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National Cardiac Audit Programme (NCAP)

## Appendix to National Adult Cardiac Surgery Audit (NACSA) Report 2025





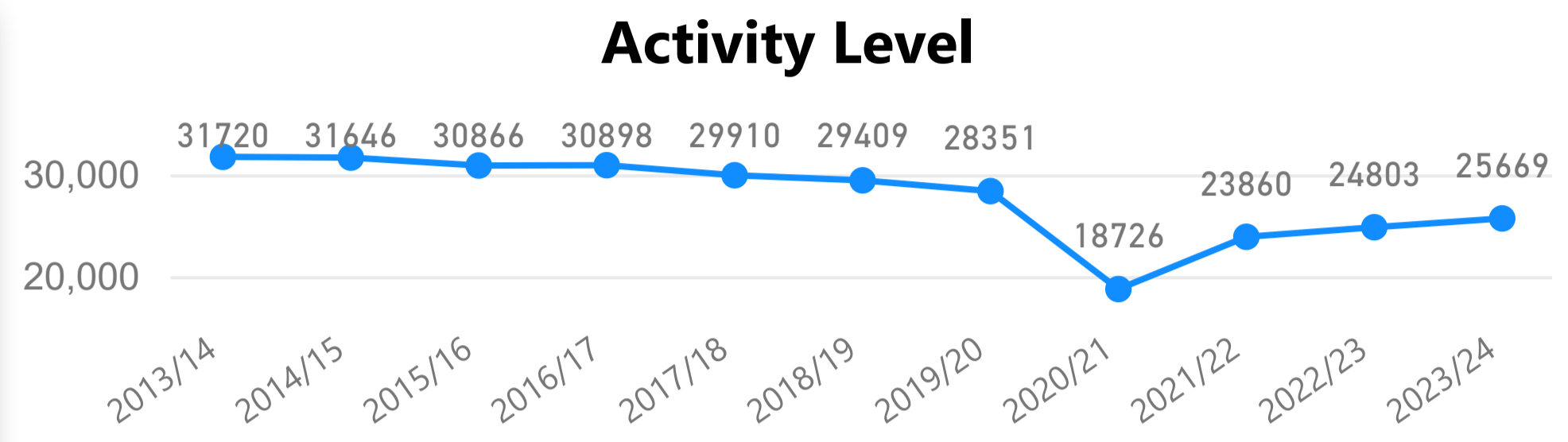
|  |  |   |
|--|--|---|
| NACSA Activity                             | Surgical Incision (number)                     | Number of bypass grafts performed in isoCABG  |
| NACSA Hospital Level Activity              | Surgical Incision (death)                      | Percent (%) of bypass grafts performed in isoCABG   |
| NACSA Hospital Level Mortality             | isoAVR Implant Type                            | Number of having IMA (internal mammary artery) and LAD coronary artery for isoCABG  |
| Hospital Activity by Procedure Type        | isoMVR Implant Type                            | Number of graft conduit (1 to 12) having IMA (internal mammary artery) and LAD coronary artery for isoCABG                |
| NACSA Waiting Time                         | Consultant Activity                            | Percent (%) of Number of graft conduit (1 to 12) having IMA (internal mammary artery) and LAD coronary artery for isoCABG |
| Need for a Return to Theatre for Any Cause | Quorate preop MDT                              | Other Procedure (Cases)   |
| Reoperation for Bleeding                   | Blood transfusion                              | Other Procedure (Deaths)  |
| Deep Sternal Wound Infection               | Dual Consultant                                | Other Procedure (Mortality)   |
| Any New Post-Operative CVA/TIA             | Consultant and Trainee in COP                  | Glossary of abbreviations   |
| Kidney Failure                             | Cardiopulmonary bypass usage for isolated CABG | Hospital names/codes  |
| EuroSCORE II                               | Off Pump Coronary Artery Bypass                |   |
| Incision Type (number)                     |  |   |

# UK, nation and hospital level activity (year and monthly)



### Nations

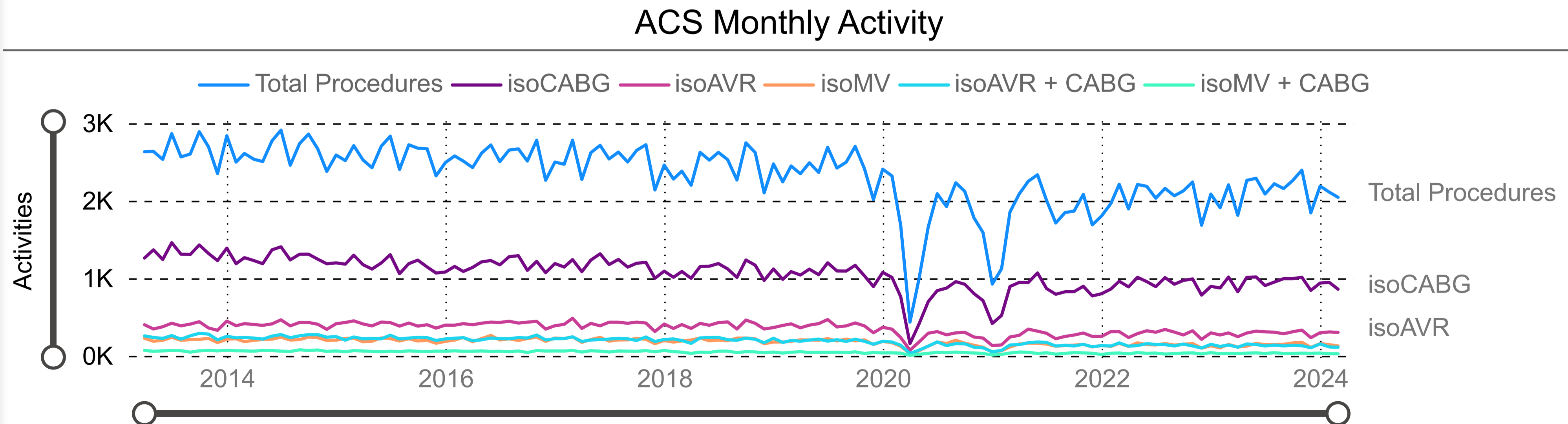
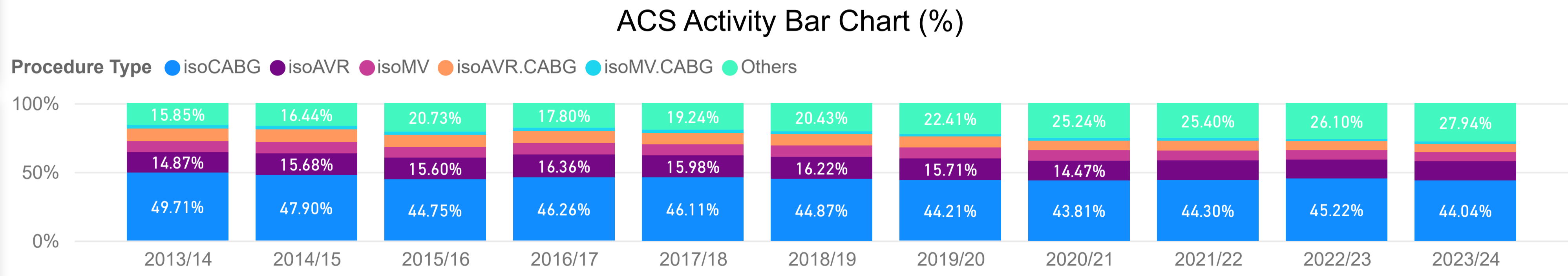
- Select all
- England
- Northern Ireland
- Wales



| Nations          | 2013/14      | 2014/15      | 2015/16      | 2016/17      | 2017/18      |
|------------------|--------------|--------------|--------------|--------------|--------------|
| England          | 30769        | 30782        | 29949        | 29991        | 29032        |
| Northern Ireland | 951          | 864          | 917          | 907          | 878          |
| <b>Total</b>     | <b>31720</b> | <b>31646</b> | <b>30866</b> | <b>30898</b> | <b>29910</b> |

### Hospital

- Select all
- ANT. Spire St Anthony's Ho...
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and ...
- BRI. Bristol Royal Infirmary
- CBS. Spire Southampton ...
- CCL. Cleveland Clinic Lon...
- CHH. Castle Hill Hospital
- CHN. Nottingham City Hos...
- CRO. Cromwell Hospital
- FRE. Freeman Hospital
- GEO. St George's Hospital
- GRL. Glenfield Hospital
- HAM. Hammersmith Hospital
- HH. Harefield Hospital



