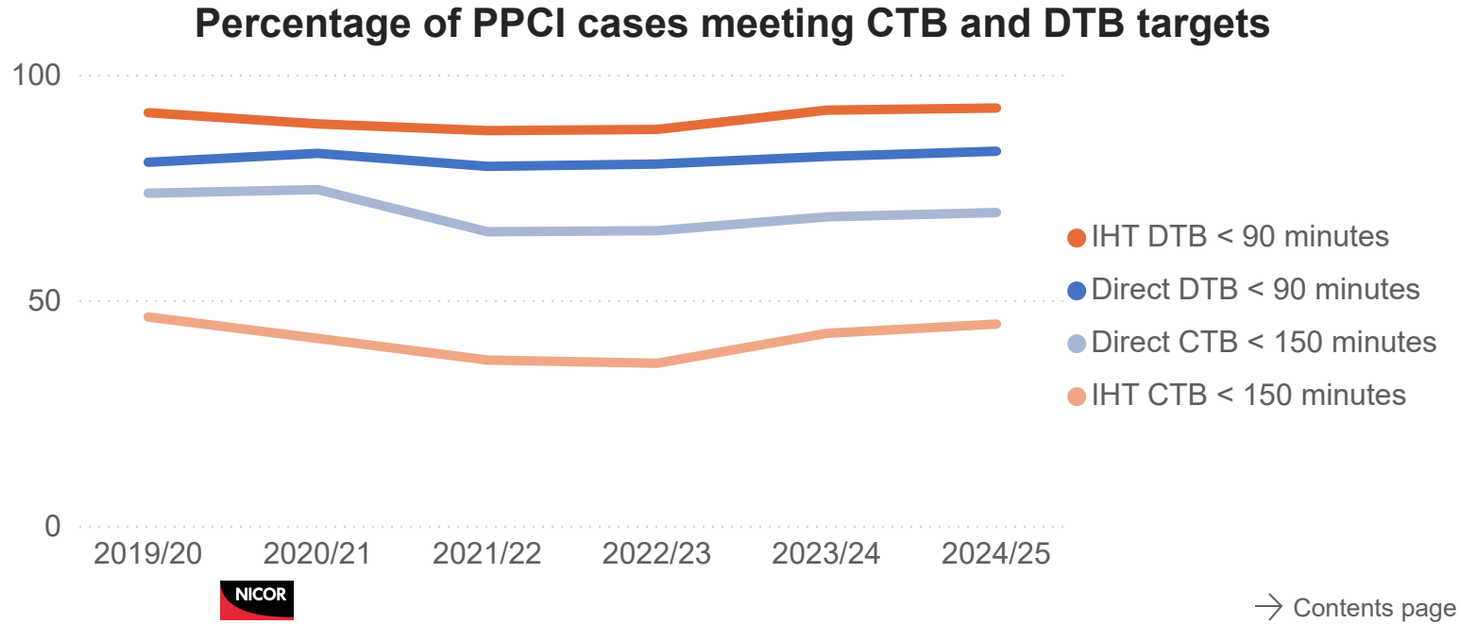
- within 90 minutes of arrival of the patient at the angioplasty centre (the Door-To-Balloon or DTB time)
- within 150 minutes of a patient's call for help (the Call-To-Balloon or CTB time).

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 for both direct and IHT cases fell 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 (163 mins versus 118 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 (69% for direct and 45% for IHT).





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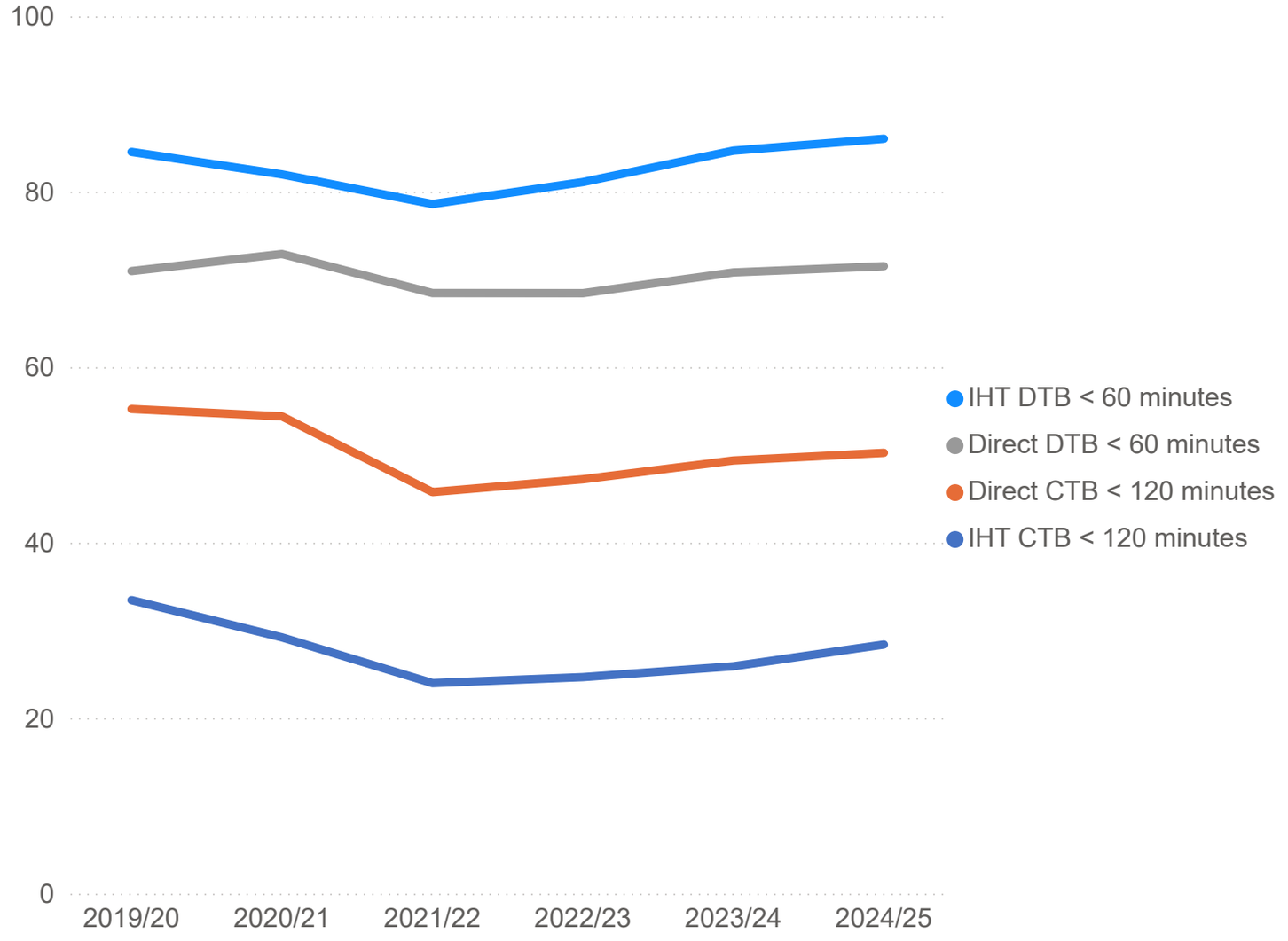
Patients requiring inter-hospital transfer are less likely to receive timely PCI but more are treated within DTB target times once they arrive at the PPCI centre

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 a 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 2024/25 than if admitted directly to a PCI-capable hospital (28% compared to 50%).

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 target time (86% compared to 72% for direct admissions).

Percentage of cases meeting tighter CTB and DTB targets



Call-To-Balloon (CTB) times vary 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.

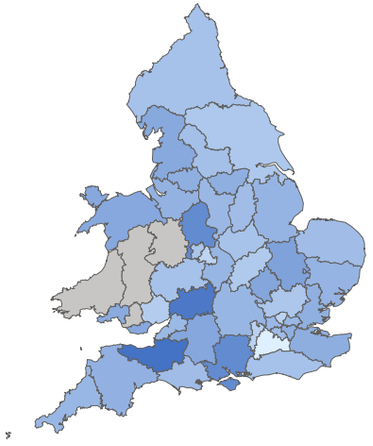
Lighter shades = better performance (i.e. lower median CTB treatment times).

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

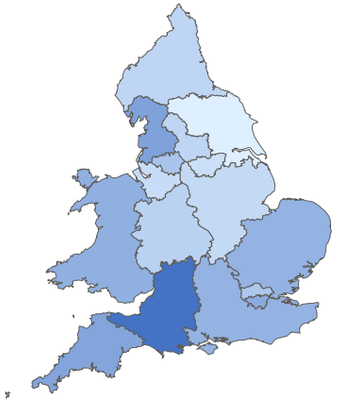
Note: The ICB median is based on the average of the hospital medians in that area. More information on CTB and DTB times can be found in the 'heart attack' audit report.

Link to be added at publication stage

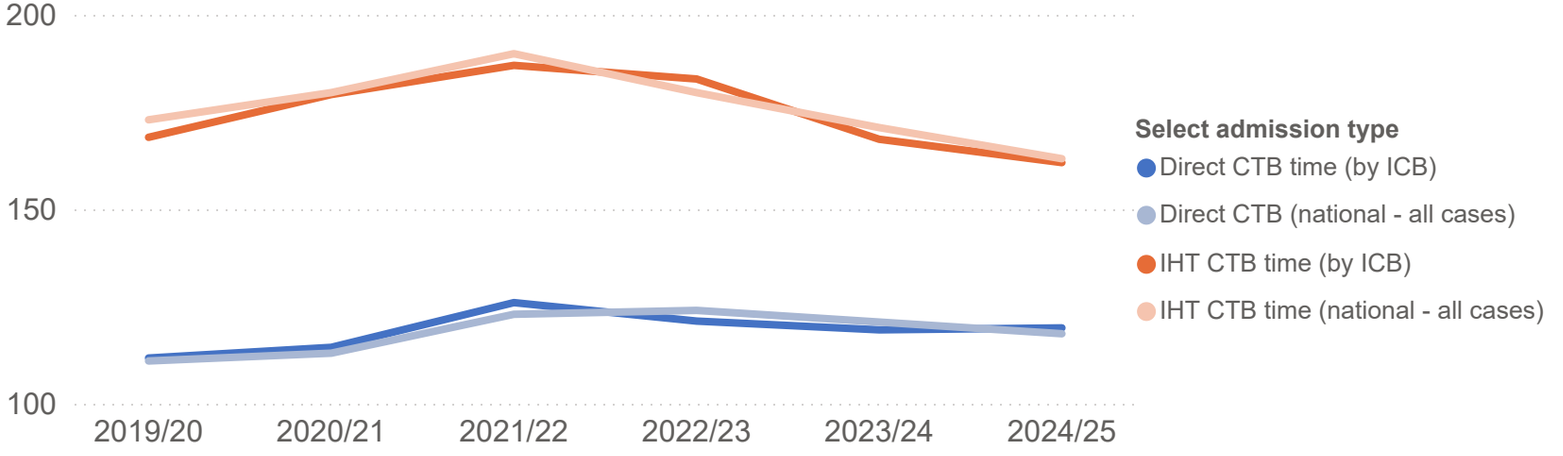
Median CTB times for PPCI based on hospital location by ICB/HB (2024/25)



Median CTB times for PPCI based on hospital location by Cardiac Network (2024/25)



Median PPCI CTB times (minutes) by ICB



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

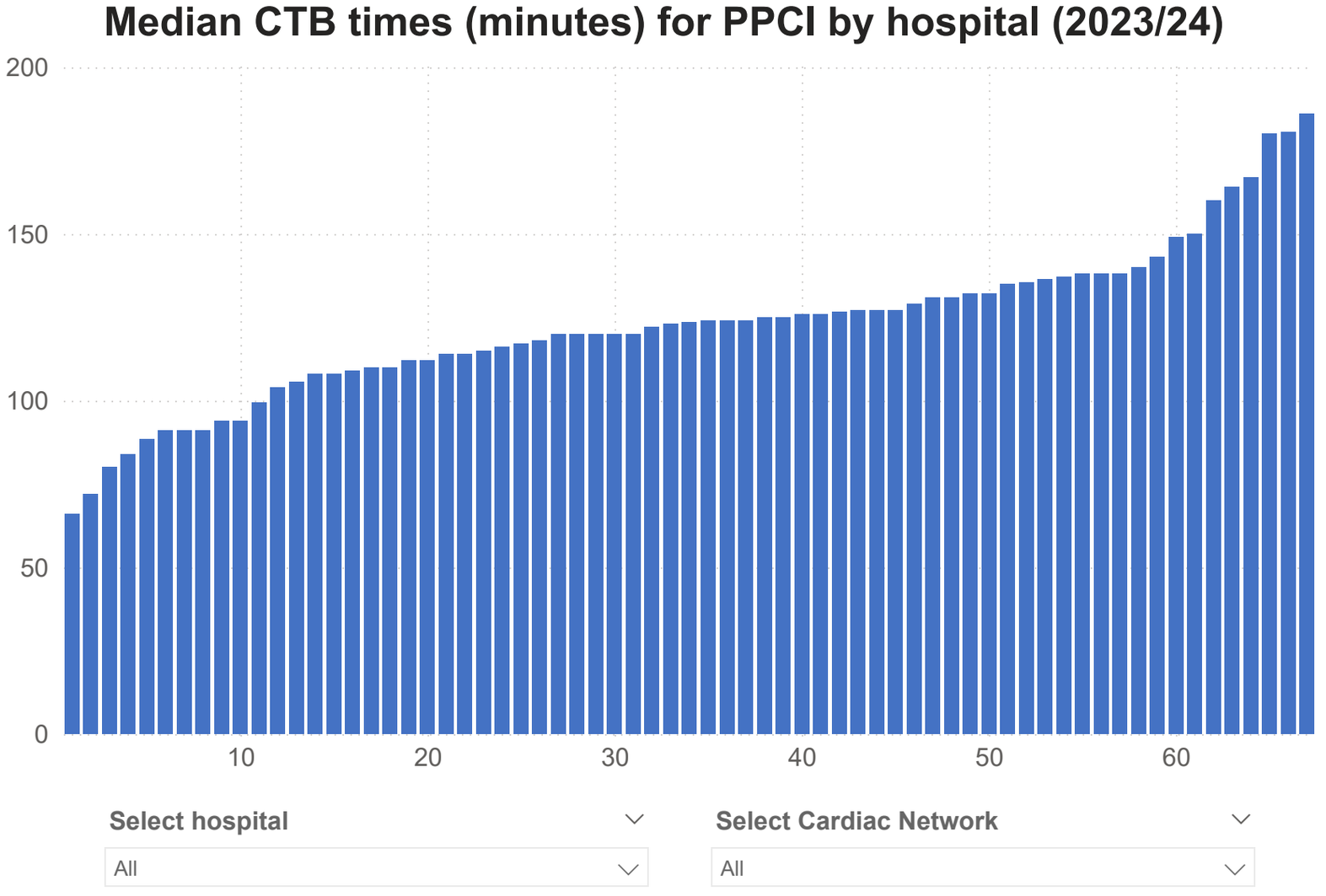
There is considerable variation in the median Call-To-Balloon (CTB) times between hospitals offering a PPCI service to patients with STEMI. The best-performing hospitals deliver PCI in half the time of the worst-performing.

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.



Use of intracoronary imaging for complex PCI procedures continues 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.

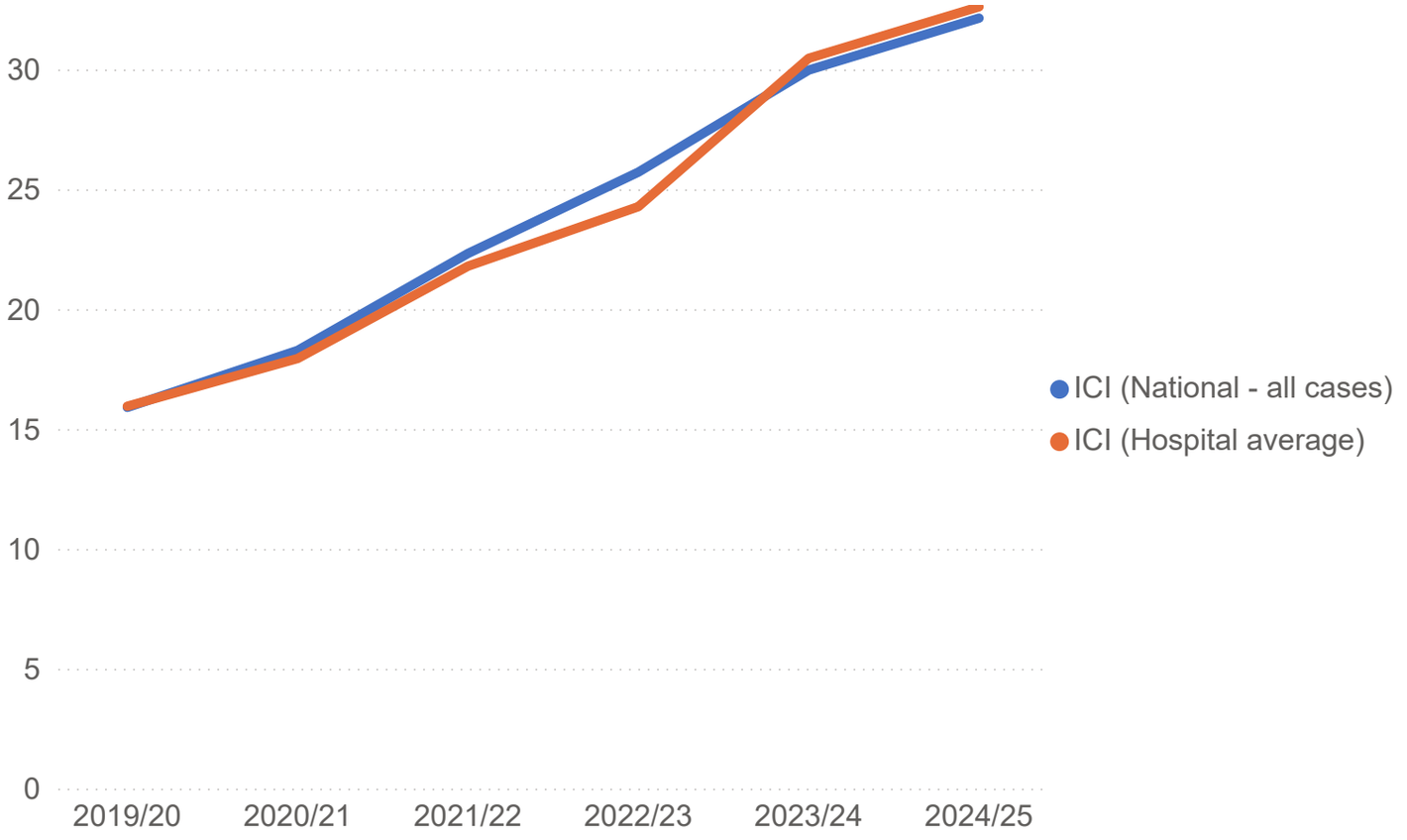
Intracoronary imaging (ICI) provides information on how well the stent has expanded, whether the stent struts are in contact with the wall and whether the stent has been landed in healthy vessel. This is undertaken with either ultrasound (intravascular ultrasound - IVUS) or laser (optical coherence tomography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

There is growing recognition that such imaging is particularly important for complex PCI lesions where the absolute risk of complications is much greater (as supported by recent randomised controlled trials). **As a result, ICI use has increased, occurring in 32% of cases in 2024/25, though there is wide variation between hospitals.**

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



Select hospital

All

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

The maps show use of intracoronary imaging (ICI) during complex percutaneous coronary intervention (PCI) in 2024/25 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).