# UK, nation and hospital level activity



## Nations

- Select all
- England
- Northern Ireland
- Wales

## ProcedureType

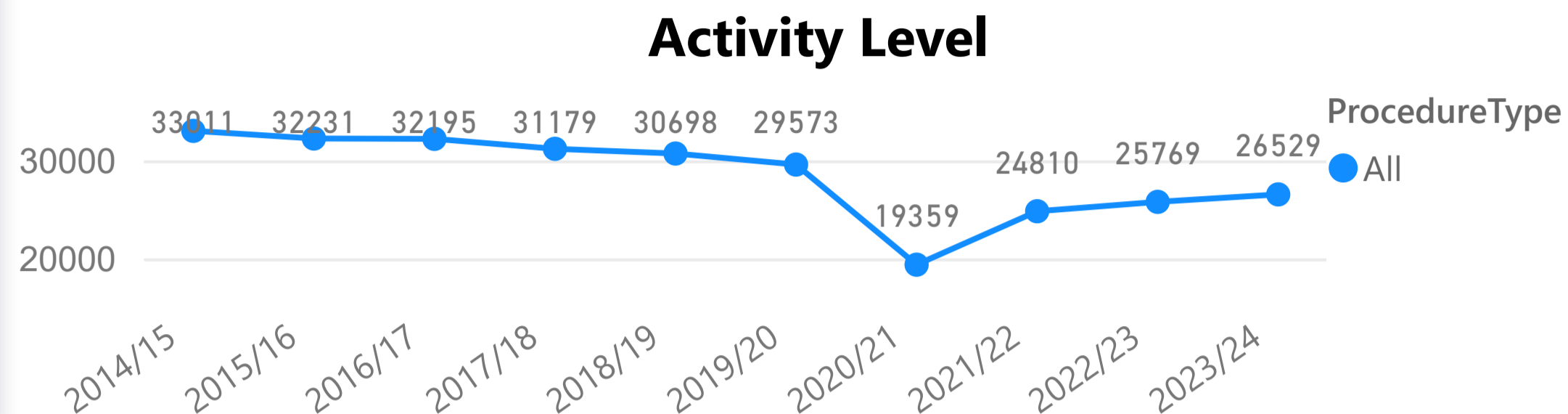
- All
- AnyTricuspid
- EmergencyMajorAo...
- isoAVR
- isoAVR+CABG
- isoCABG
- isoMV
- isoMV repair
- isoMV+CABG
- isoMV+CABG

## Hospital

All ▾

## Year

All ▾



| Nation           | 2014/15      | 2015/16      | 2016/17      | 2017/18      | 2018/19      |
|------------------|--------------|--------------|--------------|--------------|--------------|
| England          | 30782        | 29949        | 29991        | 29032        | 28647        |
| Northern Ireland | 864          | 917          | 907          | 878          | 762          |
| Wales            | 1365         | 1365         | 1297         | 1269         | 1289         |
| <b>Total</b>     | <b>33011</b> | <b>32231</b> | <b>32195</b> | <b>31179</b> | <b>30698</b> |

| Hospital                                | 2014/15      | 2015/16      | 2016/17      | 2017/18      | 2018/19      | 2019/20      | 2020/21      | 2021/22      | 2022/23      | 2023/24      |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| ANT. Spire St Anthonys Hospital         | 350          | 258          | 108          | 98           | 87           | 59           | 13           | 56           | 24           | 53           |
| BAL. Barts and the London               | 940          | 1654         | 1837         | 1933         | 2124         | 2001         | 1461         | 1728         | 1806         | 1934         |
| BAS. Basildon Hospital                  | 911          | 909          | 890          | 750          | 819          | 714          | 507          | 697          | 756          | 764          |
| BHL. Liverpool Heart and Chest Hospital | 1935         | 1908         | 2067         | 2040         | 1891         | 1765         | 1134         | 1627         | 1534         | 1479         |
| BRI. Bristol Royal Infirmary            | 1407         | 1315         | 1308         | 1257         | 1331         | 1186         | 911          | 1045         | 1005         | 1074         |
| CBS. Spire Southampton Hospital         | 449          | 403          | 407          | 401          | 336          | 612          | 216          | 364          | 347          | 317          |
| CCL. Cleveland Clinic London            |              |              |              |              |              |              |              | 129          |              | 176          |
| CHH. Castle Hill Hospital               | 655          | 660          | 696          | 627          | 788          | 837          | 423          | 561          | 613          | 676          |
| CHN. Nottingham City Hospital           | 572          | 550          | 535          | 603          | 611          | 548          | 471          | 502          | 457          | 555          |
| CRO. Cromwell Hospital                  |              | 2            | 33           | 21           | 33           | 15           | 23           | 9            | 16           | 90           |
| FRE. Freeman Hospital                   | 737          | 743          | 735          | 712          | 703          | 611          | 553          | 524          | 500          | 539          |
| GEO. St George's Hospital               | 843          | 898          | 1102         | 1005         | 717          | 670          | 346          | 517          | 509          | 508          |
| GRL. Glenfield Hospital                 | 1177         | 1091         | 1115         | 1068         | 1051         | 974          | 554          | 776          | 847          | 850          |
| HAM. Hammersmith Hospital               | 619          | 626          | 591          | 600          | 620          | 619          | 327          | 451          | 457          | 487          |
| HH. Harefield Hospital                  | 971          | 943          | 929          | 940          | 954          | 1038         | 937          | 924          | 940          | 946          |
| HHW. Wellington Hospital North          | 218          | 141          | 124          | 92           |              |              |              |              |              |              |
| HSC. Harley Street Clinic               | 134          | 109          | 133          | 119          |              |              |              |              |              |              |
| <b>Total</b>                            | <b>33011</b> | <b>32231</b> | <b>32195</b> | <b>31179</b> | <b>30698</b> | <b>29573</b> | <b>19359</b> | <b>24810</b> | <b>25769</b> | <b>26529</b> |

# UK, nation and hospital crude mortality rate % (by procedure)



## Nations

- Select all
- England
- Northern Ireland
- Wales

## ProcedureType

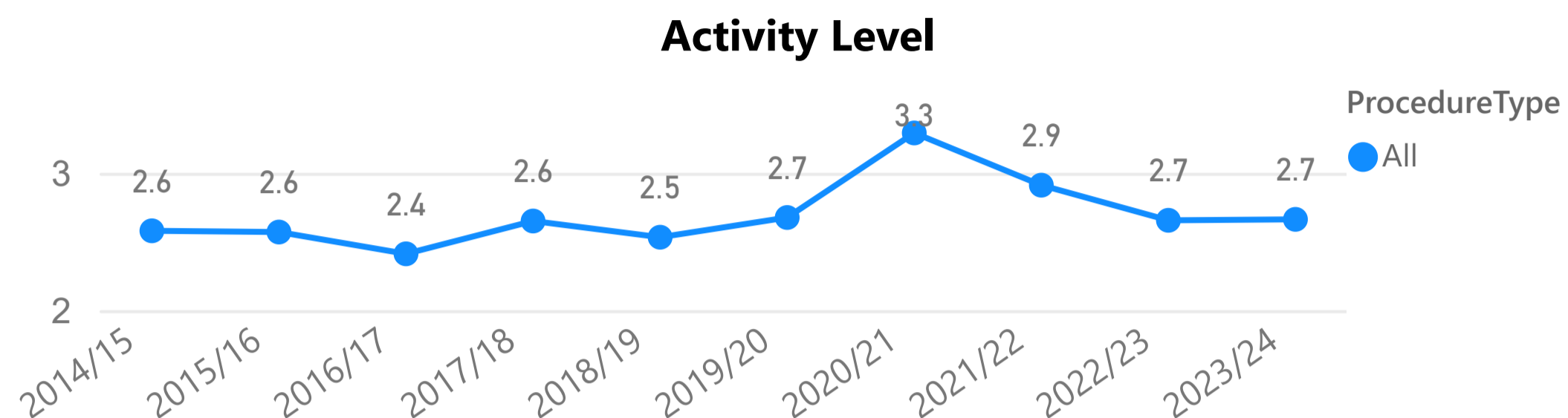
- All
- AnyTricuspid
- EmergencyMajor...
- isoAVR
- isoAVR+CABG
- isoCABG
- isoMV
- isoMV repair
- isoMV+CABG