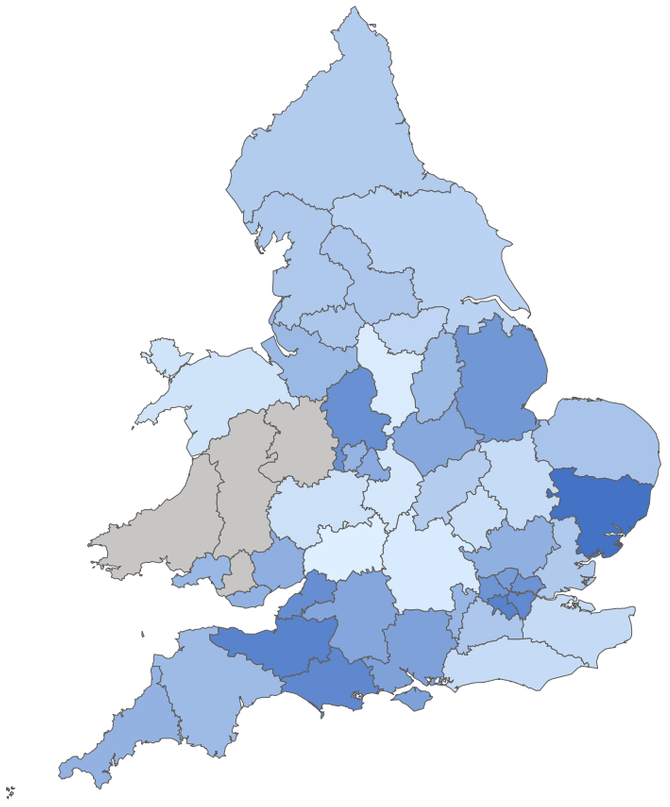
Darker shades = a higher rate of use of ICI for complex PCI.

There is a significant variation between regions in the use of ICI for these complex cases (from 7% to 64% for ICB/HBs and from 20% to 56% for CNs).

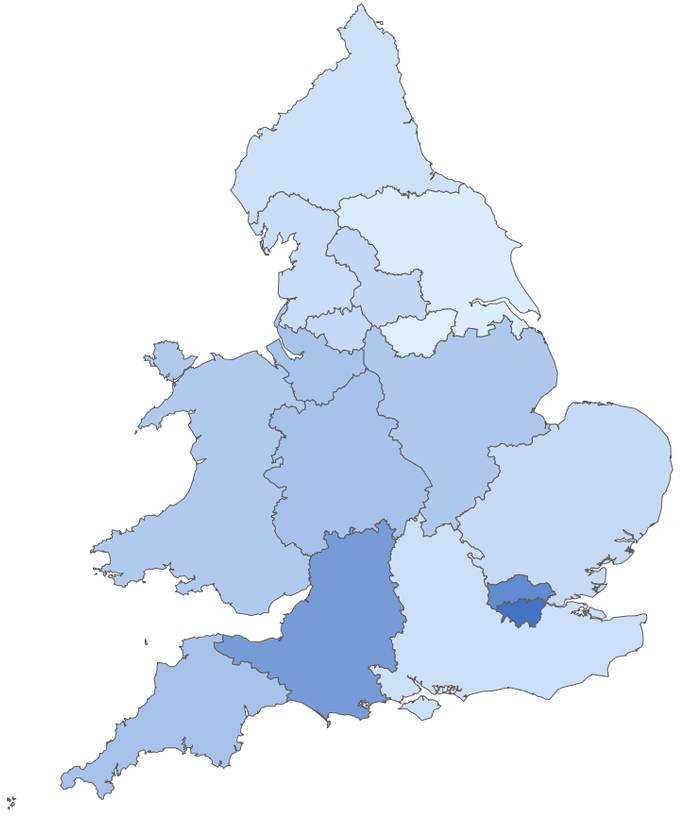
Hover over the maps to see specific data.

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

Percentage use of intracoronary imaging in complex PCI by ICB/HB (2024/25)



Percentage use of intracoronary imaging in complex PCI by Cardiac Network (2024/25)



Intracoronary imaging use for complex cases varies between hospitals

There is huge variation in the use of intracoronary imaging for complex PCI between hospitals (from 0.1% to 77% for those undertaking more than 500 complex PCI procedures).

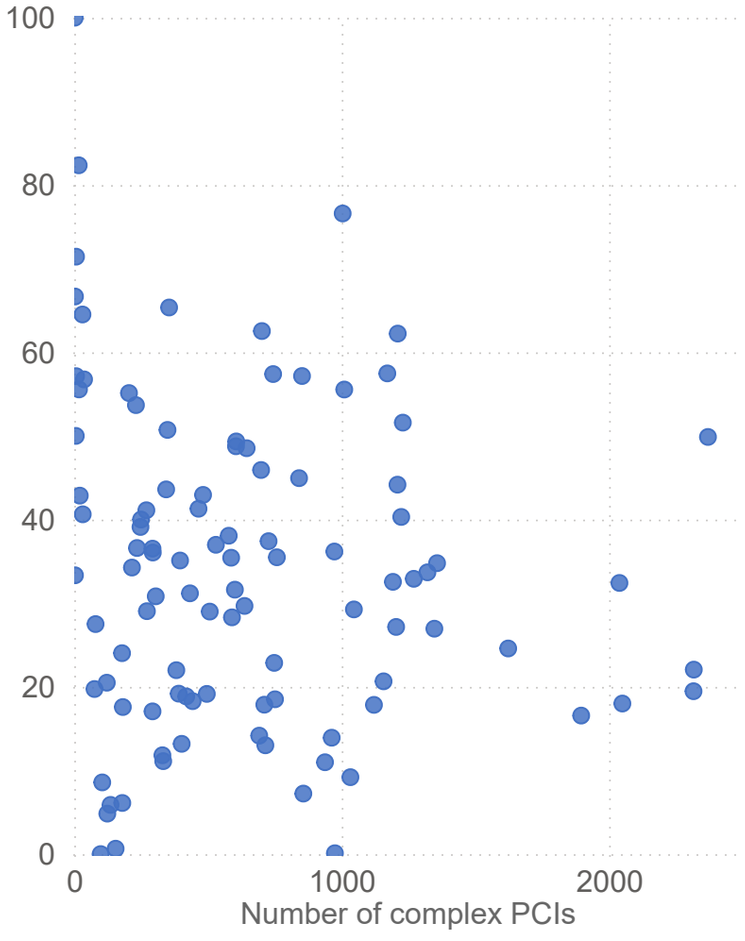
Select a hospital below or hover over a dot in the scatter plot to see specific data.

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

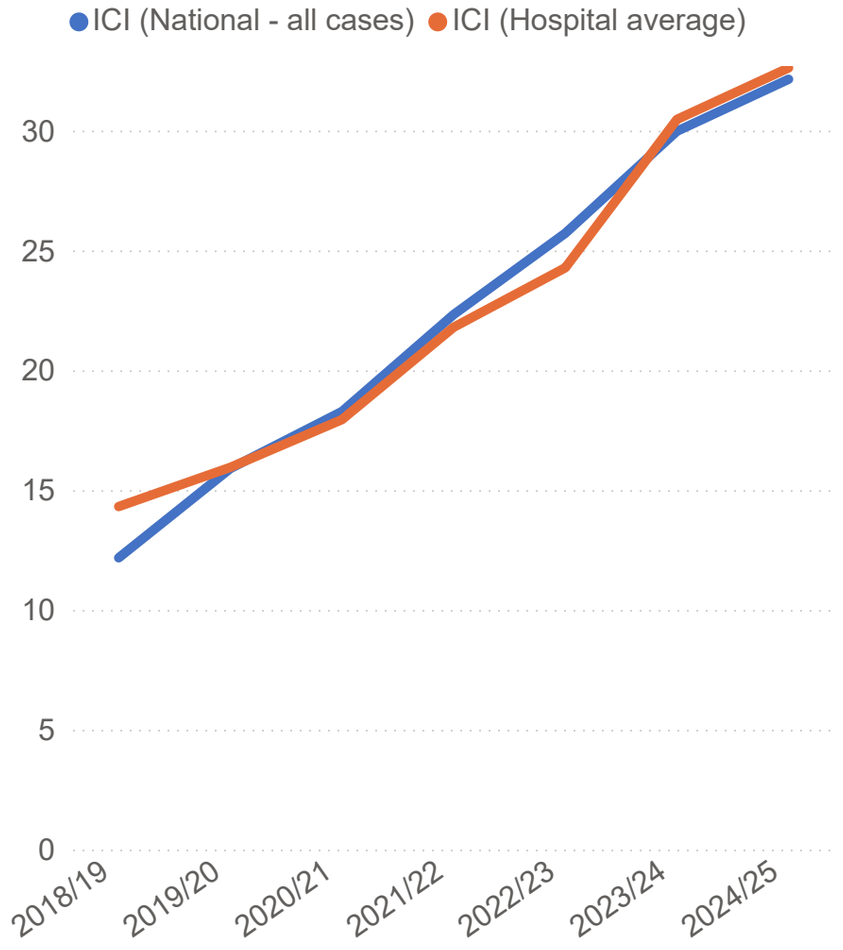
Select hospital

All

Percentage use of intracoronary imaging during complex PCI by hospital (2024/25)



Percentage use of intracoronary imaging during complex PCI



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There is an increasing use of intracoronary imaging in PCI for left main stem (LMS) lesions, but not in all hospitals

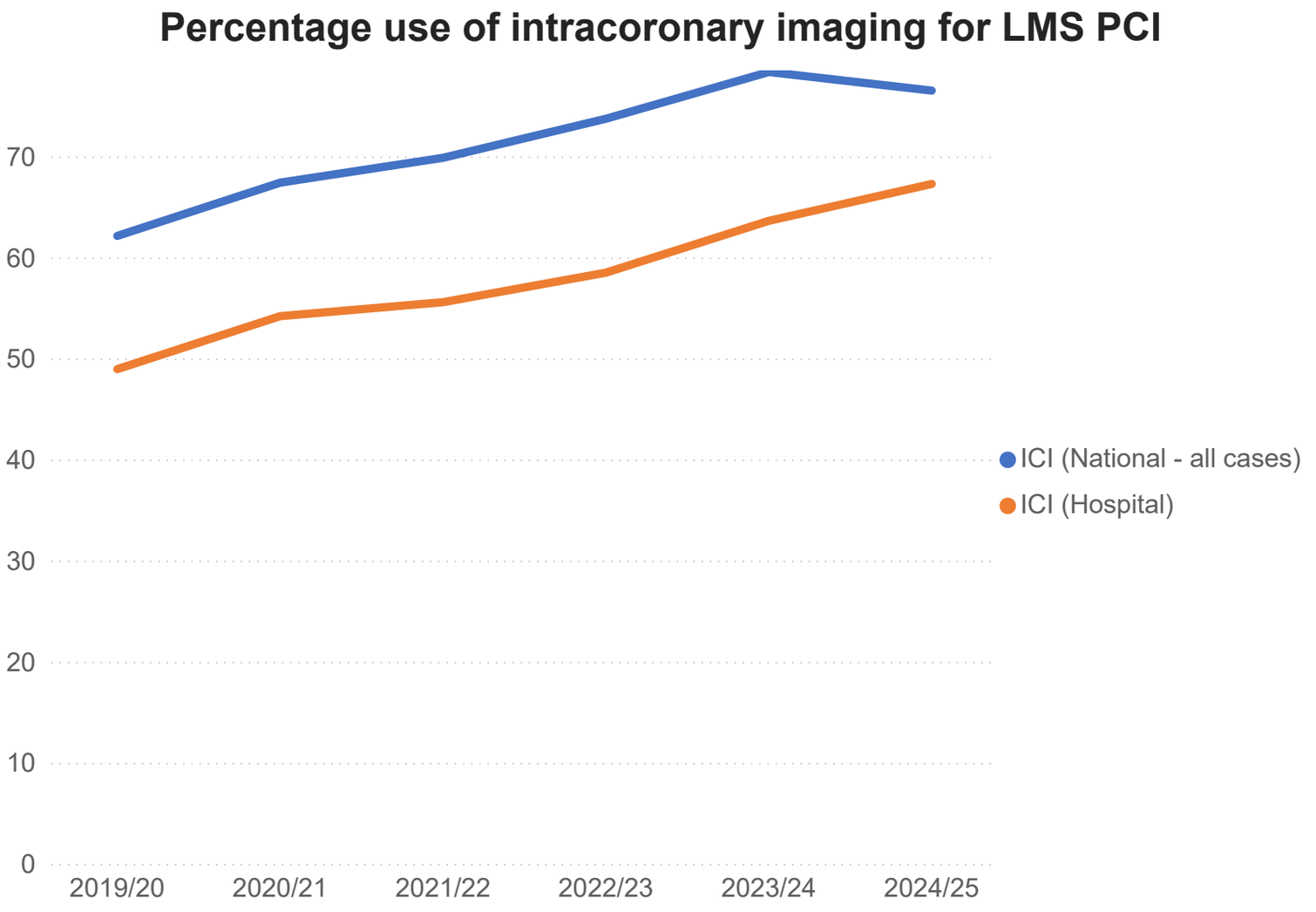
The left main stem (LMS) coronary artery supplies blood to the left ventricle and atrium. Abrupt closure or blockage of the LMS is almost always fatal.

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.

Research shows that intracoronary imaging is associated with a 30% decrease in mortality one year following LMS PCI. The international guidance on the use of ICI for LMS PCI can be seen here.

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

All

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Intracoronary imaging during left main stem PCI varies 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).

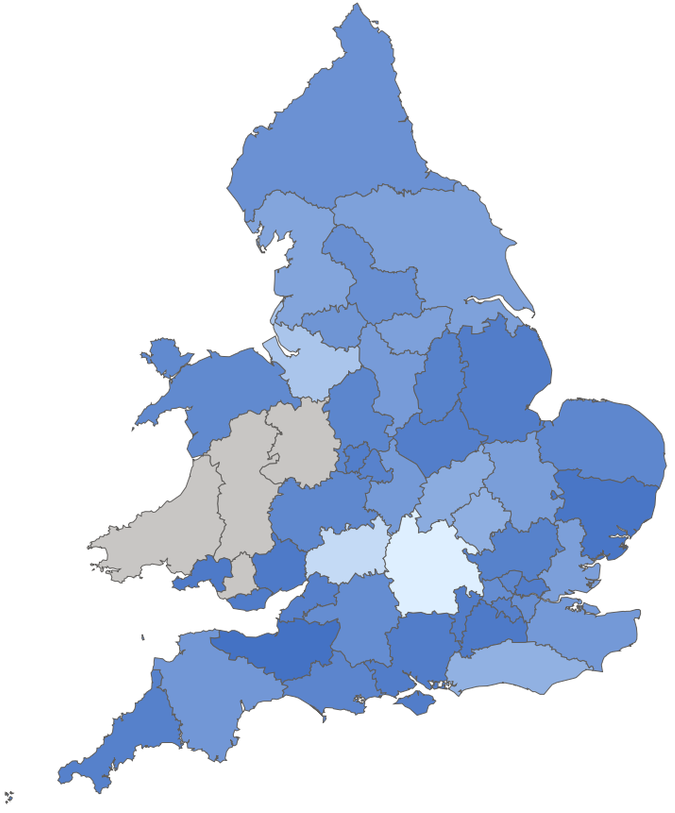
Darker shades = a higher rate of use.

The use of ICI during LMS PCI varies from 94% in hospitals in the NHS Somerset ICB to only 13% in NHS Buckinghamshire, Oxfordshire and Berkshire West ICB. Hospitals in Wales average 88% use.