## Hospital

All

## Year

All



## Nation

| Nation           | 2014/15     | 2015/16     | 2016/17     | 2017/18     | 2018/19     | 2023/24     |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| England          | 2.58        | 2.55        | 2.37        | 2.65        | 2.54        |             |
| Northern Ireland | 1.97        | 1.85        | 1.54        | 2.28        | 1.05        |             |
| Wales            | 3.00        | 3.37        | 4.01        | 2.92        | 3.18        |             |
| <b>Total</b>     | <b>2.58</b> | <b>2.57</b> | <b>2.41</b> | <b>2.65</b> | <b>2.53</b> | <b>2.53</b> |

## Hospital

| Hospital  | 2014/15     | 2015/16     | 2016/17     | 2017/18     | 2018/19     | 2019/20     | 2020/21     | 2021/22     | 2022/23     | 2023/24     |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| WYT. Wythenshawe Hospital                       | 1.47        | 1.14        | 1.56        | 2.22        | 2.07        | 2.17        | 0.90        | 1.85        | 1.41        | 1.09        |
| WAL. University Hospital Coventry               | 2.89        | 3.24        | 2.95        | 2.59        | 5.02        | 4.93        | 2.45        | 3.86        | 3.58        | 4.56        |
| VIC. Blackpool Victoria Hospital                | 3.00        | 1.98        | 1.94        | 2.69        | 2.81        | 2.85        | 2.61        | 2.53        | 2.20        | 2.52        |
| UHW. University Hospital of Wales               | 2.54        | 2.66        | 3.77        | 2.61        | 2.20        | 2.15        | 1.93        | 1.76        | 1.69        | 1.89        |
| UCL. University College Hospital                | 2.63        | 2.63        |             |             |             |             |             |             |             |             |
| STO. University Hospital of North Staffordshire | 2.58        | 2.40        | 2.30        | 3.58        | 3.01        | 2.38        | 4.41        | 3.98        | 1.84        | 2.00        |
| STH. St Thomas Hospital                         | 2.32        | 2.48        | 2.25        | 2.51        | 1.87        | 2.81        | 3.62        | 2.52        | 3.11        | 1.76        |
| SGH. Southampton General Hospital               | 2.48        | 1.22        | 2.14        | 1.74        | 1.72        | 1.78        | 2.20        | 2.43        | 3.03        | 1.95        |
| SCM. James Cook University Hospital             | 2.57        | 3.23        | 2.52        | 2.67        | 3.06        | 2.14        | 2.31        | 2.15        | 2.75        | 2.27        |
| RVB. Royal Victoria Hospital                    | 1.97        | 1.85        | 1.54        | 2.28        | 1.05        | 1.62        | 2.37        | 2.28        | 2.62        | 1.37        |
| RSC. Royal Sussex County Hospital               | 3.08        | 2.16        | 1.67        | 2.15        | 0.94        | 2.53        | 5.07        | 3.33        | 2.69        | 2.44        |
| RAD. John Radcliffe Hospital                    | 2.79        | 2.17        | 2.20        | 1.44        | 1.58        | 1.16        | 1.65        | 3.33        | 1.46        | 1.98        |
| QEB. Queen Elizabeth Hospital                   | 3.92        | 3.55        | 2.45        | 3.09        | 2.55        | 2.45        | 4.97        | 4.98        | 3.81        | 3.53        |
| PLY. Derriford Hospital                         | 2.36        | 3.12        | 2.08        | 2.77        | 2.27        | 1.98        | 2.37        | 2.16        | 1.67        | 2.20        |
| PAP. Papworth Hospital                          | 1.85        | 2.40        | 2.15        | 2.91        | 2.28        | 3.04        | 3.52        | 2.01        | 3.22        | 3.05        |
| NHB. Royal Brompton Hospital                    | 2.11        | 2.77        | 2.04        | 3.53        | 2.99        | 2.83        | 2.36        | 1.74        | 2.02        | 2.06        |
| NGS. Northern General Hospital                  | 1.94        | 3.06        | 2.91        | 2.72        | 2.31        | 3.85        | 2.83        | 4.17        | 2.84        | 3.75        |
| <b>Total</b>                                    | <b>2.58</b> | <b>2.57</b> | <b>2.41</b> | <b>2.65</b> | <b>2.53</b> | <b>2.67</b> | <b>3.29</b> | <b>2.91</b> | <b>2.65</b> | <b>2.66</b> |

# Numbers and Percent (%) of patients undergoing Redo cardiac



## Nations

- Select all
- England
- Northern Ireland
- Wales

## ProcedureType

MajorAortic ▼

## Number or Percent

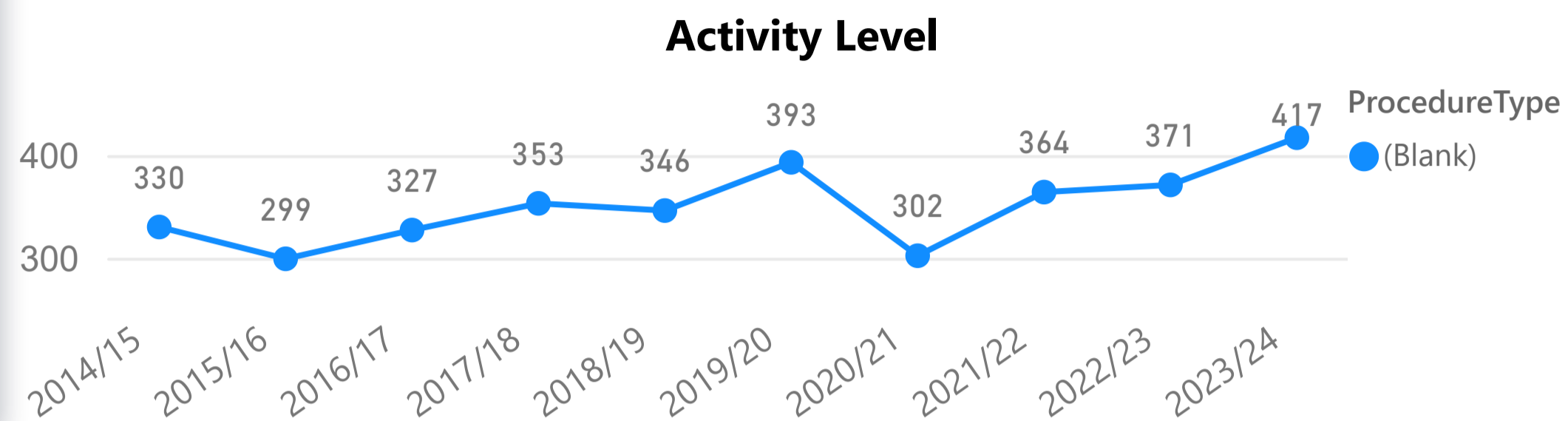
- Number
- Percent(%)

## Hospital

All ▼

## Year

All ▼



| Nation           | 2014/15    | 2015/16    | 2016/17    | 2017/18    | 2018/19    |
|------------------|------------|------------|------------|------------|------------|
| England          | 314        | 286        | 309        | 338        | 336        |
| Northern Ireland | 7          | 3          | 10         | 7          | 7          |
| Wales            | 9          | 10         | 8          | 8          | 3          |
| <b>Total</b>     | <b>330</b> | <b>299</b> | <b>327</b> | <b>353</b> | <b>346</b> |