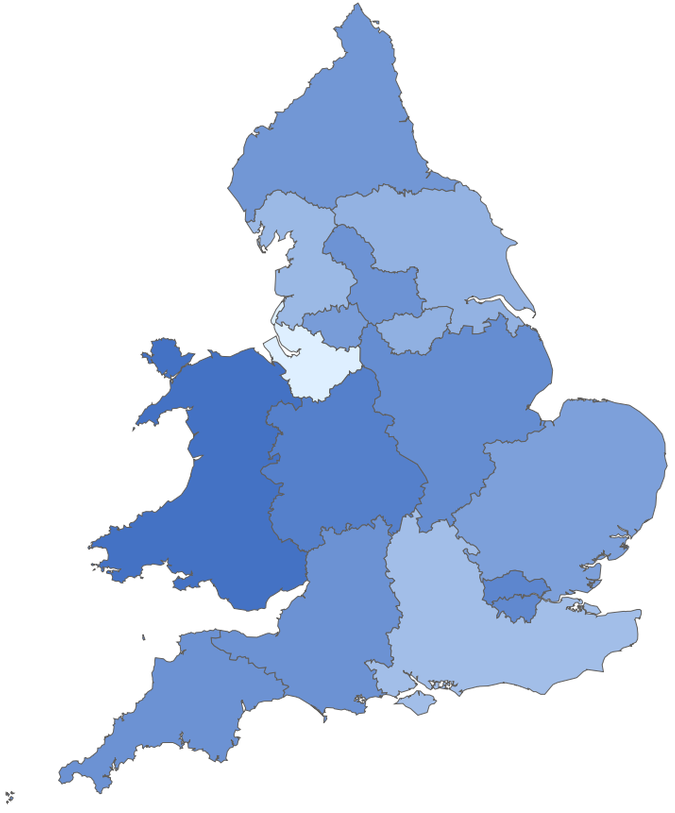
Hover over the maps to see specific data.

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 (2024/25)



Percentage use of intracoronary imaging during LMS PCI by Cardiac Network (2024/25)



Intracoronary imaging for LMS PCI varies substantially between hospitals

There is huge variation in the use of intracoronary imaging for LMS PCI between hospitals (from 0% to 94% for those undertaking more than 50 LMS PCI procedures).

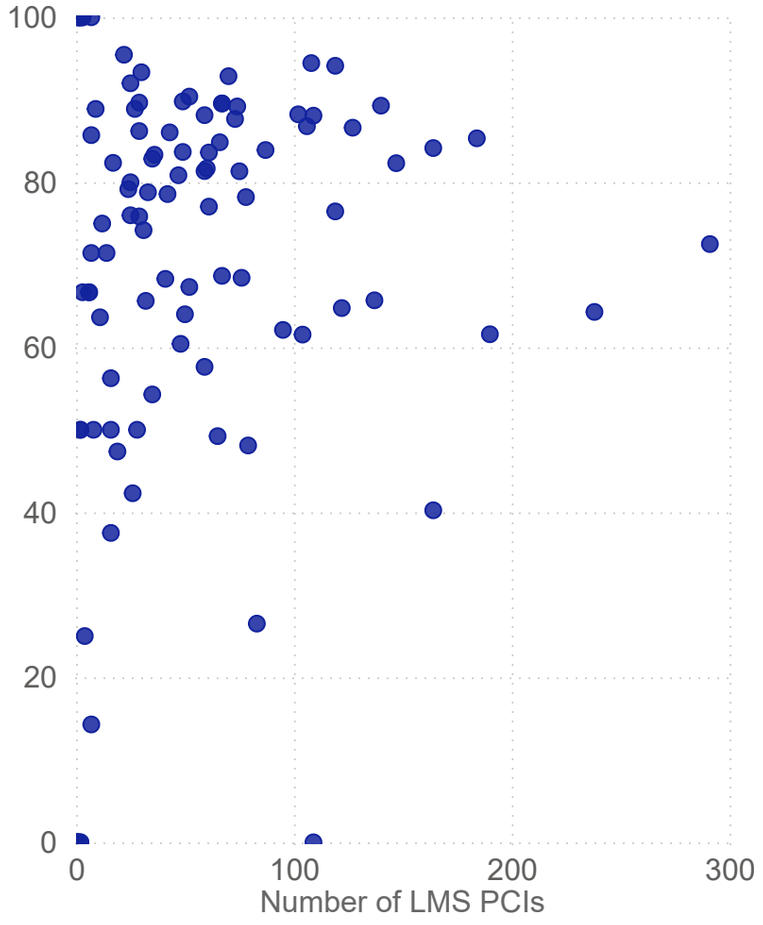
Select a hospital below to see specific data.

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

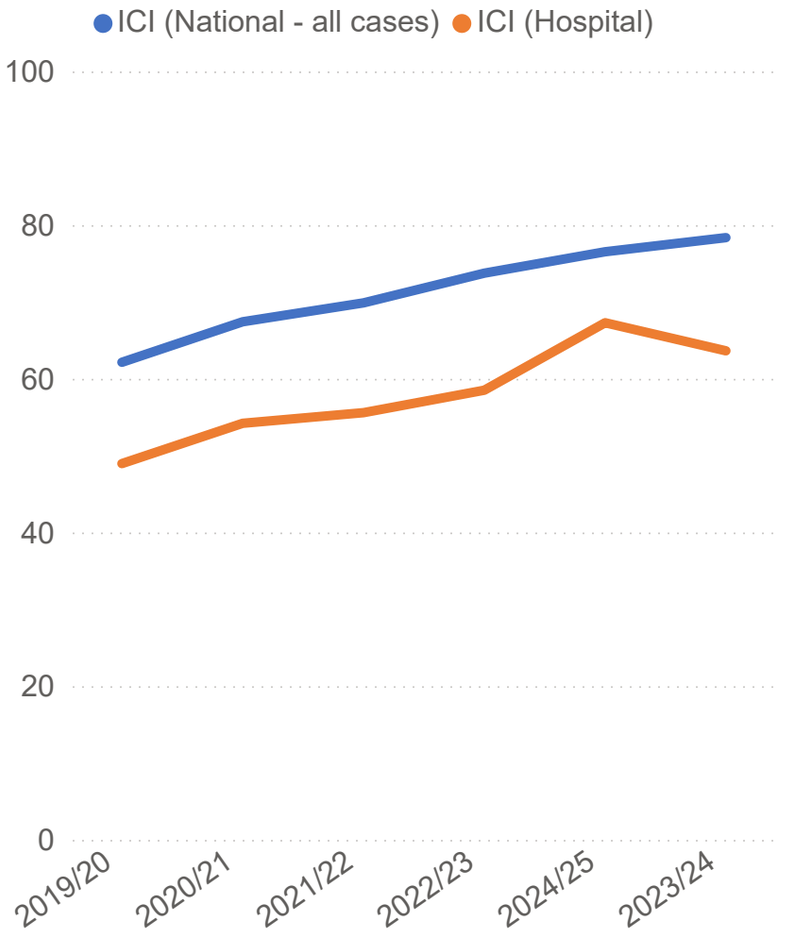
Select hospital

All

Percentage use of intracoronary imaging for LMS PCI by hospital (2024/25)



Percentage use of intracoronary imaging for LMS PCI



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The prescription of the antiplatelet drugs prasugrel and ticagrelor, in PCI for acute coronary syndromes, continues to increase

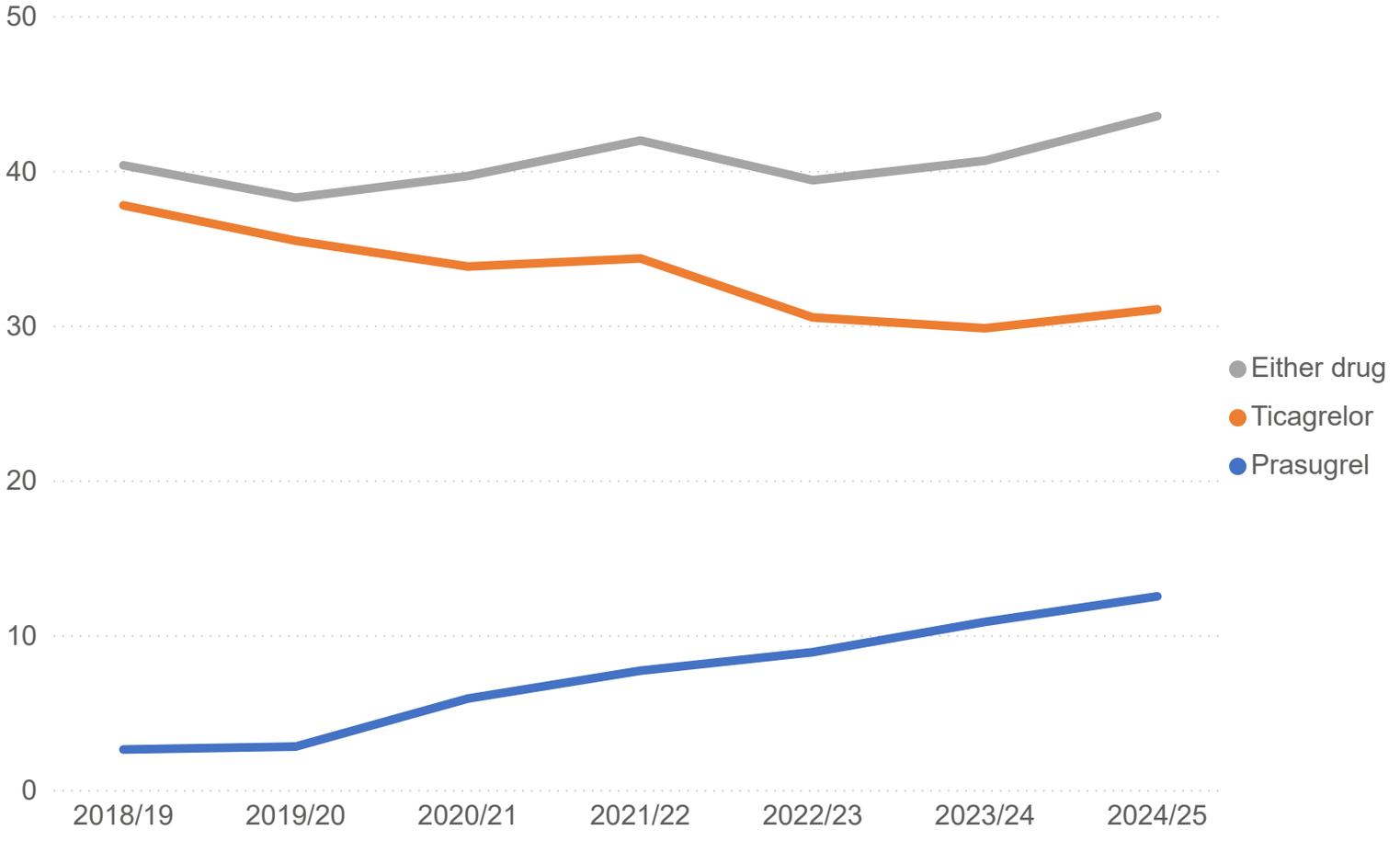
Antiplatelet drugs are used in acute coronary syndromes (ACS) and following percutaneous coronary intervention (PCI) to reduce the risks of further cardiovascular events.

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 slowly increased from 41% in 2023/24 to 44% in 2024/25. There has been a gradual increase in the prescription of prasugrel.

Percentage use of prasugrel and ticagrelor for PCI in acute coronary syndromes



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

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).

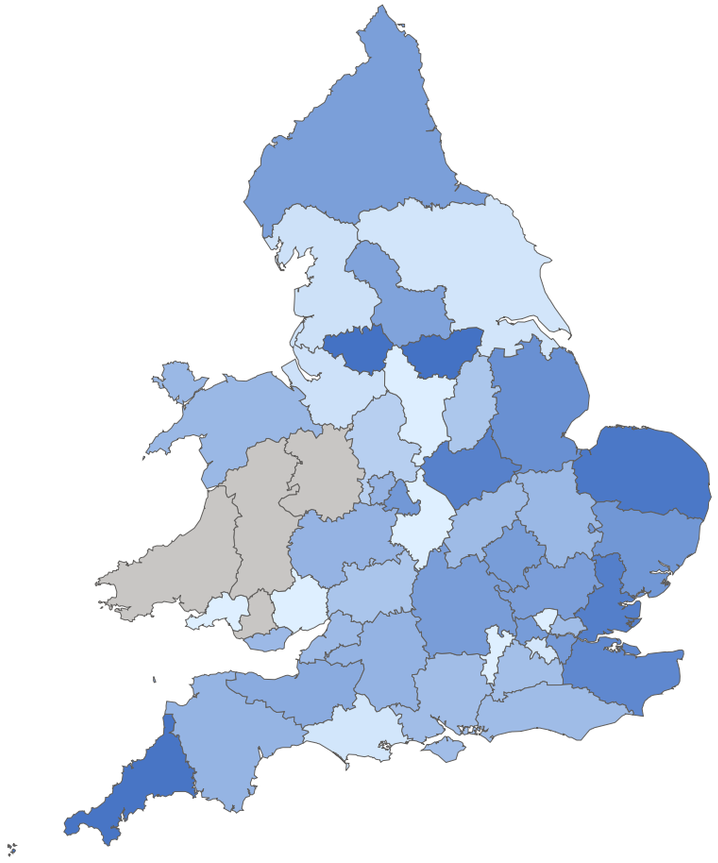
A darker shade = a higher level of prescription of these drugs to ACS patients undergoing PCI.

Newer P2Y12 antiplatelet drugs are used in:

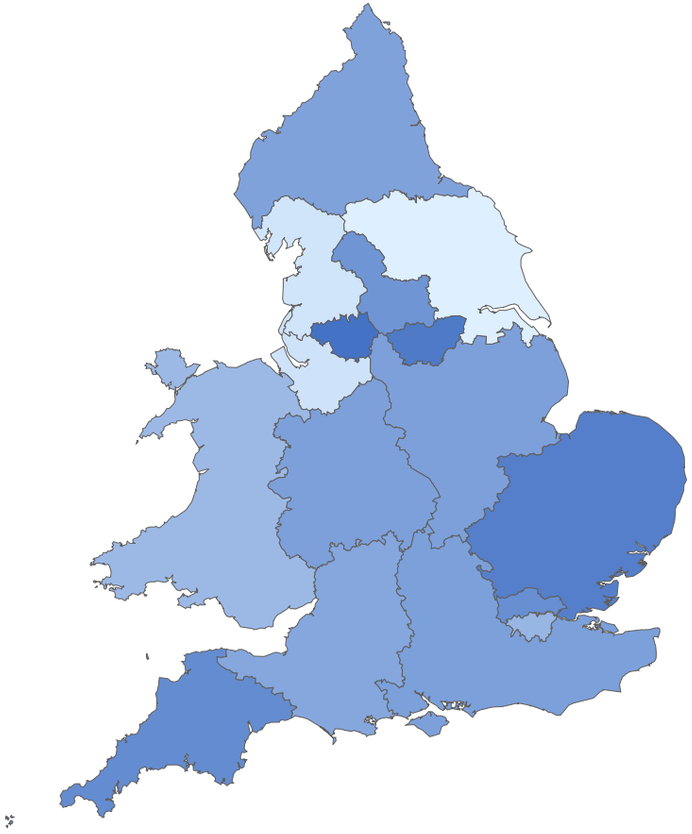
- **86% of cases in NHS South Yorkshire ICB**
- **hardly any cases in NHS North Central London, NHS Frimley, NHS Coventry and Warwickshire and NHS Derby and Derbyshire ICBs.**

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

Percentage use of prasugrel or ticagrelor in ACS treated by PCI by ICB/HB (2024/25)



Percentage use of prasugrel or ticagrelor in ACS treated by PCI by Cardiac Network (2024/25)



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

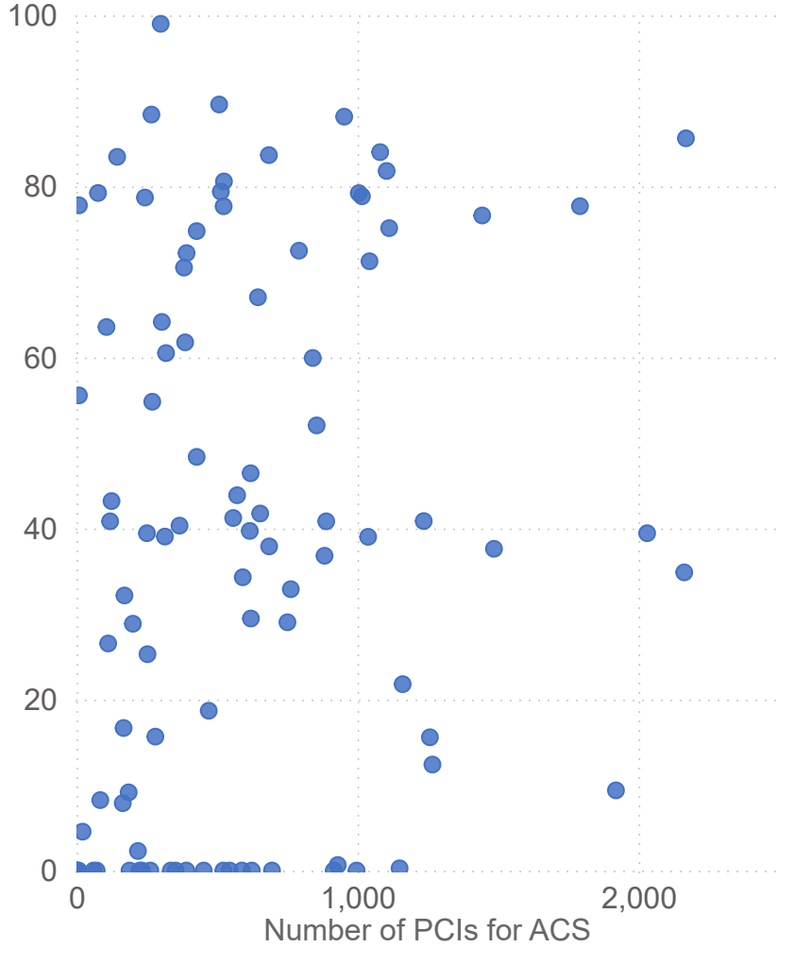
There is huge variation in the prescribing of new P2Y12 antiplatelet drugs in PCI for acute coronary syndrome (ACS), from 0% of cases to 100%.