| Hospital                                | 2014/15    | 2015/16    | 2016/17    | 2017/18    | 2018/19    | 2019/20    | 2020/21    | 2021/22    | 2022/23    | 2023/24    |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ANT. Spire St Anthonys Hospital         | 6          | 6          |            | 1          | 1          | 1          |            |            |            |            |
| BAL. Barts and the London               |            | 4          | 27         | 27         | 43         | 27         | 27         | 47         | 53         | 63         |
| BAS. Basildon Hospital                  |            | 2          | 4          | 4          | 2          | 4          | 6          | 3          | 8          | 4          |
| BHL. Liverpool Heart and Chest Hospital | 47         | 35         | 43         | 53         | 38         | 37         | 33         | 47         | 51         | 63         |
| BRI. Bristol Royal Infirmary            | 1          | 18         | 19         | 21         | 25         | 25         | 20         | 35         | 28         | 32         |
| CBS. Spire Southampton Hospital         | 3          |            | 1          | 1          |            |            |            | 1          | 1          |            |
| CCL. Cleveland Clinic London            |            |            |            |            |            |            |            |            | 3          | 11         |
| CHH. Castle Hill Hospital               | 4          | 6          | 3          | 4          | 7          | 7          | 5          | 4          | 5          | 6          |
| CHN. Nottingham City Hospital           | 5          | 10         | 8          | 5          | 9          | 14         | 3          | 6          | 5          | 3          |
| CRO. Cromwell Hospital                  |            |            |            |            |            |            |            |            |            |            |
| FRE. Freeman Hospital                   | 16         | 10         | 4          | 4          | 5          | 7          | 7          | 4          | 8          | 9          |
| GEO. St George's Hospital               | 8          | 11         | 14         | 12         | 4          | 6          | 1          | 1          | 4          | 2          |
| GRL. Glenfield Hospital                 | 13         | 13         | 9          | 10         | 9          | 21         | 12         | 8          | 5          | 16         |
| HAM. Hammersmith Hospital               | 6          | 1          | 3          | 8          | 5          | 8          |            | 3          | 2          | 3          |
| HH. Harefield Hospital                  | 16         | 18         | 22         | 17         | 16         | 26         | 25         | 15         | 9          | 10         |
| HHW. Wellington Hospital North          | 3          | 3          | 3          |            |            |            |            |            |            |            |
| HSC Harlev Street Clinic                | 1          | 2          |            | 1          |            |            |            |            |            |            |
| <b>Total</b>                            | <b>330</b> | <b>299</b> | <b>327</b> | <b>353</b> | <b>346</b> | <b>393</b> | <b>302</b> | <b>364</b> | <b>371</b> | <b>417</b> |

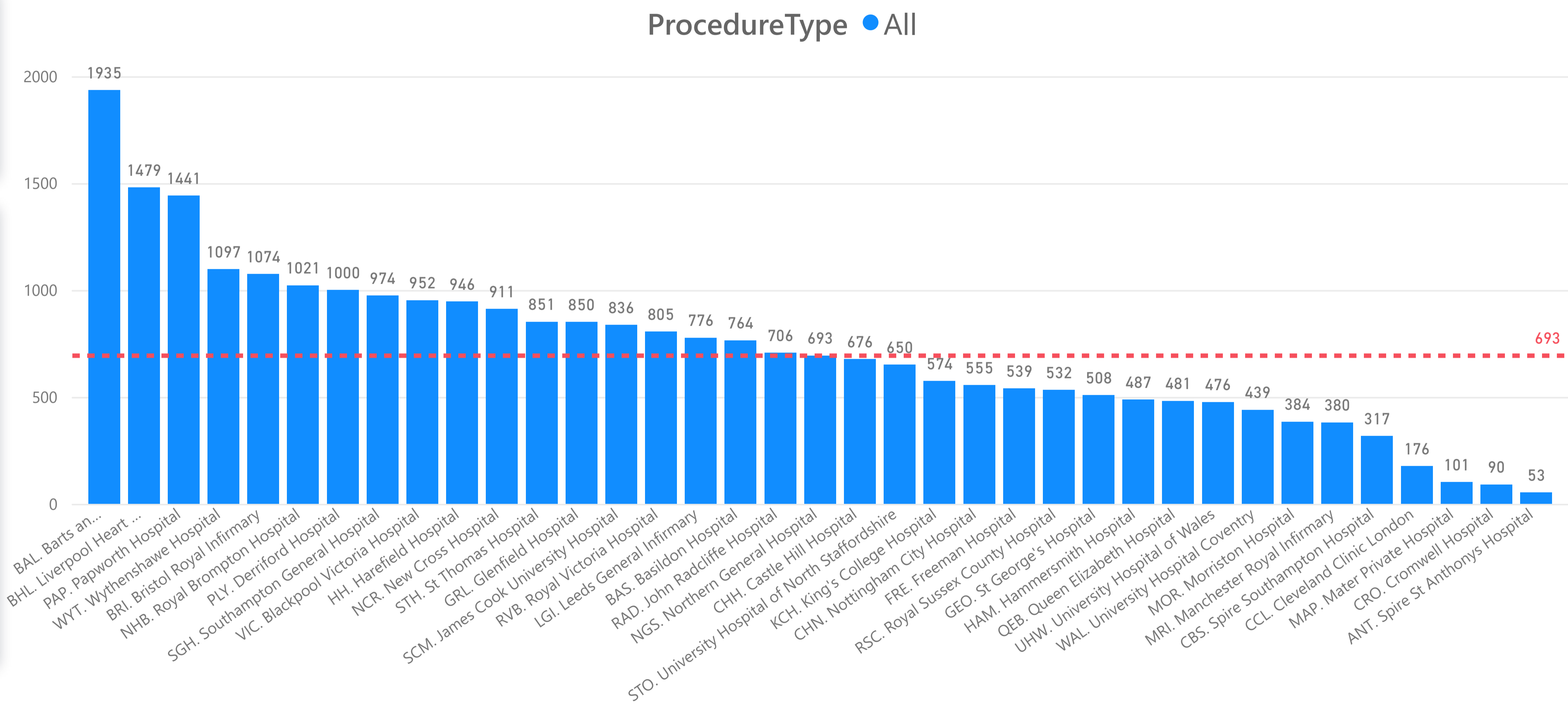
# Hospital activity by procedure type



**Year**

2023/24 ▼

- ProcedureType**
- All
  - AnyTricuspid
  - EmergencyMajorA..
  - isoAVR
  - isoAVR+CABG
  - isoCABG
  - isoMV
  - isoMV repair
  - isoMV+CABG
  - isoMVR+CABG
  - isoTricuspid
  - LA Appendage O...



# Waiting times for surgery (from angiogram) by procedure



## Urgent Status

- Elective
- Urgent

## ProcedureType

- All
- AnyisoTricuspid
- isoAVR
- isoAVR+CABG
- isoCABG
- isoMV
- isoMV+CABG
- isoTricuspid
- LA\_Appendage\_Occlu...

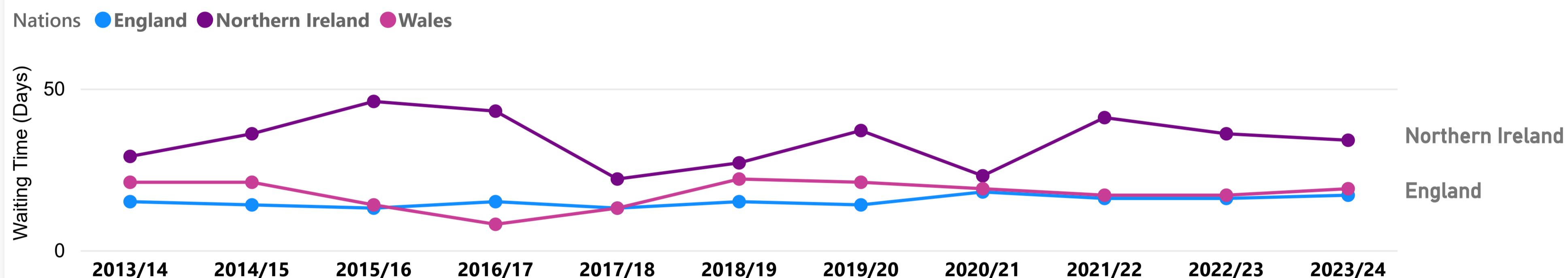
## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19
- 2019/20
- 2020/21
- 2021/22

| Country | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|---------|---------|---------|---------|---------|---------|---------|
| UK      | 15      | 14      | 15      | 13      | 16      | 14      |

| Nation           | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|------------------|---------|---------|---------|---------|---------|---------|
| England          | 14      | 13      | 15      | 13      | 15      | 14      |
| Northern Ireland | 36      | 46      | 43      | 22      | 27      | 37      |
| Wales            | 21      | 14      | 8       | 13      | 22      | 21      |

Nation Level Waiting Time (Days) over Years



| Hospital                                | Data Completeness(%) |
|---|----------------------|
| ANT. Spire St Anthonys Hospital         | 50%                  |
| BAL. Barts and the London               | 26%                  |
| BAS. Basildon Hospital                  | 89%                  |
| BHL. Liverpool Heart and Chest Hospital | 47%                  |
| BRI. Bristol Royal Infirmary            | 75%                  |
| CBS. Spire Southampton Hospital         | 13%                  |
| CCL. Cleveland Clinic London            | 70%                  |

| Hospital                                | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|---|---------|---------|---------|---------|---------|---------|
| ANT. Spire St Anthonys Hospital         |         | 14      |         | 34      |         |         |
| BAL. Barts and the London               | 2       |         | 4       | 8       | 17      | 9       |
| BAS. Basildon Hospital                  | 10      | 14      | 20      | 17      | 15      | 15      |
| BHL. Liverpool Heart and Chest Hospital | 17      | 20      | 20      | 20      | 38      |         |
| BRI. Bristol Royal Infirmary            | 33      | 28      | 28      | 11      | 17      | 14      |
| CBS. Spire Southampton Hospital         | 8       |         |         |         |         |         |
| CCL. Cleveland Clinic London            |         |         |         |         |         |         |
| CHH. Castle Hill Hospital               | 19      | 22      | 9       | 15      | 12      | 9       |
| CHN. Nottingham City Hospital           | 54      | 35      | 14      | 22      | 11      | 21      |