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

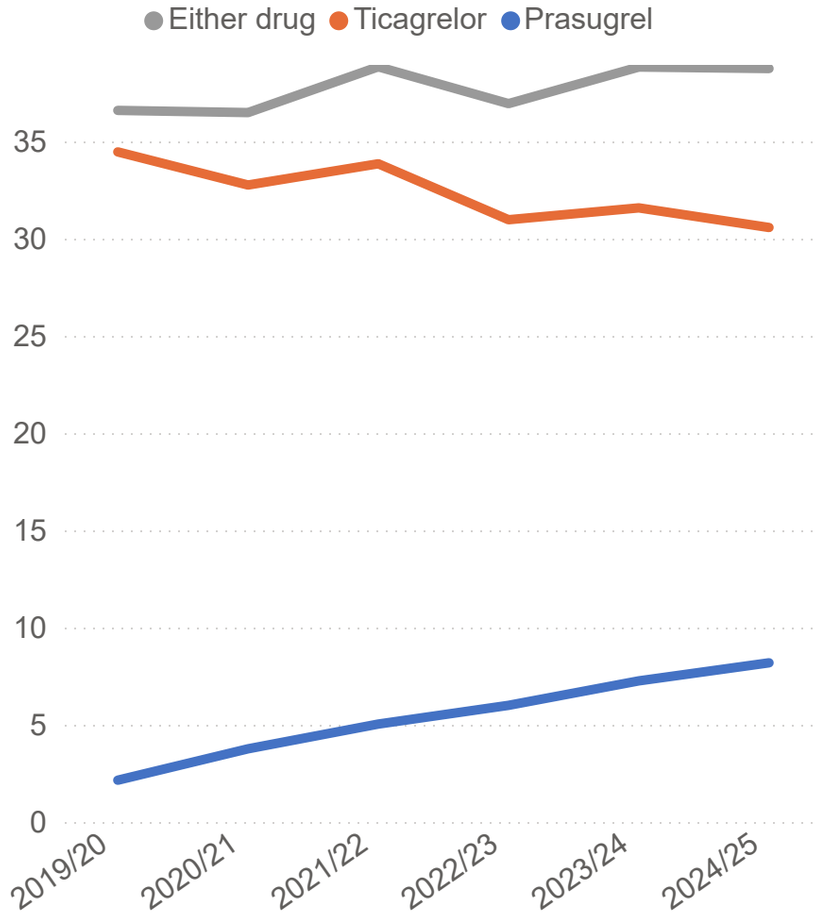
Select hospital

All

Percentage use of prasugrel or ticagrelor for ACS by hospital (2024/25)



Percentage use of prasugrel and ticagrelor for ACS



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The rate of use of P2Y12 antiplatelet drugs in PCI for acute coronary syndromes varies between 0% and 100% across hospitals

There is huge variation between hospitals in use of new P2Y12 antiplatelet drugs in PCI for acute coronary syndrome (ACS).

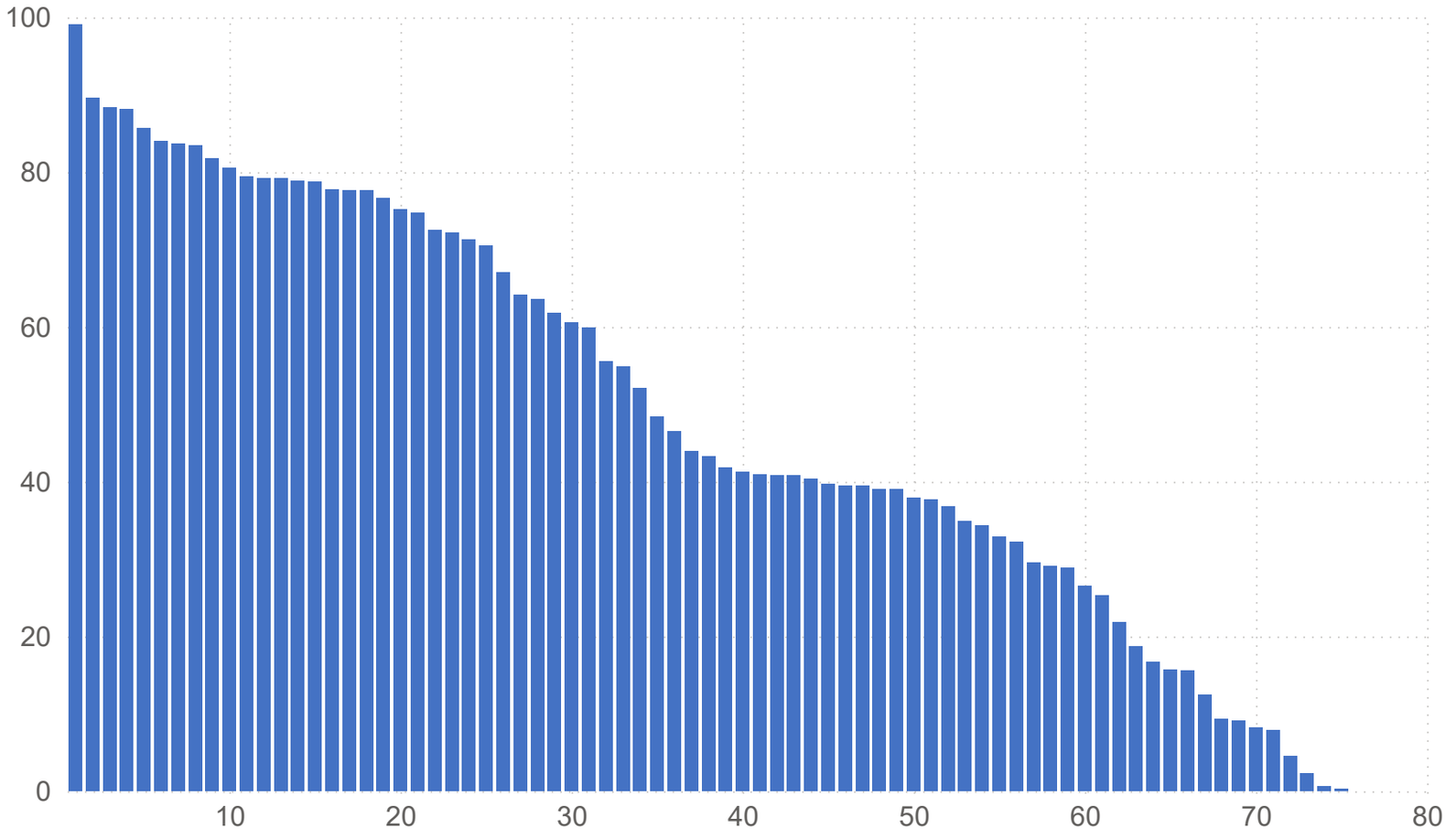
The rate of prescribing is between 0% and 100% of cases.

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

Select hospital

All

Percentage of patients receiving either prasugrel or ticagrelor for ACS by hospital (2024/25)



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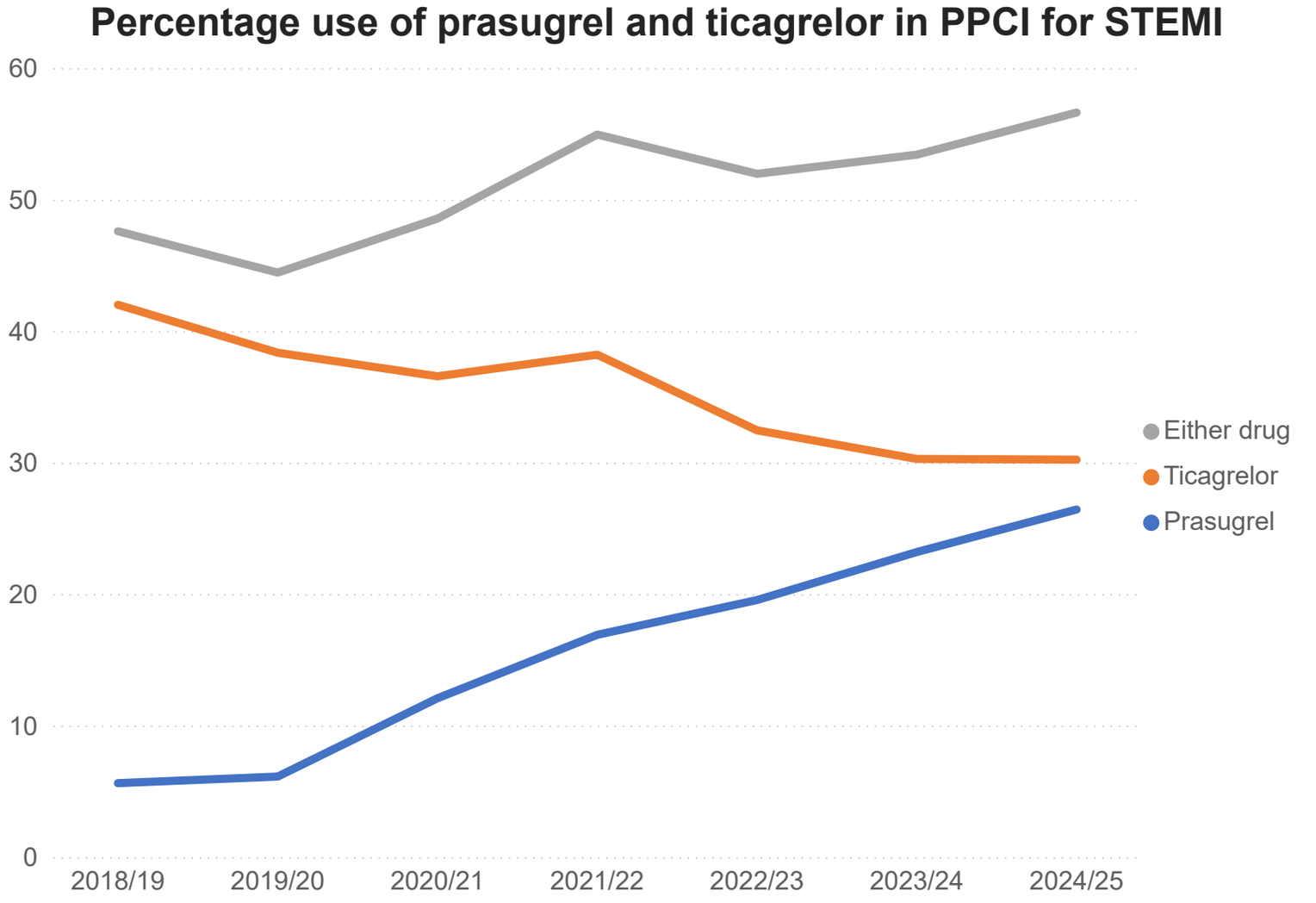
P2Y12 antiplatelet drug use for PCI in patients with STEMI continues to increase

There is an increasing use of one of the new drugs in primary PCI (PPCI) for higher-risk ST-elevation myocardial infarction (STEMI) heart attacks with almost 60% of patients receiving one of these drugs in 2024/25.

This is all because of an increase in the use of prasugrel.



P2Y12 antiplatelet drug usage in primary PCI for STEMI varies 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).

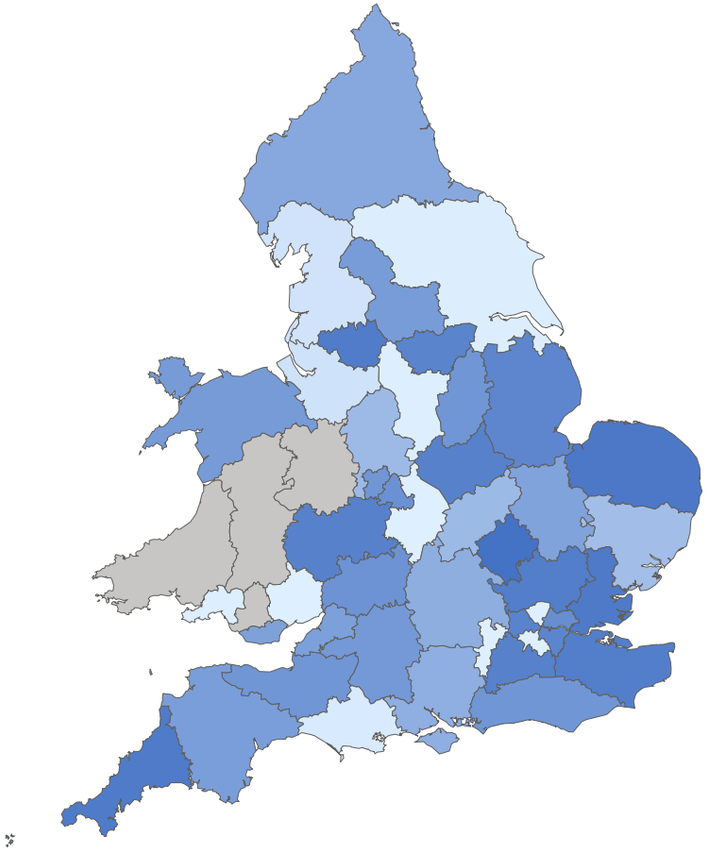
Darker shades = a higher rate of use.

Prescribing of new P2Y12 antiplatelet drugs in STEMI patients varies from 88% in Greater Manchester Cardiac Network to only 1% in Humber and North Yorkshire Cardiac Network.

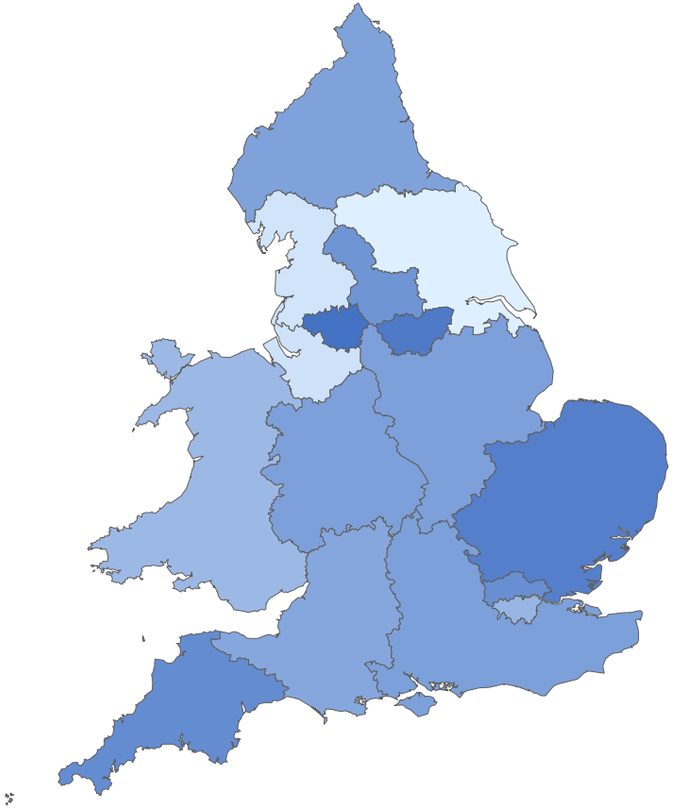
Hover over the maps to see specific data.

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 (2024/25)



Percentage use of prasugrel and ticagrelor in PPCI by Cardiac Network (2024/25)



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

There are 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).

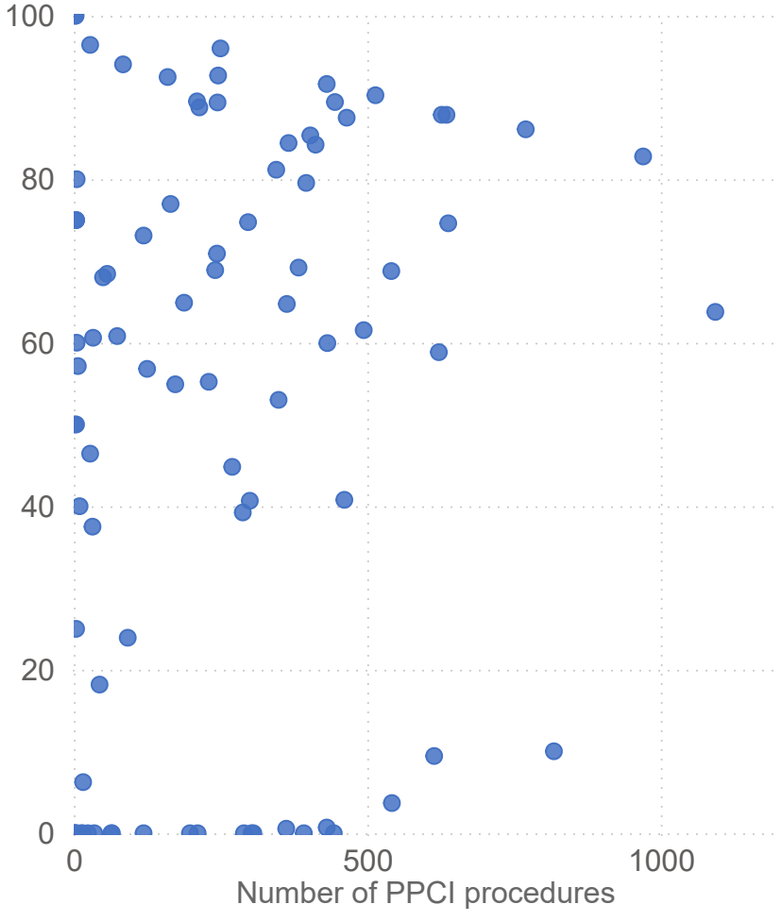
Some hospitals do not use these drugs (presumably preferring to use clopidogrel) but some use them in all cases.

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

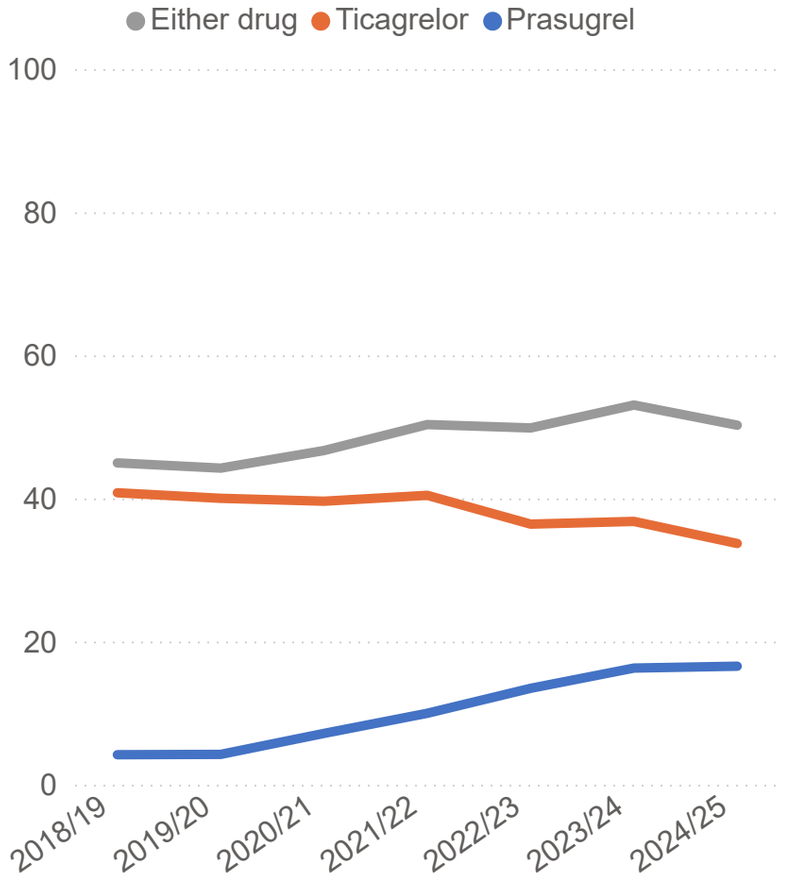
Select hospital

All

Percentage use of prasugrel or ticagrelor for PPCI, by hospital (2024/25)



Percentage use of prasugrel and ticagrelor for PPCI



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

There is 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).

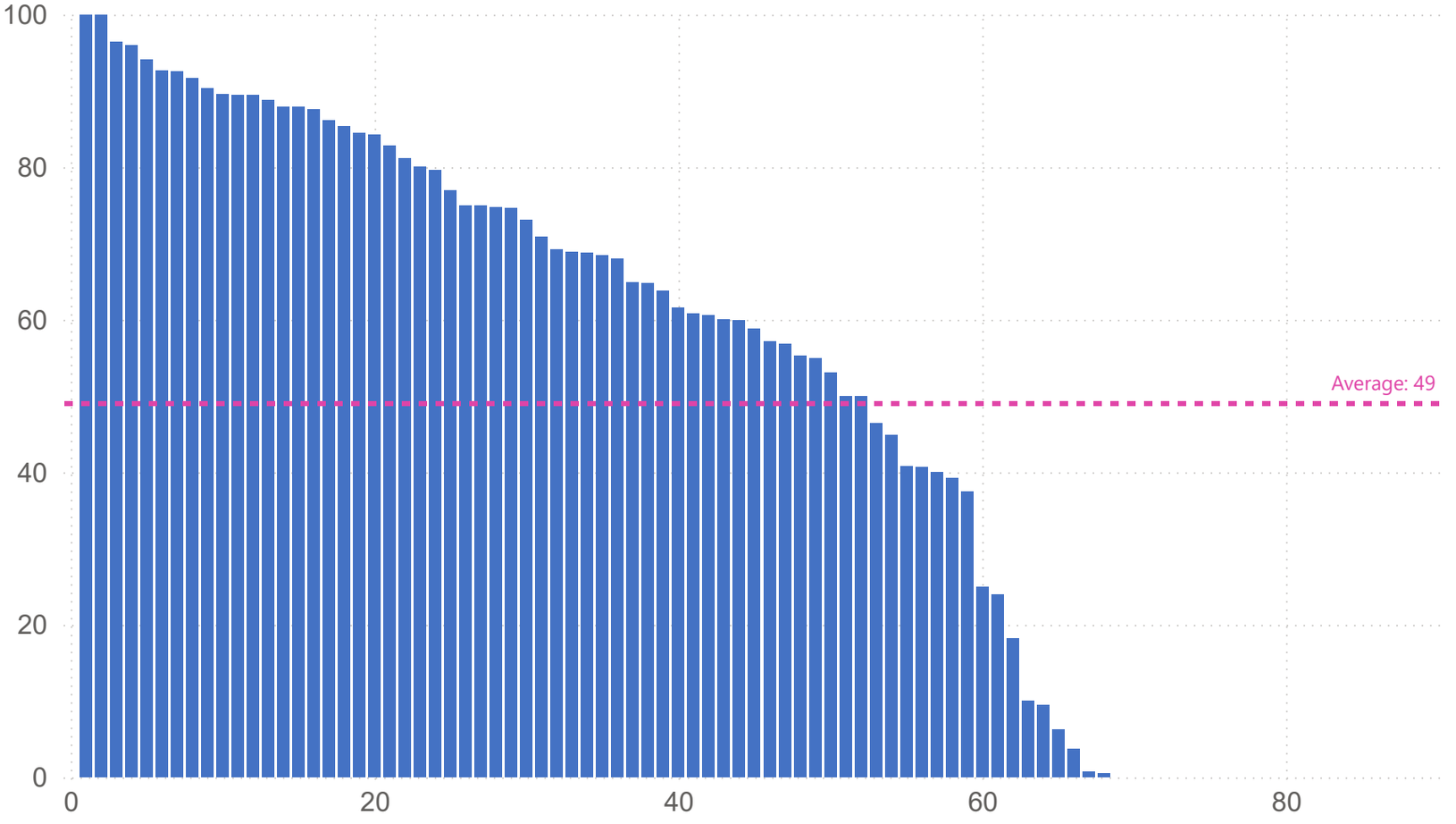
The rate of prescribing is between 100% and 0% of cases. 19 hospitals reported

Select a hospital below to see its data.

Select hospital

All

Percentage of use of prasugrel or ticagrelor in STEMI patients undergoing PPCI, by hospital (2024/25)



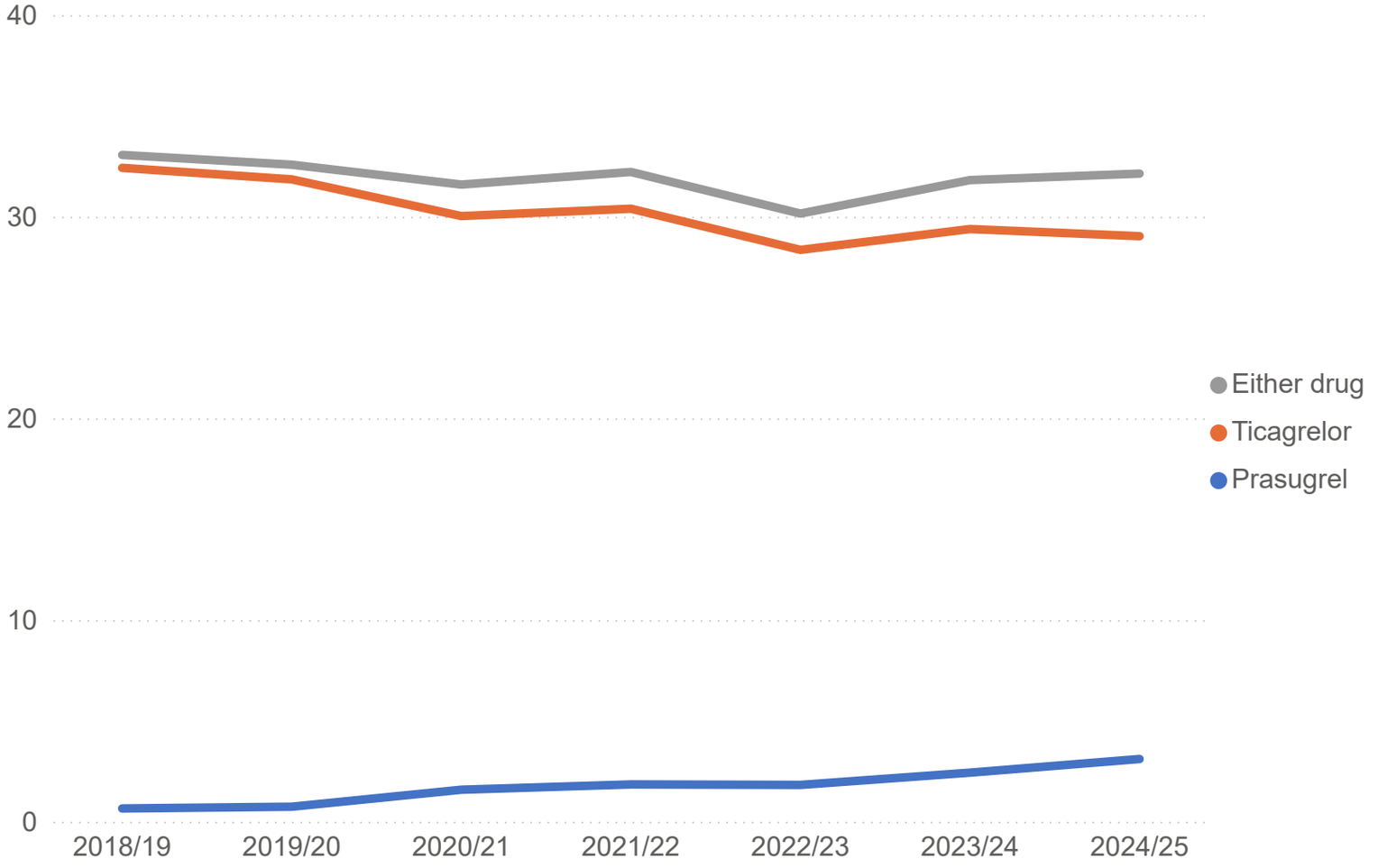
P2Y12 antiplatelet drug usage for NSTEMI cases continues to increase, although low prasugrel use is counter to guideline recommendations

The use of newer antiplatelets such as prasugrel or ticagrelor increased slightly in PCI for non-ST-elevation myocardial infarction (NSTEMI) cases during 2024/25.

UK practice lags behind European Society of Cardiology guidelines which recommend the use of prasugrel over ticagrelor. In 2024/25, only 3.1% 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.

Percentage use of prasugrel and ticagrelor in PCI for NSTEMI patients



P2Y12 antiplatelet drug prescription after PCI for NSTEMI varies 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:

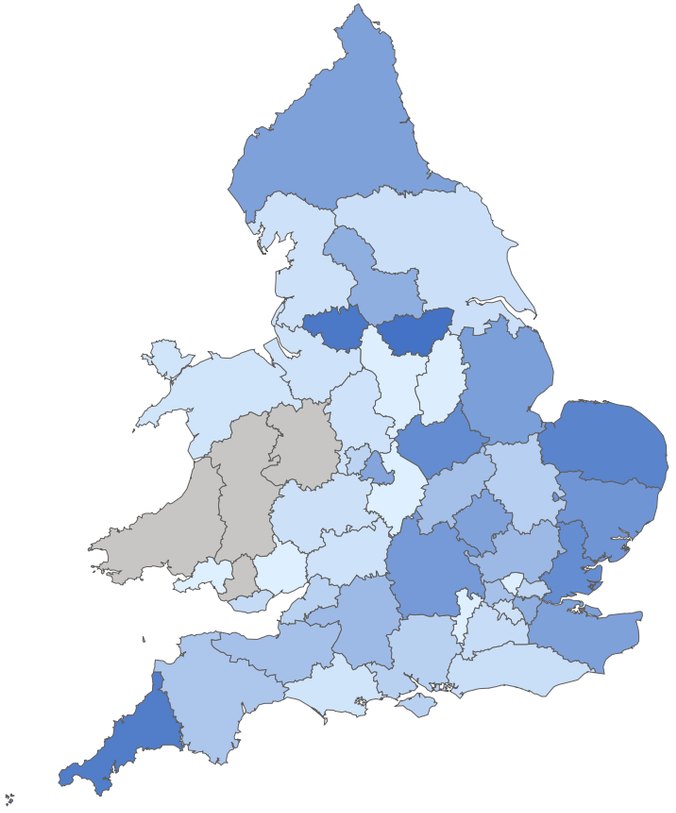
- the 42 Integrated Health Boards (ICBs) in England and 7 University Health Boards (HBs) in Wales (commissioning organisations)
- the 16 Cardiac Networks in England and Wales (service delivery networks).

Darker shades = greater use of these drugs.

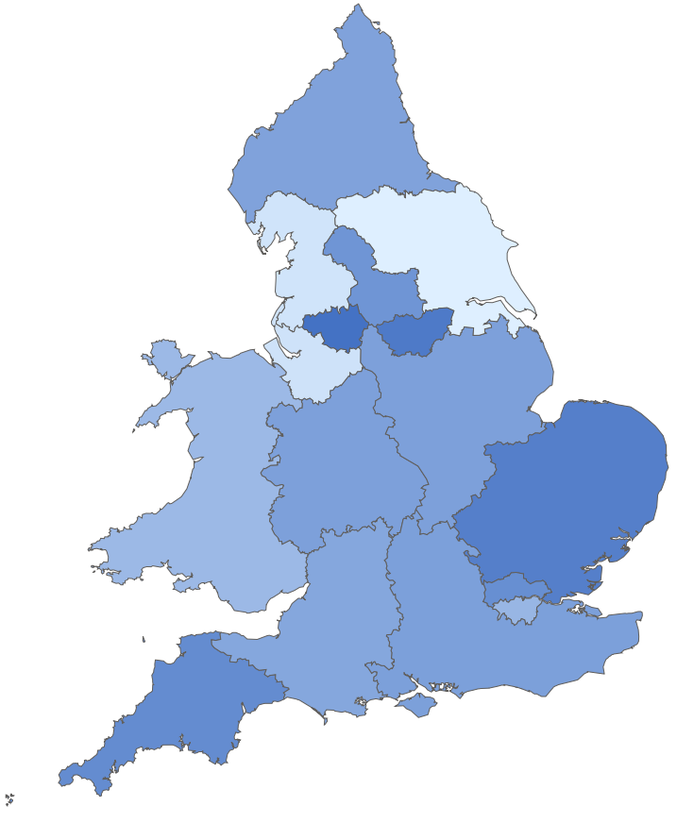
The rate varies from 88% of patients (NHS South Yorkshire ICB) to no patients in NHS Coventry and Warwickshire ICB, NHS North Central London ICB, NHS Frimley ICB, Swansea Bay University HB and Aneurin Bevan University HB.

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 (2024/25)



Percentage use of prasugrel and ticagrelor in PCI for NSTEMI by Cardiac Network (2024/25)



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

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

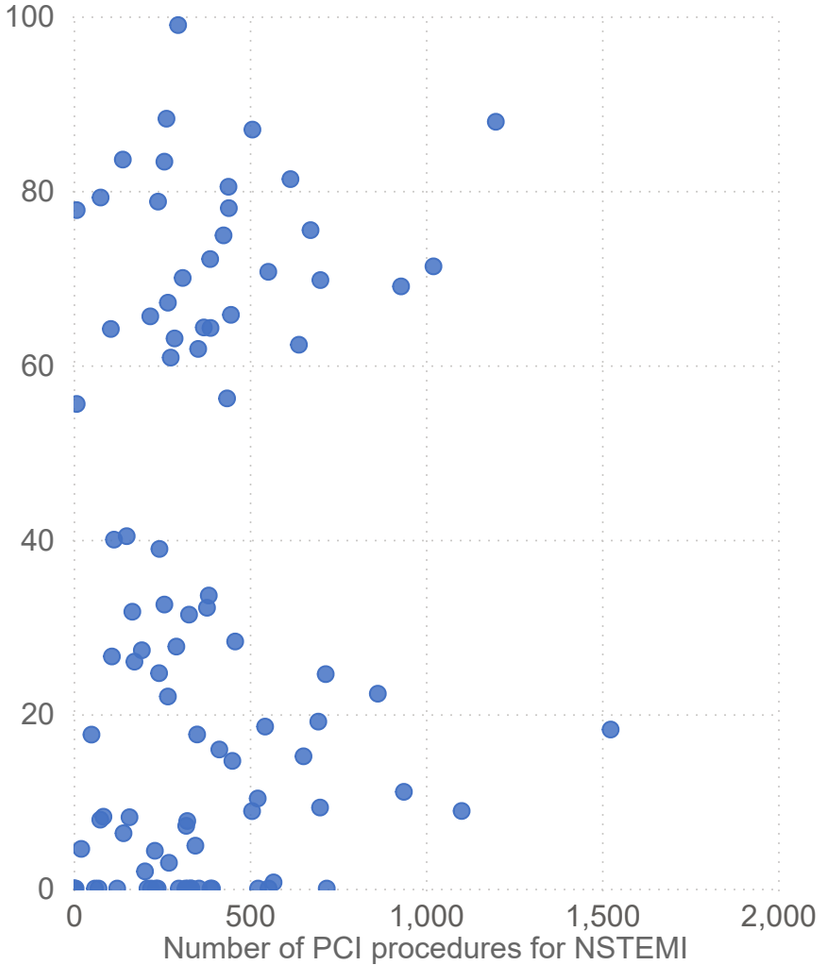
Despite the international recommendations, the use of these newer antiplatelet agents varies between 0% and 100% across hospitals.