# Rate (%) of return to theatre following CABG (any reason)



## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19

## X1.01.Hospital

- Select all
- ANT. Spire St Antonys Hospital
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and Chest Hospital
- BRI. Bristol Royal Infirmary
- CBS. Spire Southampton Hospital
- CCL. Cleveland Clinic London
- CHH. Castle Hill Hospital
- CHN. Nottingham City Hospital
- CRO. Cromwell Hospital
- FRE. Freeman Hospital
- GEO. St George's Hospital
- GRL. Glenfield Hospital
- HAM. Hammersmith Hospital
- HH. Harefield Hospital
- HHW. Wellington Hospital North
- HSC. Harley Street Clinic
- KCH. King's College Hospital
- LBH. London Bridge Hospital
- LCL. Leeds General Infirmary

| Country | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
|---------|---------|---------|---------|---------|---------|
| UK      | 3.06    | 2.76    | 2.72    | 2.88    | 2.65    |

| Nation           | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|------------------|---------|---------|---------|---------|---------|---------|
| England          | 2.95    | 2.66    | 2.69    | 2.80    | 2.63    | 2.35    |
| Northern Ireland | 6.16    | 5.40    | 4.41    | 6.69    | 4.14    | 1.37    |
| Wales            | 3.93    | 3.36    | 2.29    | 2.45    | 2.07    | 1.05    |

| Hospital  | Data Completeness |
|---|-------------------|
| WYT. Wythenshawe Hospital                       | 53                |
| WAL. University Hospital Coventry               | 99                |
| VIC. Blackpool Victoria Hospital                | 100               |
| UHW. University Hospital of Wales               | 89                |
| UCL. University College Hospital                | 100               |
| STO. University Hospital of North Staffordshire | 99                |
| STH. St Thomas Hospital                         | 98                |
| SGH. Southampton General Hospital               | 100               |
| SCM. James Cook University Hospital             | 100               |
| RVB. Royal Victoria Hospital                    | 93                |
| RSC. Royal Sussex County Hospital               | 99                |
| <b>Total</b>                                    | <b>93</b>         |

| Hospital  | 2014/15     | 2015/16     | 2016/17     | 2017/18     | 2018/19     | 2019/20     |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| WYT. Wythenshawe Hospital                       | 0.98        | 0.37        | 0.35        | 0.20        | 0.69        | 0.20        |
| WAL. University Hospital Coventry               | 3.60        | 3.67        | 3.44        | 2.83        | 4.46        | 2.34        |
| VIC. Blackpool Victoria Hospital                | 5.26        | 3.51        | 5.03        | 4.80        | 2.65        | 1.32        |
| UHW. University Hospital of Wales               | 1.72        | 2.58        | 1.55        | 3.49        | 1.23        | 0.89        |
| UCL. University College Hospital                | 1.34        |             |             |             |             |             |
| STO. University Hospital of North Staffordshire | 4.99        | 5.31        | 6.08        | 3.98        | 2.34        | 1.32        |
| STH. St Thomas Hospital                         | 1.57        | 2.44        | 0.89        | 1.77        | 1.32        | 0.89        |
| SGH. Southampton General Hospital               | 3.21        | 2.78        | 3.29        | 2.68        | 2.63        | 2.12        |
| SCM. James Cook University Hospital             | 4.63        | 3.21        | 3.20        | 5.18        | 2.12        | 1.32        |
| RVB. Royal Victoria Hospital                    | 6.16        | 5.40        | 4.41        | 6.69        | 4.14        | 1.37        |
| RSC. Royal Sussex County Hospital               | 3.02        | 1.63        | 3.22        | 2.81        | 4.59        | 1.05        |
| <b>Total</b>                                    | <b>3.06</b> | <b>2.76</b> | <b>2.72</b> | <b>2.88</b> | <b>2.65</b> | <b>2.35</b> |

# Rate (%) of return to theatre following CABG (for bleeding/tamponade)



## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18

## Country 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20

|    |      |      |      |      |      |      |
|----|------|------|------|------|------|------|
| UK | 2.65 | 2.29 | 2.27 | 2.43 | 2.14 | 1.85 |
|----|------|------|------|------|------|------|

## Nation

|                  |      |      |      |      |      |      |
|------------------|------|------|------|------|------|------|
| England          | 2.53 | 2.19 | 2.26 | 2.35 | 2.13 | 1.85 |
| Northern Ireland | 5.91 | 4.37 | 3.86 | 6.08 | 3.45 | 1.37 |
| Wales            | 3.31 | 3.36 | 1.53 | 2.25 | 1.66 | 0.84 |

## X1.01.Hospital

- Select all
- ANT. Spire St Anthonys Hospital
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and Chest ...
- BRI. Bristol Royal Infirmary
- CBS. Spire Southampton Hospital
- CCL. Cleveland Clinic London
- CHH. Castle Hill Hospital
- CHN. Nottingham City Hospital
- CRO. Cromwell Hospital
- FRE. Freeman Hospital
- GEO. St George's Hospital
- GRL. Glenfield Hospital
- HAM. Hammersmith Hospital
- HH. Harefield Hospital
- HHW. Wellington Hospital North
- HSC. Harley Street Clinic
- KCH. King's College Hospital
- LBH. London Bridge Hospital
- LGL. Leeds General Infirmary

## Hospital

## Data Completeness

|   |           |
|---|-----------|
| WYT. Wythenshawe Hospital                       | 53        |
| WAL. University Hospital Coventry               | 99        |
| VIC. Blackpool Victoria Hospital                | 100       |
| UHW. University Hospital of Wales               | 89        |
| UCL. University College Hospital                | 100       |
| STO. University Hospital of North Staffordshire | 99        |
| STH. St Thomas Hospital                         | 98        |
| SGH. Southampton General Hospital               | 100       |
| SCM. James Cook University Hospital             | 100       |
| RVB. Royal Victoria Hospital                    | 93        |
| RSC. Royal Sussex County Hospital               | 99        |
| <b>Total</b>                                    | <b>93</b> |

## Hospital

## 2014/15 2015/16 2016/17 2017/18 2018/19

|   |             |             |             |             |             |
|---|-------------|-------------|-------------|-------------|-------------|
| ANT. Spire St Anthonys Hospital         | 0.00        | 1.80        | 3.77        | 0.00        | 2.13        |
| BAL. Barts and the London               | 1.60        | 2.26        | 2.77        | 1.27        | 2.28        |
| BAS. Basildon Hospital                  | 1.46        | 1.73        | 0.81        | 1.59        | 4.26        |
| BHL. Liverpool Heart and Chest Hospital | 4.52        | 4.51        | 3.10        | 1.64        | 2.50        |
| BRI. Bristol Royal Infirmary            | 1.84        | 2.04        | 0.78        | 3.28        | 2.48        |
| CBS. Spire Southampton Hospital         | 2.74        | 0.00        | 1.33        | 5.26        | 0.00        |
| CCL. Cleveland Clinic London            |             |             |             |             |             |
| CHH. Castle Hill Hospital               | 1.90        | 3.04        | 3.00        | 3.13        | 2.18        |
| CHN. Nottingham City Hospital           | 2.69        | 1.83        | 2.48        | 1.19        | 1.14        |
| CRO. Cromwell Hospital                  |             | 0.00        | 0.00        | 0.00        | 0.00        |
| FRE. Freeman Hospital                   | 2.60        | 1.06        | 1.61        | 1.11        | 2.01        |
| GEO. St George's Hospital               | 2.34        | 1.87        | 3.35        | 3.28        | 3.58        |
| GRL. Glenfield Hospital                 | 3.61        | 2.78        | 2.64        | 3.39        | 2.33        |
| HAM. Hammersmith Hospital               | 2.22        | 1.14        | 0.31        | 0.00        | 1.53        |
| <b>Total</b>                            | <b>2.65</b> | <b>2.29</b> | <b>2.27</b> | <b>2.43</b> | <b>2.14</b> |