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

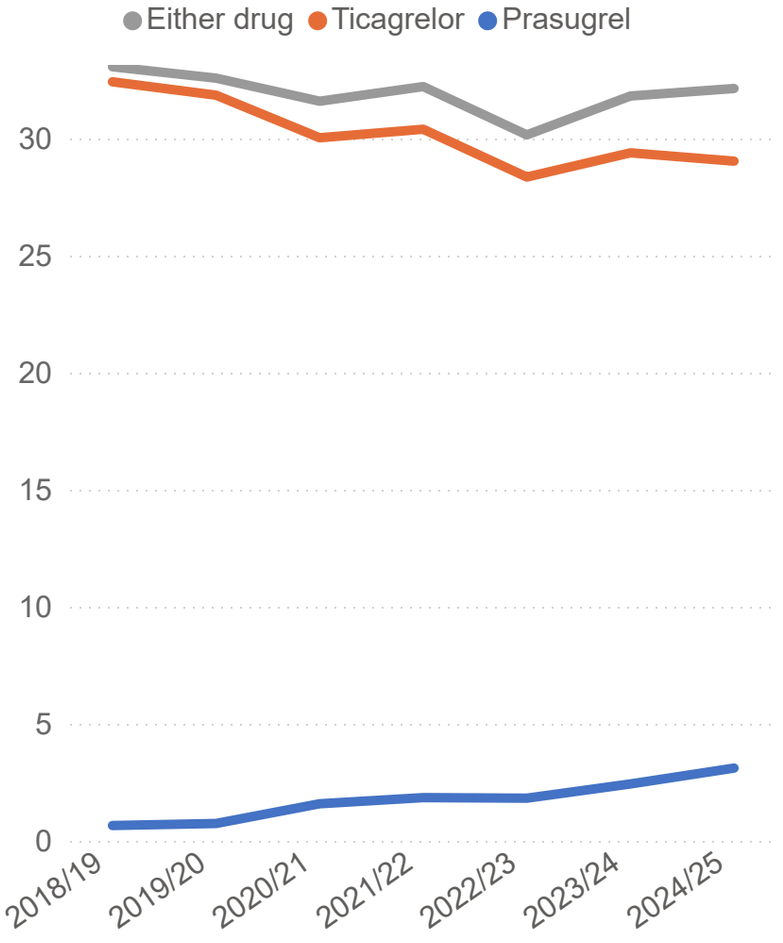
Select hospital

All

Percentage use of prasugrel or ticagrelor after PCI for NSTEMI, by hospital (2024/25)



Percentage use of prasugrel and ticagrelor after PCI for NSTEMI



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P2Y12 antiplatelet drug usage after PCI for NSTEMI varies between hospitals

There is 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).

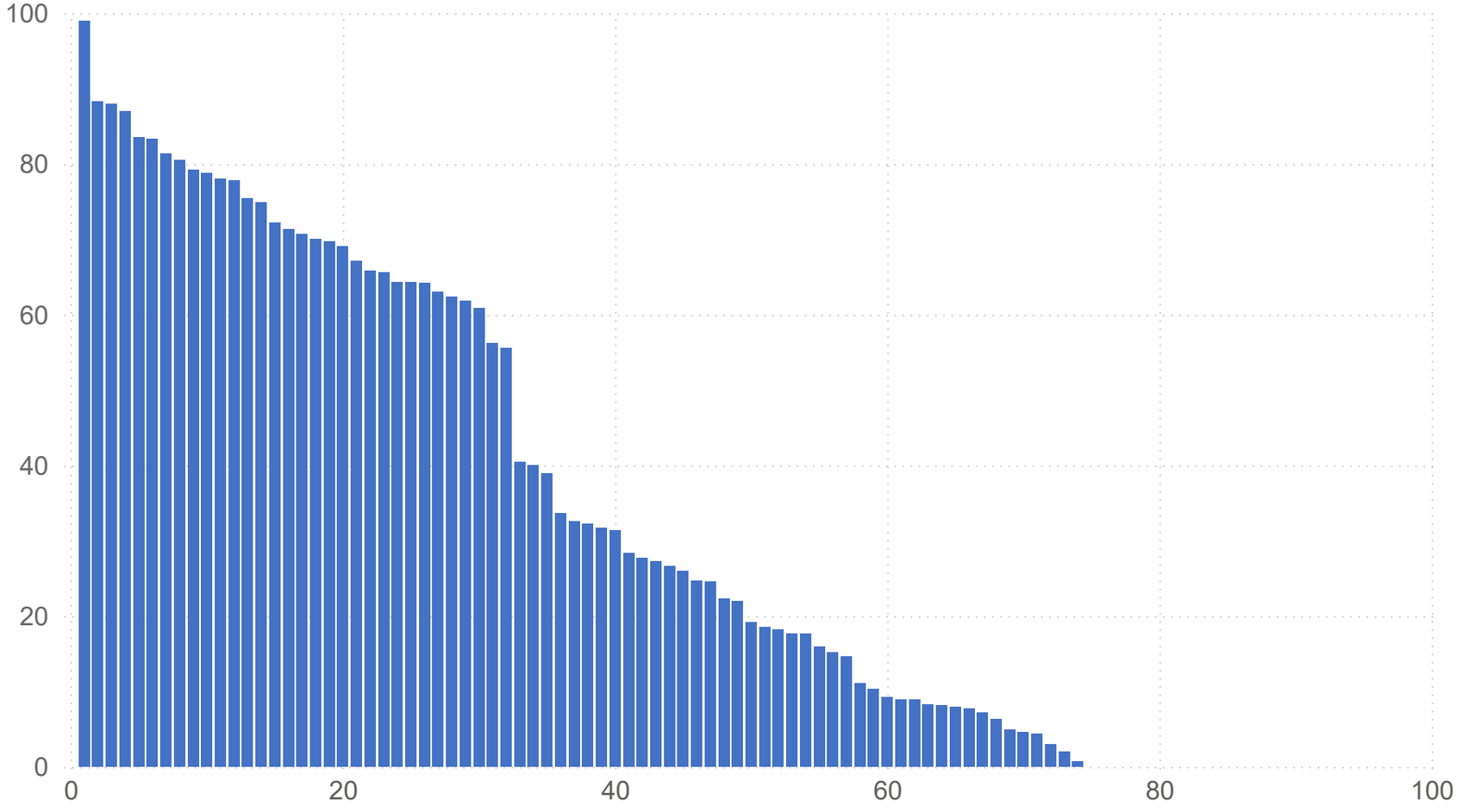
Some hospitals use these drugs in every case and others in none.

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

Select hospital

All

Percentage of patients receiving either prasugrel or ticagrelor after PCI for NSTEMI by hospital (2024/25)



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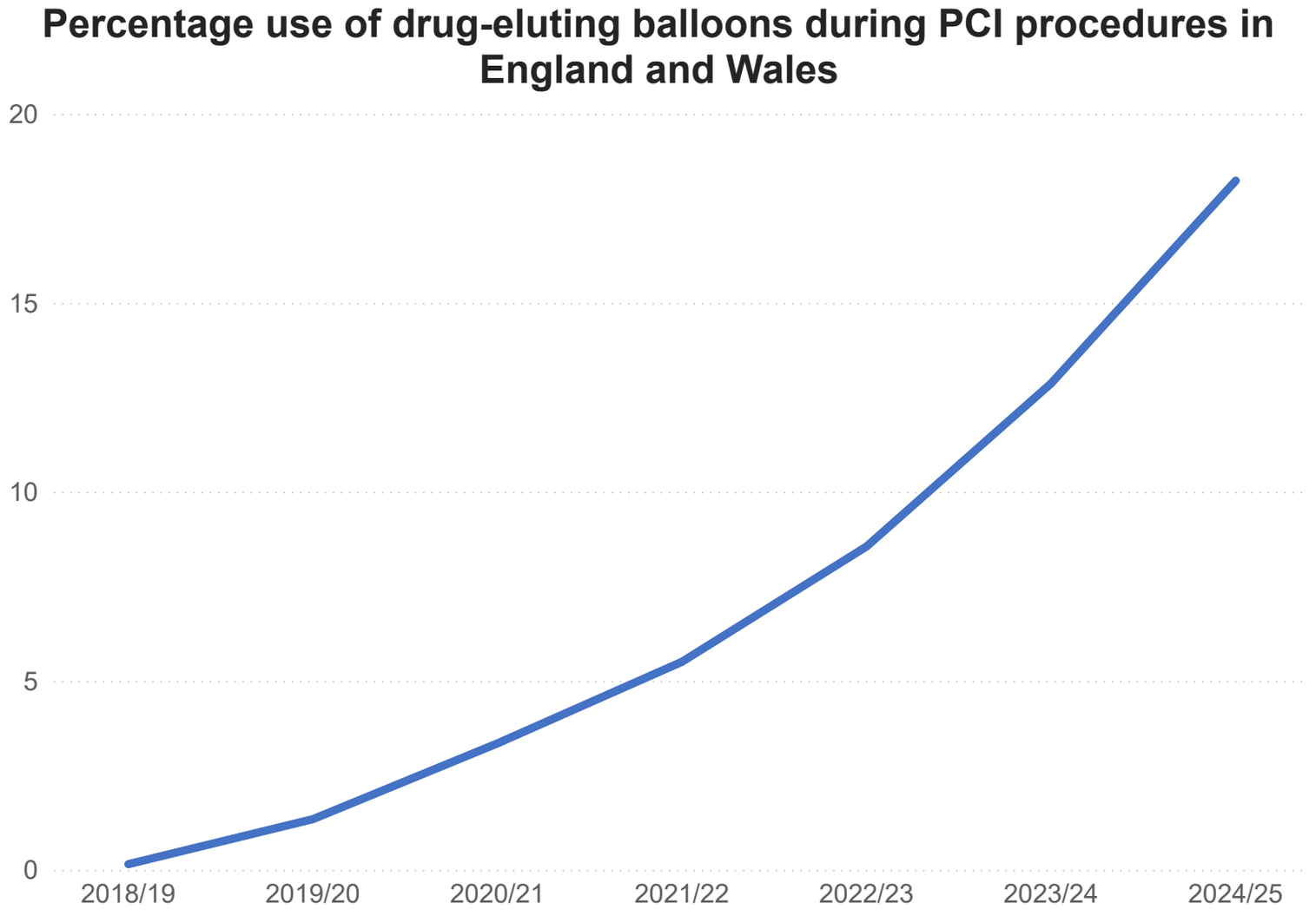
The use of drug-eluting balloons has increased to 18% of all PCI cases

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 2024/25, a drug-eluting balloon (DEB) was used in 18% of all PCI procedures, up from 13% 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 under-estimate drug-eluting balloon use.



Drug-eluting balloon use varies, with many hospitals not using them and two hospitals using them in more than 50% of cases

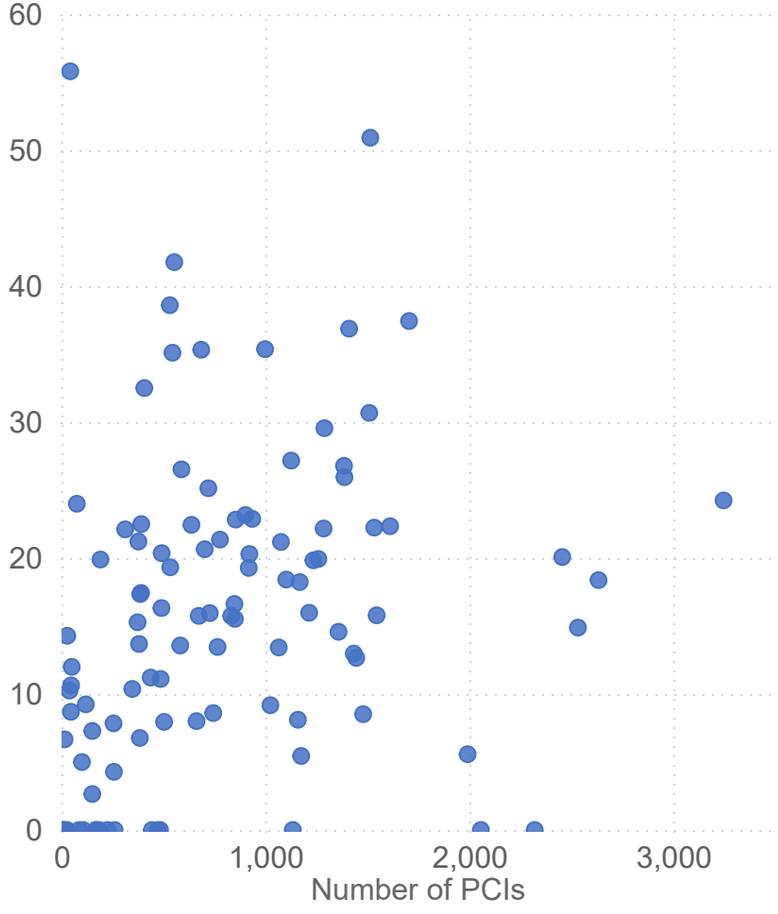
The rate of drug-eluting balloon use by hospital varies from 0% to over 50% of cases.

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

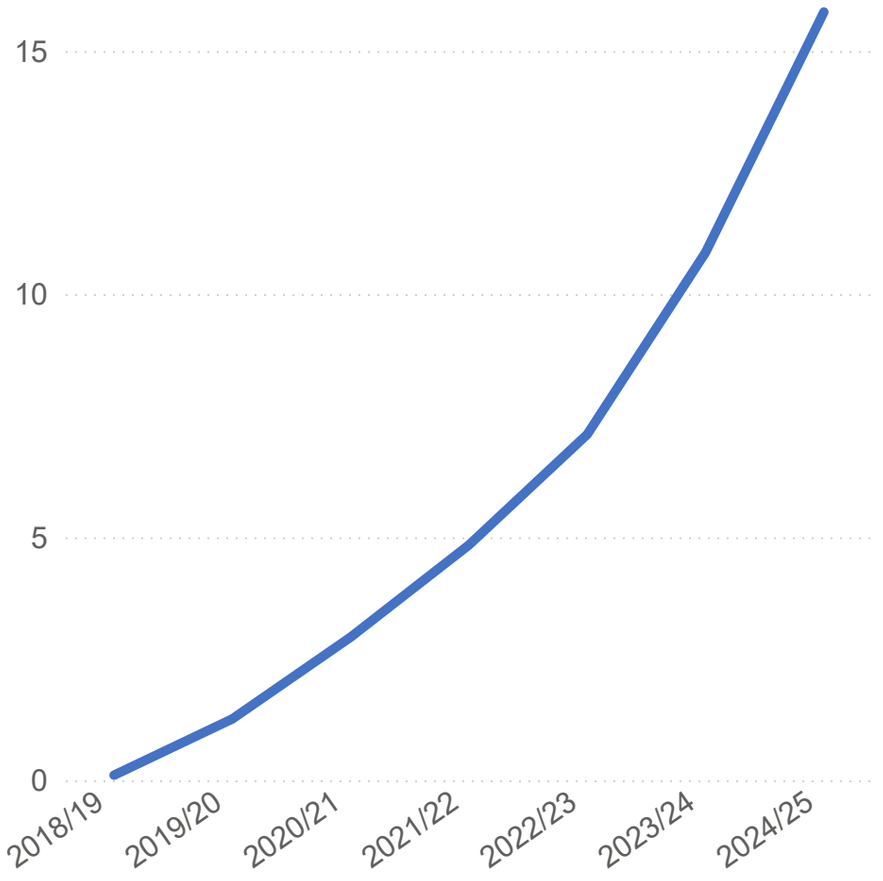
Select hospital

All

Percentage use of drug-eluting balloons during PCI by hospital (2023/24)