# Rate (%) of deep sternal wound infection (DSWI) following CABG (requiring surgery)



## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19
- 2019/20
- 2020/21

## Hospital

- Select all
- ANT. Spire St Anthonys Hospital
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and Chest. Hospital
- BRI. Bristol Royal Infirmary
- CBS. Spire Southampton Hospital
- CCL. Cleveland Clinic London
- CHH. Castle Hill Hospital
- CHN. Nottingham City Hospital
- CRO. Cromwell Hospital
- FRE. Freeman Hospital
- GEO. St George's Hospital
- GRL. Glenfield Hospital
- HAM. Hammersmith Hospital
- HH. Harefield Hospital
- HHW. Wellington Hospital North
- HSC. Harley Street Clinic

## Country 2014/15 2015/16 2016/17 2017/18 2018/19

|    |      |      |      |      |      |
|----|------|------|------|------|------|
| UK | 0.34 | 0.28 | 0.26 | 0.29 | 0.31 |
|----|------|------|------|------|------|

## Nation 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21

|                  |      |      |      |      |      |      |
|------------------|------|------|------|------|------|------|
| England          | 0.32 | 0.28 | 0.25 | 0.26 | 0.32 | 0.26 |
| Northern Ireland | 0.74 | 0.00 | 0.00 | 1.22 | 0.34 | 0.00 |
| Wales            | 0.62 | 0.40 | 0.57 | 0.61 | 0.21 | 0.00 |

## Hospital Data Completeness

| Hospital                                | Data Completeness |
|---|-------------------|
| ANT. Spire St Anthonys Hospital         | 100               |
| BAL. Barts and the London               | 94                |
| BAS. Basildon Hospital                  | 94                |
| BHL. Liverpool Heart and Chest Hospital | 100               |
| BRI. Bristol Royal Infirmary            | 99                |
| CBS. Spire Southampton Hospital         | 99                |
| CCL. Cleveland Clinic London            | 93                |
| CHH. Castle Hill Hospital               | 100               |
| CHN. Nottingham City Hospital           | 100               |
| CRO. Cromwell Hospital                  | 94                |
| FRE. Freeman Hospital                   | 100               |
| GEO. St George's Hospital               | 100               |
| GRL. Glenfield Hospital                 | 100               |
| HAM. Hammersmith Hospital               | 99                |
| HH. Harefield Hospital                  | 99                |
| HHW. Wellington Hospital North          | 99                |
| <b>Total</b>                            | <b>93</b>         |

## Hospital 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21

| Hospital                                | 2014/15     | 2015/16     | 2016/17     | 2017/18     | 2018/19     | 2019/20     | 2020/21     |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ANT. Spire St Anthonys Hospital         | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| BAL. Barts and the London               | 0.00        | 0.14        | 0.48        | 0.69        | 0.00        | 0.00        | 0.00        |
| BAS. Basildon Hospital                  | 0.21        | 0.25        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| BHL. Liverpool Heart and Chest Hospital | 0.00        | 0.11        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| BRI. Bristol Royal Infirmary            | 0.31        | 0.19        | 0.00        | 0.21        | 0.00        | 0.00        | 0.00        |
| CBS. Spire Southampton Hospital         | 0.00        | 0.79        | 0.67        | 0.00        | 0.00        | 0.00        | 0.00        |
| CCL. Cleveland Clinic London            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| CHH. Castle Hill Hospital               | 0.81        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| CHN. Nottingham City Hospital           | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| CRO. Cromwell Hospital                  | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| FRE. Freeman Hospital                   | 0.37        | 1.41        | 0.40        | 1.11        | 0.00        | 0.00        | 0.00        |
| GEO. St George's Hospital               | 1.40        | 0.62        | 0.56        | 0.19        | 0.00        | 0.00        | 0.00        |
| GRL. Glenfield Hospital                 | 0.40        | 0.80        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| HAM. Hammersmith Hospital               | 0.28        | 0.28        | 0.31        | 0.68        | 0.00        | 0.00        | 0.00        |
| HH. Harefield Hospital                  | 0.00        | 0.26        | 0.67        | 0.00        | 0.00        | 0.00        | 0.00        |
| <b>Total</b>                            | <b>0.34</b> | <b>0.28</b> | <b>0.26</b> | <b>0.29</b> | <b>0.32</b> | <b>0.26</b> | <b>0.00</b> |

# Rate (%) of any new post-op neurological event (CVA or TIA) following CABG



## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19
- 2019/20
- 2020/21

## Hospital

- Select all
- ANT. Spire St Anthonys Hospital
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and Chest. Hospital
- BRI. Bristol Royal Infirmary
- CBS. Spire Southampton Hospital
- CCL. Cleveland Clinic London
- CHH. Castle Hill Hospital
- CHN. Nottingham City Hospital
- CRO. Cromwell Hospital
- FRE. Freeman Hospital
- GEO. St George's Hospital
- GRL. Glenfield Hospital
- HAM. Hammersmith Hospital
- HH. Harefield Hospital
- HHW. Wellington Hospital North
- HSC. Harley Street Clinic

| Country | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
|---------|---------|---------|---------|---------|---------|
| UK      | 0.64    | 0.67    | 0.84    | 0.58    | 0.80    |

| Hospital                                | Data Completeness(%) |
|---|----------------------|
| ANT. Spire St Anthonys Hospital         | 99                   |
| BAL. Barts and the London               | 90                   |
| BAS. Basildon Hospital                  | 100                  |
| BHL. Liverpool Heart and Chest Hospital | 100                  |
| BRI. Bristol Royal Infirmary            | 59                   |
| CBS. Spire Southampton Hospital         | 99                   |
| CCL. Cleveland Clinic London            | 93                   |
| CHH. Castle Hill Hospital               | 100                  |
| CHN. Nottingham City Hospital           | 100                  |
| CRO. Cromwell Hospital                  | 96                   |
| FRE. Freeman Hospital                   | 100                  |
| GEO. St George's Hospital               | 100                  |
| GRL. Glenfield Hospital                 | 100                  |
| HAM. Hammersmith Hospital               | 99                   |
| HH. Harefield Hospital                  | 98                   |
| HHW. Wellington Hospital North          | 100                  |
| <b>Total</b>                            | <b>93</b>            |

| Nation           | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 20 |
|------------------|---------|---------|---------|---------|---------|---------|----|
| England          | 0.67    | 0.70    | 0.87    | 0.58    | 0.77    | 0.84    |    |
| Northern Ireland | 0.00    | 0.26    | 0.28    | 0.00    | 1.73    | 1.02    |    |
| Wales            | 0.21    | 0.20    | 0.38    | 1.02    | 1.24    | 0.84    |    |

| Hospital  | 2014/15     | 2015/16     | 2016/17     | 2017/18     | 2018/19     | 2019/20 |
|---|-------------|-------------|-------------|-------------|-------------|---------|
| WYT. Wythenshawe Hospital                       | 0.00        | 0.00        | 0.17        | 0.41        | 0.46        |         |
| WAL. University Hospital Coventry               | 0.00        | 0.00        | 0.34        | 0.35        | 0.37        |         |
| VIC. Blackpool Victoria Hospital                | 1.28        | 0.33        | 1.41        | 1.24        | 0.19        |         |
| UHW. University Hospital of Wales               | 0.00        | 0.37        | 0.39        | 0.87        | 0.82        |         |
| UCL. University College Hospital                | 1.61        | 0.00        |             |             |             |         |
| STO. University Hospital of North Staffordshire | 0.91        | 0.46        | 0.45        | 0.80        | 0.88        |         |
| STH. St Thomas Hospital                         | 1.34        | 1.71        | 0.67        | 1.26        | 0.79        |         |
| SGH. Southampton General Hospital               | 1.28        | 0.22        | 1.24        | 0.00        | 0.20        |         |
| SCM. James Cook University Hospital             | 1.20        | 0.89        | 1.25        | 0.58        | 0.96        |         |
| RVB. Royal Victoria Hospital                    | 0.00        | 0.26        | 0.28        | 0.00        | 1.73        |         |
| RSC. Royal Sussex County Hospital               | 6.79        | 5.56        | 3.22        | 2.46        | 3.18        |         |
| RAD. John Radcliffe Hospital                    | 0.28        | 0.00        | 0.29        | 0.27        | 1.20        |         |
| <b>Total</b>                                    | <b>0.64</b> | <b>0.67</b> | <b>0.84</b> | <b>0.58</b> | <b>0.80</b> |         |