Percentage use of drug-eluting balloons during PCI



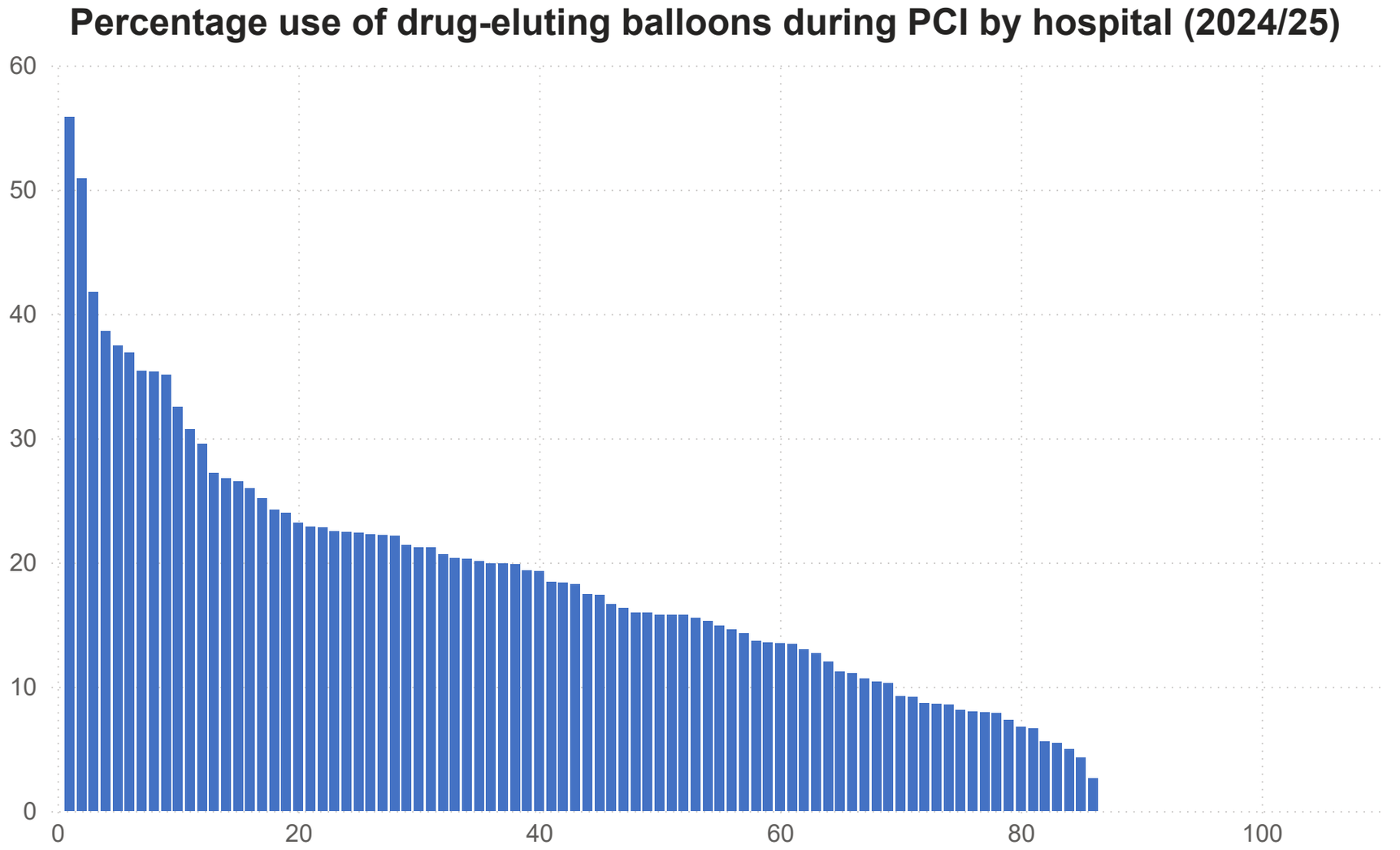
Drug-eluting balloon use in PCI by hospital ranges from zero to over 50%

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

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

Select hospital

All



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A drug-eluting balloon in PCI cases is used in 10% of cases on average, though the use in hospitals varies between 0% and 70%

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.

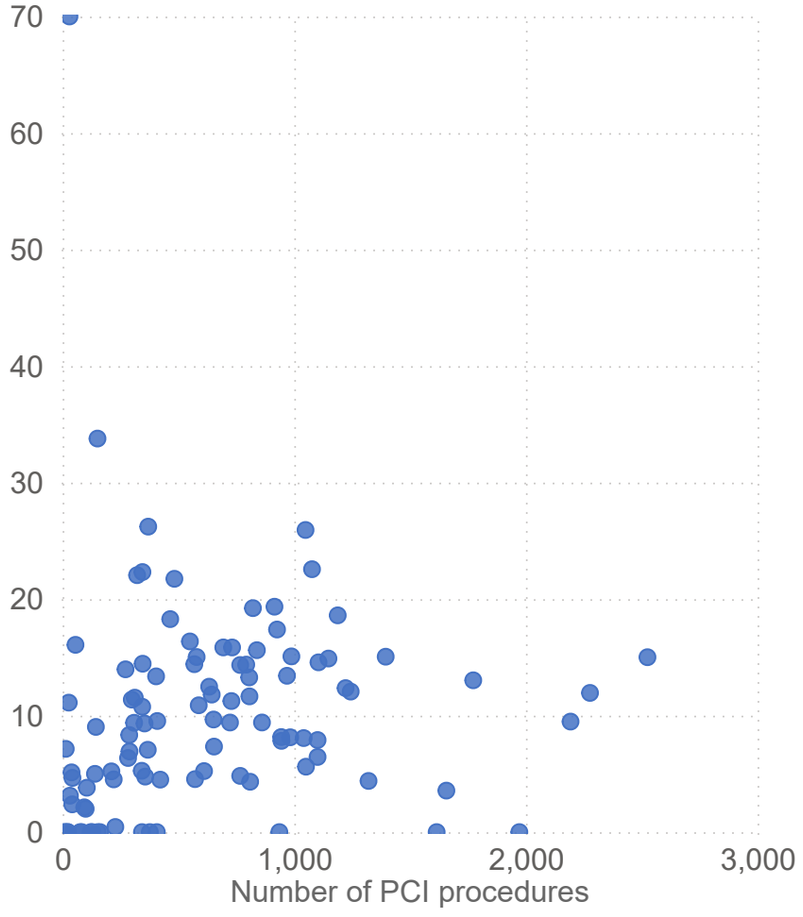
The overall use of a DEB alongside a stent increased to 10% in 2024/25 from virtually no use in 2018/19.

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

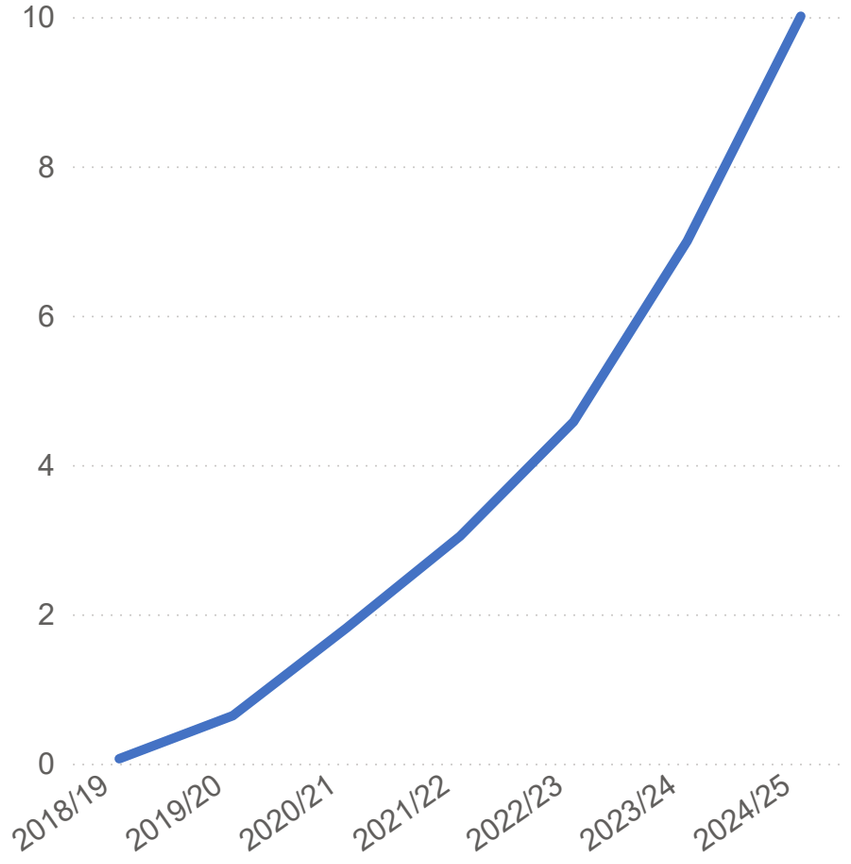
Select hospital

All

Percentage use of drug-eluting balloons during PCI when a stent was also used by hospital (2024/25)



Percentage use of drug-eluting balloons during PCI when a stent was also used



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Drug-eluting balloon use in PCI when a stent is also inserted varies between 0% and 34% across NHS hospitals

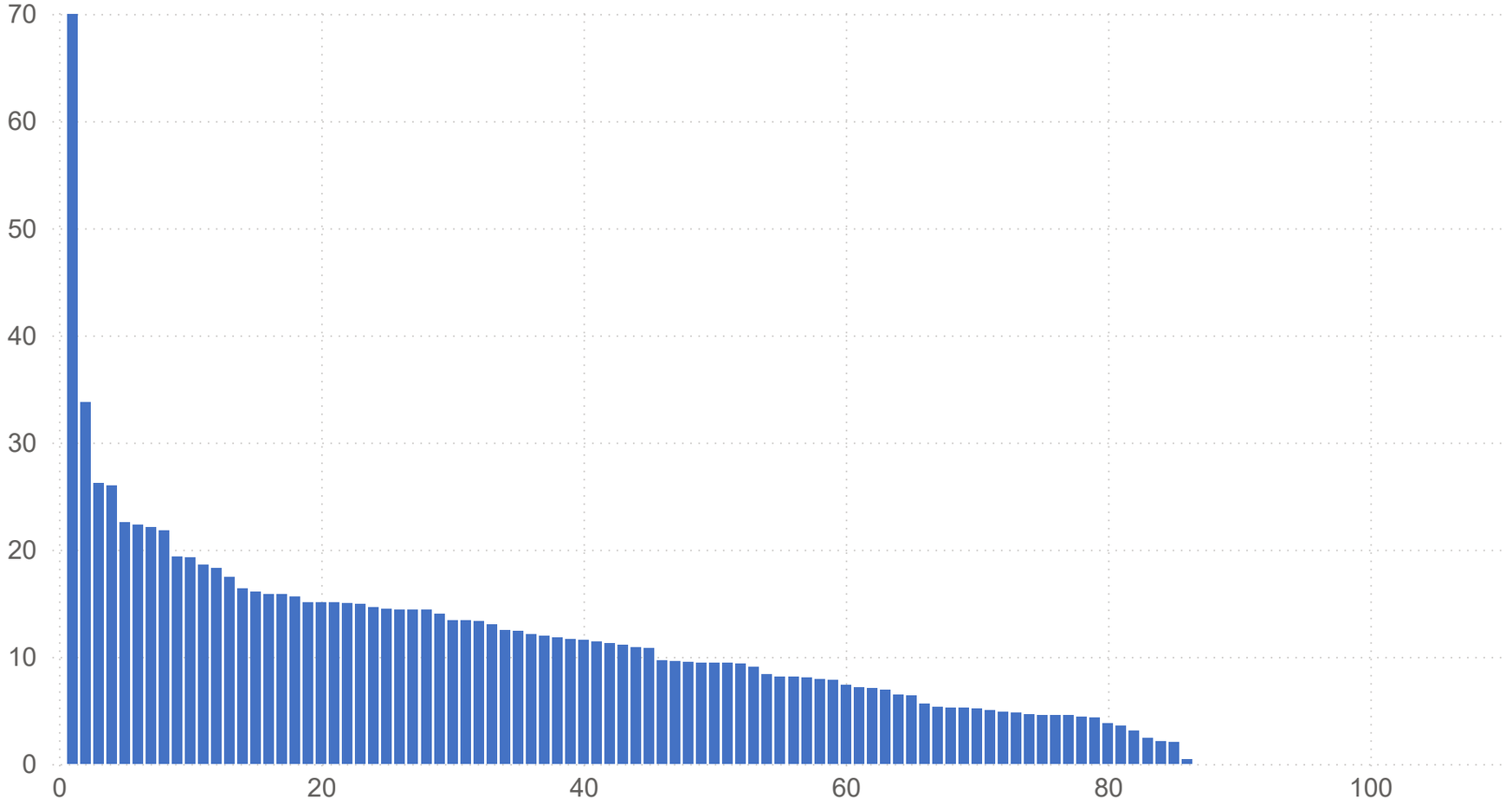
Between hospitals, the use of a DEB alongside a stent varies between 0% and 34% in NHS hospitals.

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

Select hospital

All

Percentage use of drug-eluting balloons during PCI when a stent was also use, by hospital (2024/25)



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Drug-eluting balloon use in PCI cases where no stent is used averages 41% but varies between 0% and 92%

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

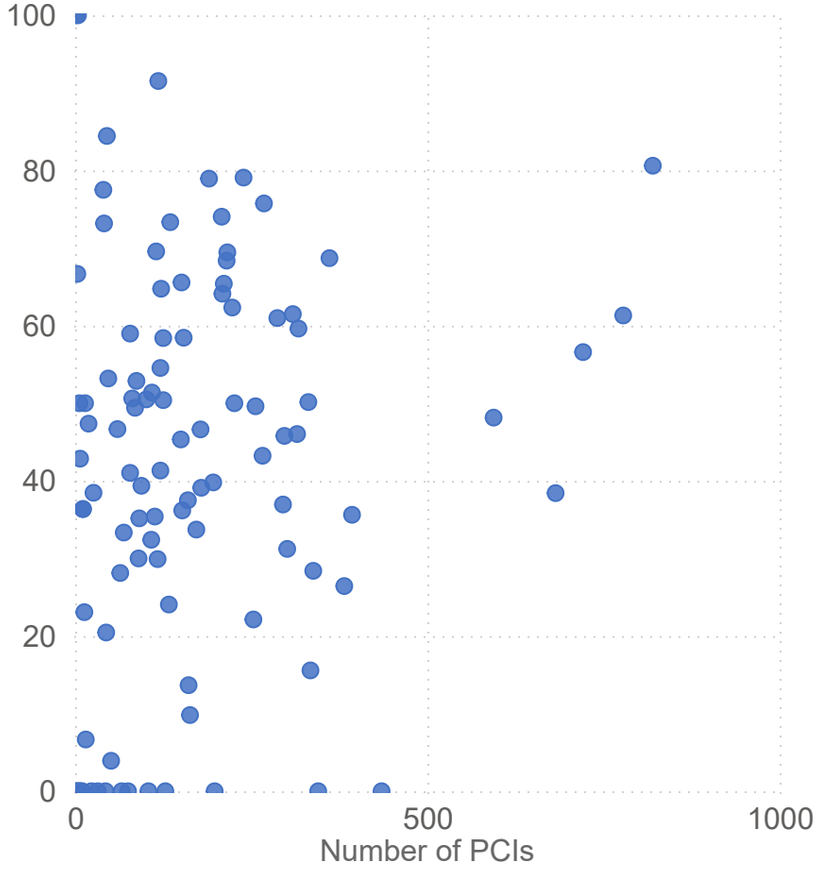
Use of a drug-eluting balloon (DEB) in PCI without a stent varied between hospitals from zero to 92% in 2024/25 in hospitals that performed more than 50 cases.

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

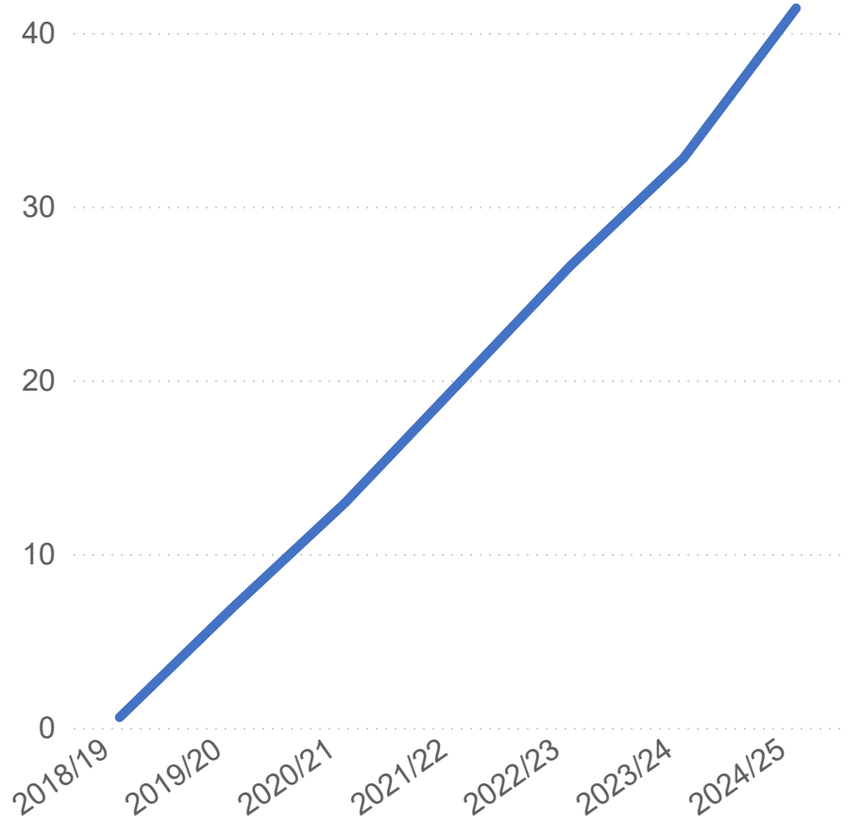
Select hospital

All

Percentage use of drug-eluting balloons during PCI without stent use by hospital (2024/25)



Percentage use of drug-eluting balloons during PCI without stent use



41 hospitals use drug-eluting balloons for 50% or more of PCI cases when no stent is used

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

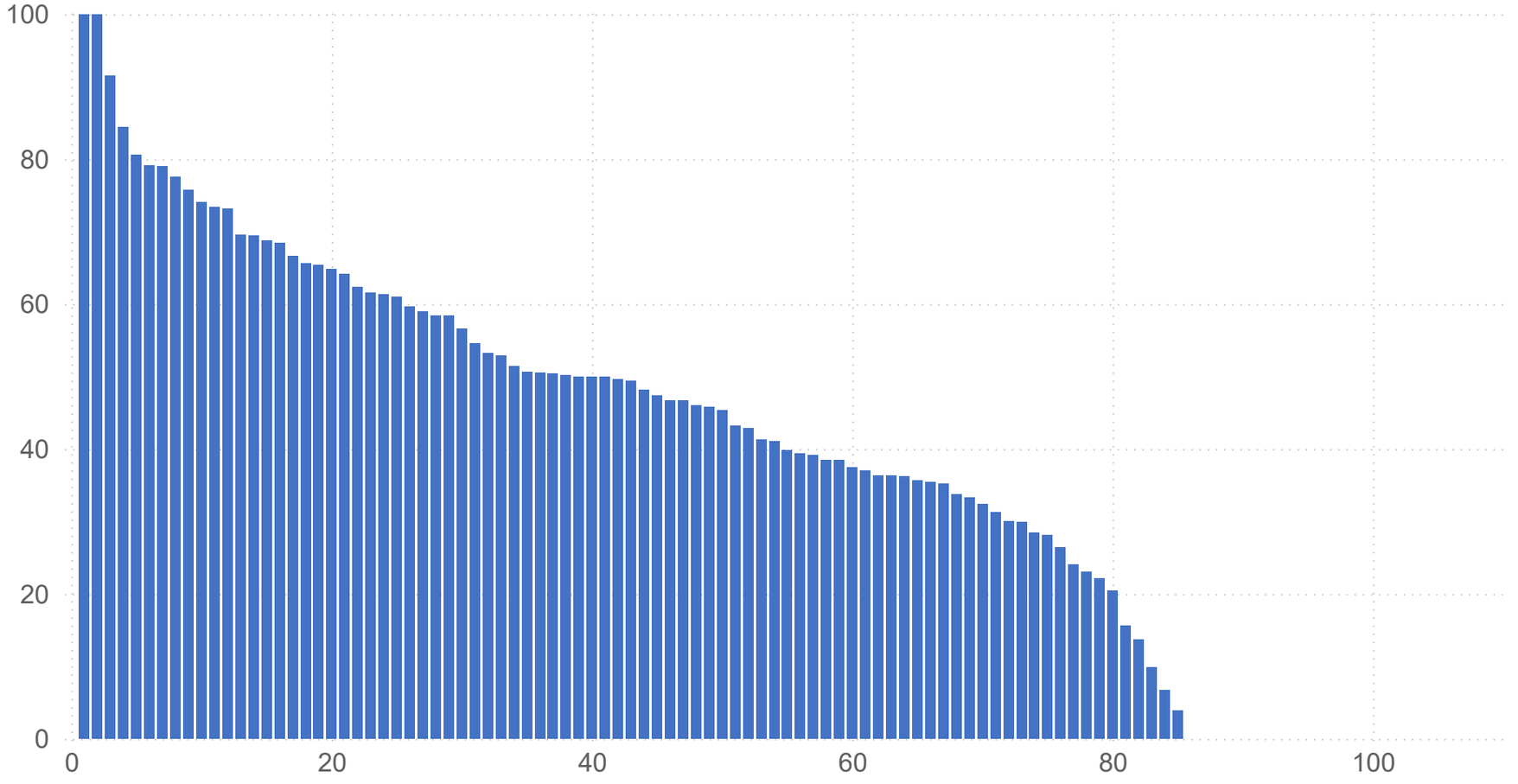
Use of a drug-eluting balloon (DEB) in PCI without a stent varied between hospitals from zero to 100% in 2023/24.

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

Select hospital

All

Percentage use of drug-eluting balloons during PCI without stent use by hospital (2024/25)



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Drug-eluting balloons is used in over 40% of cases for the treatment of in-stent restenosis, though many hospitals do 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.

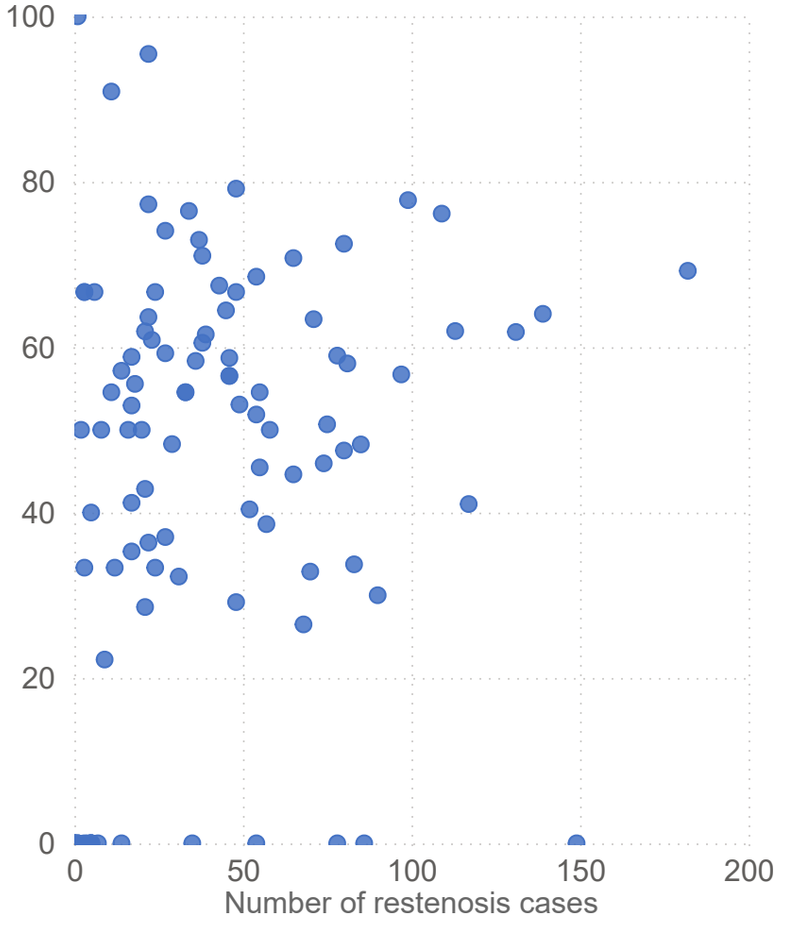
Drug-eluting balloons (DEB) to treat in-stent restenosis were used for 44% of all PCI cases for in-stent restenosis in 2024/25, up from 1% in 2018/19 and 36% in 2023/24.

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

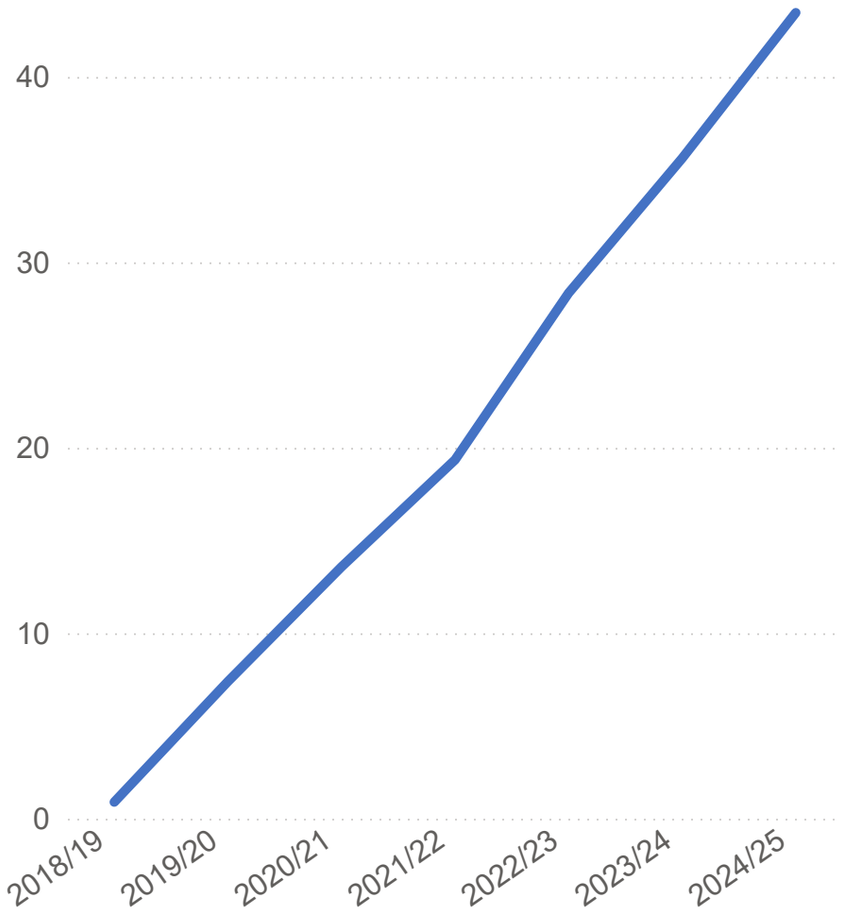
Select hospital

All

Percentage use of drug eluting balloons in restenosis cases by hospital (2024/25)



Percentage use of drug eluting balloons in restenosis cases



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

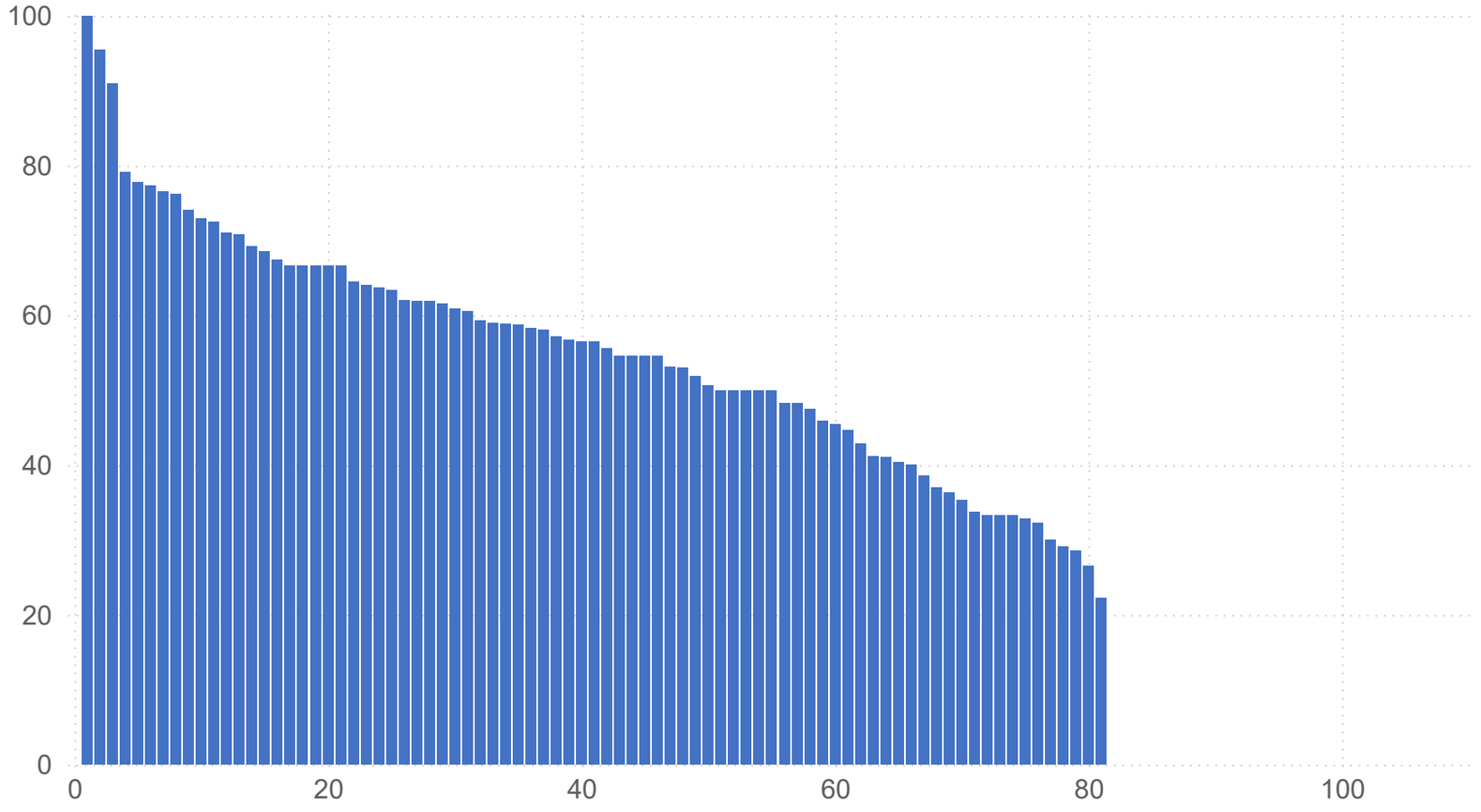
The use of drug-eluting balloons (DEB) to treat in-stent restenosis varies hugely between hospitals, with rates between 0% and 100%.

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

Select hospital

All

Percentage use of drug-eluting balloons in restenosis cases by hospital (2024/25)



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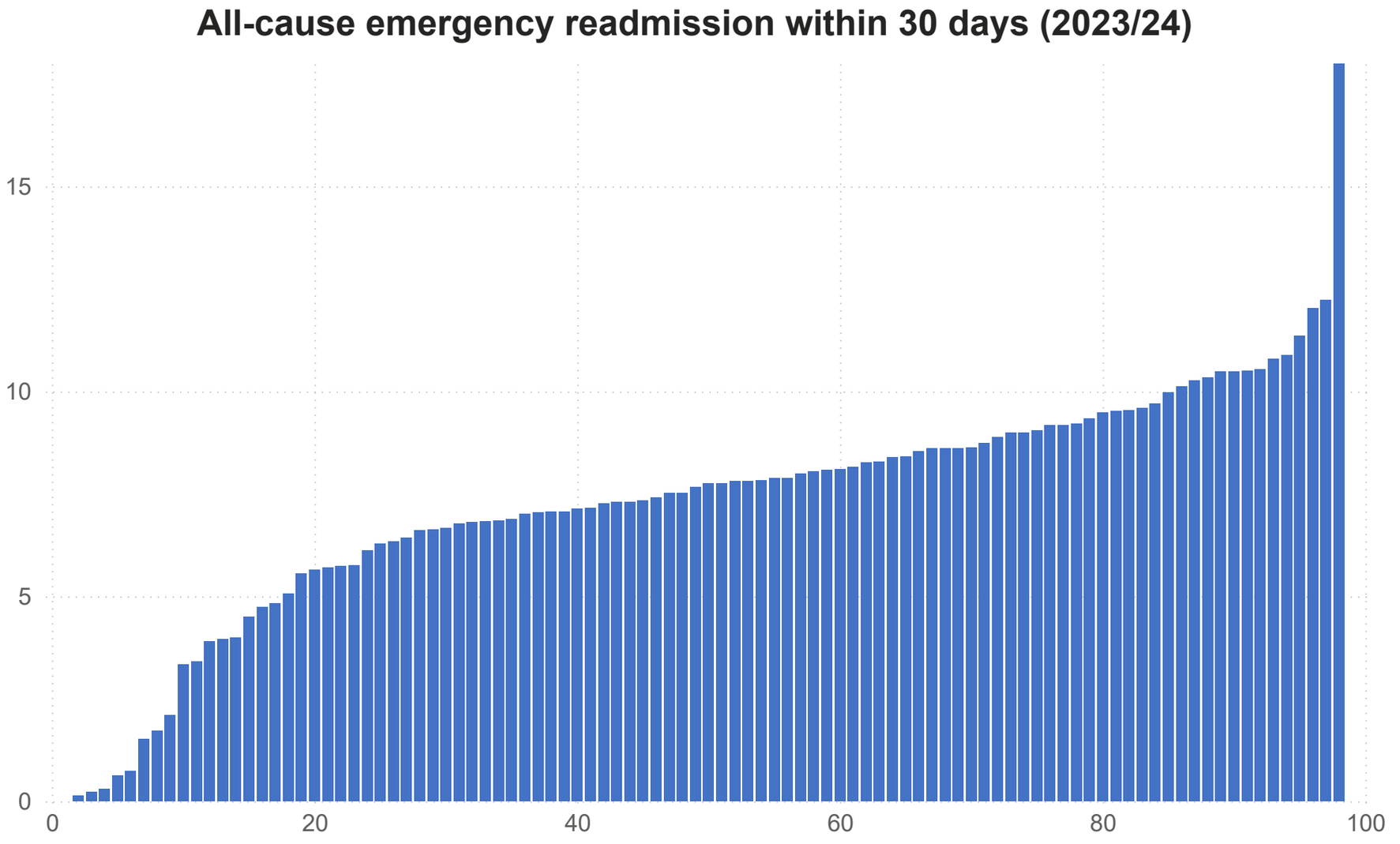
Unplanned readmissions following PCI vary by hospital (2023/24 data)

Unplanned readmissions following a PCI may occur for a number of reasons. They may be related to the PCI procedure itself and occur as a consequence of a complication, such as an acute myocardial infarction, stroke, bleeding complication or stent thrombosis. They may also be unrelated to the PCI procedure and occur as a consequence of existing medical conditions that the patient may have.

30-day unplanned readmissions varied from 0.2 to 18% between hospitals, with an average of 11.4%. Future work will focus around reasons for readmissions.



Select hospital

All

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Introduction

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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.

Elective day case PCI

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Intracoronary imaging for complex and left main stem PCI procedures

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