# Rate (%) of new post-operative kidney failure (requiring renal support therapy)



## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19
- 2019/20
- 2020/21

## Hospital

- Select all
- ANT. Spire St Antonys H...
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and ...
- BRI. Bristol Royal Infirmary
- CBS. Spire Southampton H...
- CCL. Cleveland Clinic Lond...
- CHH. Castle Hill Hospital
- CHN. Nottingham City Ho...
- CRO. Cromwell Hospital
- FRE. Freeman Hospital
- GEO. St George's Hospital
- GRL. Glenfield Hospital
- HAM. Hammersmith Hosn

| Country | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|---------|---------|---------|---------|---------|---------|---------|
| UK      | 1.58    | 1.29    | 1.32    | 1.57    | 1.23    | 1.23    |

| Nation           | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|------------------|---------|---------|---------|---------|---------|---------|
| England          | 1.51    | 1.21    | 1.27    | 1.53    | 1.19    | 1.19    |
| Northern Ireland | 3.20    | 2.31    | 2.20    | 3.34    | 2.41    | 2.41    |
| Wales            | 2.27    | 2.77    | 2.10    | 1.64    | 1.45    | 1.45    |

## Hospital Data Completeness(%)

| Hospital  | Data Completeness(%) |
|---|----------------------|
| WYT. Wythenshawe Hospital                       | 71                   |
| WAL. University Hospital Coventry               | 83                   |
| VIC. Blackpool Victoria Hospital                | 99                   |
| UHW. University Hospital of Wales               | 88                   |
| UCL. University College Hospital                | 100                  |
| STO. University Hospital of North Staffordshire | 98                   |
| STH. St Thomas Hospital                         | 98                   |
| SGH. Southampton General Hospital               | 99                   |
| SCM. James Cook University Hospital             | 100                  |
| RVB. Royal Victoria Hospital                    | 92                   |
| RSC. Royal Sussex County Hospital               | 98                   |
| RAD. John Radcliffe Hospital                    | 94                   |
| GEP. Queen Elizabeth Hospital                   | 100                  |
| <b>Total</b>                                    | <b>95</b>            |

## Hospital Data

| Hospital  | 2014/15     | 2015/16     | 2016/17     | 2017/18     | 2018/19     | 2019/20     |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| WYT. Wythenshawe Hospital                       | 0.20        | 0.00        | 0.00        | 0.00        | 0.00        | 0.90        |
| WAL. University Hospital Coventry               | 1.39        | 1.22        | 2.75        | 1.06        | 0.74        | 0.74        |
| VIC. Blackpool Victoria Hospital                | 0.48        | 1.67        | 1.21        | 1.07        | 0.90        | 0.90        |
| UHW. University Hospital of Wales               | 2.15        | 3.32        | 3.88        | 2.62        | 2.41        | 2.41        |
| UCL. University College Hospital                | 2.15        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| STO. University Hospital of North Staffordshire | 1.36        | 1.16        | 1.80        | 0.53        | 1.11        | 1.11        |
| STH. St Thomas Hospital                         | 0.67        | 0.00        | 0.00        | 0.51        | 0.51        | 0.51        |
| SGH. Southampton General Hospital               | 0.86        | 0.43        | 0.00        | 0.67        | 0.20        | 0.20        |
| SCM. James Cook University Hospital             | 1.89        | 1.61        | 1.42        | 1.54        | 0.19        | 0.19        |
| RVB. Royal Victoria Hospital                    | 3.20        | 2.31        | 2.20        | 3.34        | 2.41        | 2.41        |
| RSC. Royal Sussex County Hospital               | 1.51        | 0.98        | 0.97        | 1.40        | 0.00        | 0.00        |
| RAD. John Radcliffe Hospital                    | 0.00        | 0.00        | 0.29        | 0.80        | 2.60        | 2.60        |
| <b>Total</b>                                    | <b>1.58</b> | <b>1.29</b> | <b>1.32</b> | <b>1.57</b> | <b>1.23</b> | <b>1.23</b> |

# Numbers and % of cases by EuroSCORE 2 risk categories (high/medium/low)



## EuroSCORE II Risk Group

- High (>=8%)
- Low (<4%)
- Medium (4% - 8%)

## Procedure Type

- isoAVR
- isoCABG
- isoMV

## Number or Percent

- Number
- Percent(%)

## Year

All ▼

## Hospital

All ▼

| Country   | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 |
|-----------|---------|---------|---------|---------|---------|
| <b>UK</b> | 89.64   | 89.77   | 89.25   | 89.87   | 90.79   |

| Nations                 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 |
|-------------------------|---------|---------|---------|---------|---------|
| <b>England</b>          | 89.67   | 89.92   | 89.46   | 90.06   | 90.88   |
| <b>Northern Ireland</b> | 91.81   | 88.76   | 83.02   | 86.03   | 87.38   |
| <b>Wales</b>            | 87.55   | 85.39   | 86.54   | 87.59   | 90.98   |

| Hospital  | 2019/20      | 2020/21      | 2021/22      | 2022/23      | 2023/24      | Aggregate    |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| WYT. Wythenshawe Hospital                       | 91.37        | 90.24        | 92.23        | 92.57        | 91.72        | <b>91.71</b> |
| WAL. University Hospital Coventry               | 90.04        | 89.86        | 86.83        | 87.45        | 89.25        | <b>88.58</b> |
| VIC. Blackpool Victoria Hospital                | 91.94        | 91.80        | 90.08        | 91.28        | 91.49        | <b>91.27</b> |
| UHW. University Hospital of Wales               | 89.92        | 84.26        | 87.38        | 88.70        | 91.26        | <b>88.77</b> |
| STO. University Hospital of North Staffordshire | 89.85        | 86.22        | 87.50        | 88.83        | 88.89        | <b>88.50</b> |
| STH. St Thomas Hospital                         | 88.19        | 87.86        | 85.22        | 88.66        | 88.93        | <b>87.73</b> |
| SGH. Southampton General Hospital               | 71.89        | 78.04        | 77.58        | 73.50        | 85.41        | <b>77.10</b> |
| SCM. James Cook University Hospital             | 84.89        | 89.97        | 87.27        | 86.81        | 89.20        | <b>87.42</b> |
| RVB. Royal Victoria Hospital                    | 91.81        | 88.76        | 83.02        | 86.03        | 87.38        | <b>87.77</b> |
| RSC. Royal Sussex County Hospital               | 90.44        | 90.37        | 91.46        | 92.27        | 93.00        | <b>91.59</b> |
| RAD. John Radcliffe Hospital                    | 96.08        | 95.19        | 95.08        | 95.15        | 95.70        | <b>95.45</b> |
| QEB. Queen Elizabeth Hospital                   | 93.96        | 93.28        | 87.13        | 92.21        | 91.76        | <b>92.20</b> |
| PLY. Derriford Hospital                         | 94.30        | 93.49        | 92.63        | 91.59        | 86.63        | <b>92.08</b> |
| PAP. Papworth Hospital                          | 87.61        | 87.98        | 83.47        | 88.79        | 86.35        | <b>86.76</b> |
| NHB. Royal Brompton Hospital                    | 93.11        | 93.71        | 92.79        | 91.69        | 95.52        | <b>93.38</b> |
| NGS. Northern General Hospital                  | 90.71        | 92.90        | 88.66        | 86.50        | 87.72        | <b>89.45</b> |
| NCR. New Cross Hospital                         | 91.57        | 89.88        | 88.97        | 89.16        | 88.11        | <b>89.50</b> |
| MRI. Manchester Royal Infirmary                 | 82.72        | 85.84        | 83.53        | 80.79        | 81.93        | <b>82.92</b> |
| <b>Total</b>                                    | <b>89.64</b> | <b>89.77</b> | <b>89.25</b> | <b>89.87</b> | <b>90.79</b> | <b>89.87</b> |

# Incision type - number of cases



## Incision Type

- Median Sternotomy
- Mini Thoracotomy
- Other
- Partial Sternotomy
- Robotic assisted

## Procedure Type

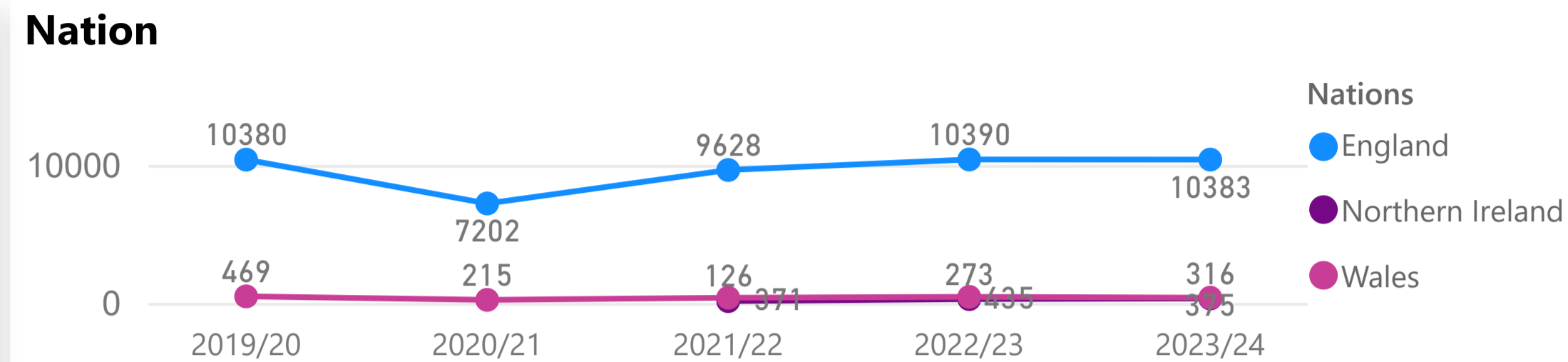
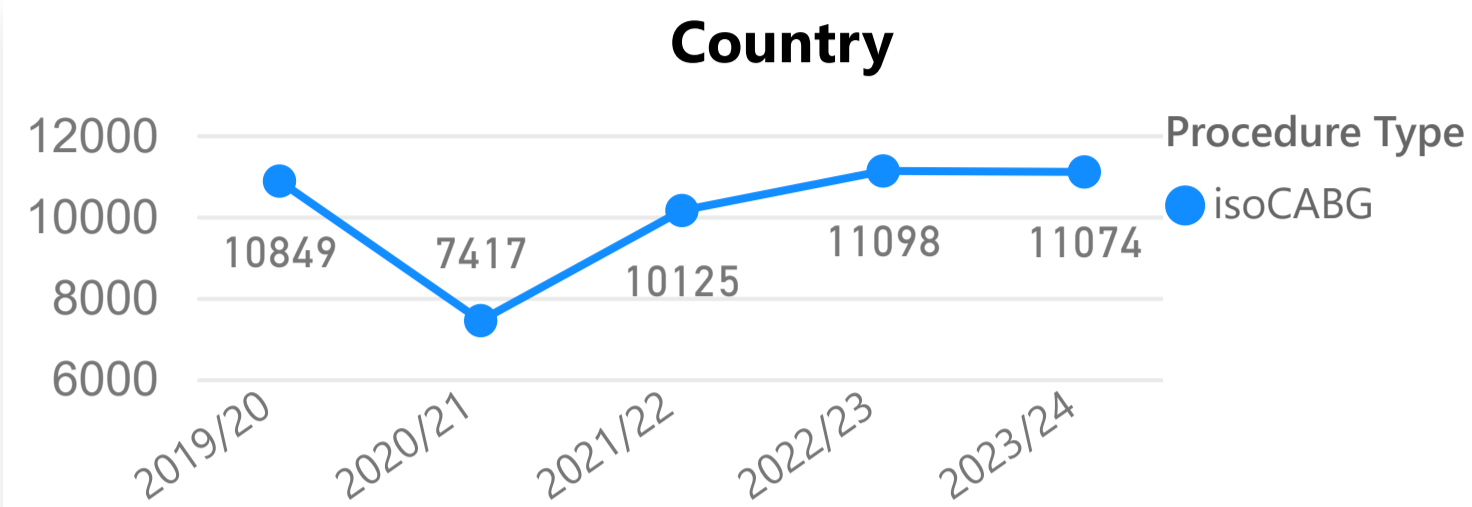
- isoAVR
- isoCABG
- isoMVR

## Year

- 2019/20
- 2020/21
- 2021/22
- 2022/23

## Hospital

- Select all
- ANT. Spire St Antonys Ho...
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and ...



| Hospital                                | 2019/20      | 2020/21     | 2021/22      | 2022/23      | 2023/24      | Aggregate    |
|---|--------------|-------------|--------------|--------------|--------------|--------------|
| ANT. Spire St Antonys Hospital          | 23           | 5           | 22           | 11           | 25           | 86           |
| BAL. Barts and the London               | 956          | 688         | 797          | 834          | 851          | 4126         |
| BAS. Basildon Hospital                  | 275          | 223         | 332          | 334          | 357          | 1521         |
| BHL. Liverpool Heart and Chest Hospital | 755          | 491         | 711          | 696          | 599          | 3252         |
| BRI. Bristol Royal Infirmary            | 438          | 315         | 402          | 412          | 456          | 2023         |
| CBS. Spire Southampton Hospital         | 13           | 39          | 21           | 83           | 95           | 251          |
| CCL. Cleveland Clinic London            |              |             |              | 36           | 36           | 72           |
| CHH. Castle Hill Hospital               |              |             |              | 298          | 343          | 641          |
| CHN. Nottingham City Hospital           | 223          | 194         | 210          | 189          | 214          | 1030         |
| CRO. Cromwell Hospital                  | 9            | 9           | 3            | 5            | 24           | 50           |
| FRE. Freeman Hospital                   | 230          | 221         | 171          | 178          | 156          | 956          |
| GEO. St George's Hospital               | 344          | 153         | 270          | 238          | 227          | 1232         |
| GRL. Glenfield Hospital                 | 444          | 219         | 326          | 402          | 360          | 1751         |
| HAM. Hammersmith Hospital               | 318          | 184         | 251          | 253          | 250          | 1256         |
| HH. Harefield Hospital                  | 431          | 408         | 428          | 470          | 433          | 2170         |
| KCH. King's College Hospital            | 359          | 192         | 292          | 269          | 157          | 1269         |
| LCH. Leeds General Infirmary            | 263          | 309         | 296          | 296          | 268          | 1432         |
| <b>Total</b>                            | <b>10849</b> | <b>7417</b> | <b>10125</b> | <b>11098</b> | <b>11074</b> | <b>50563</b> |

# Operations with or without median sternotomy - number of cases



## Median Sternotomy

- Both
- Unknown
- With
- Without

## Procedure Type

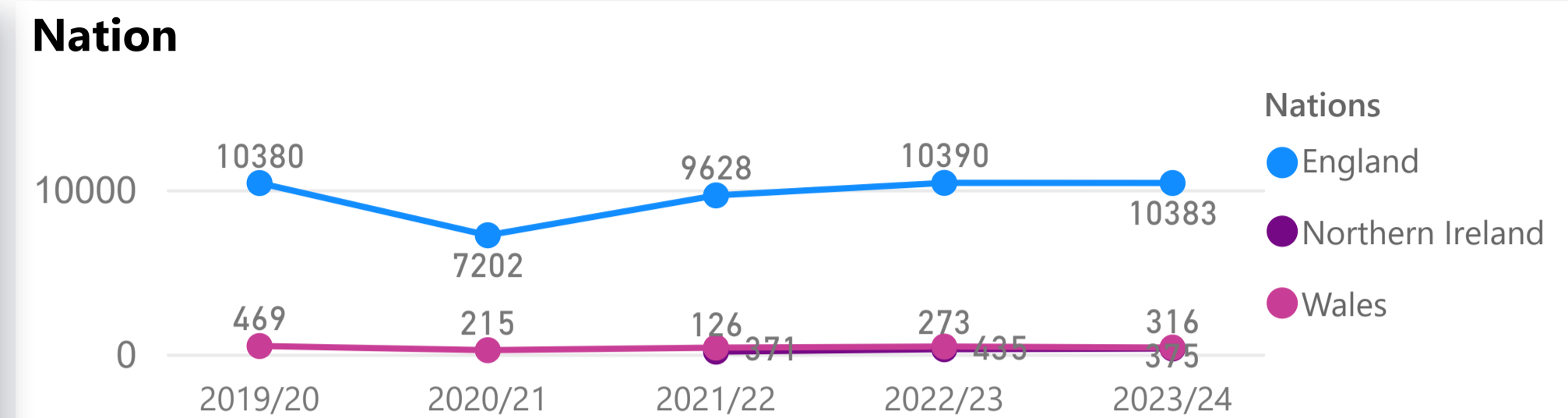
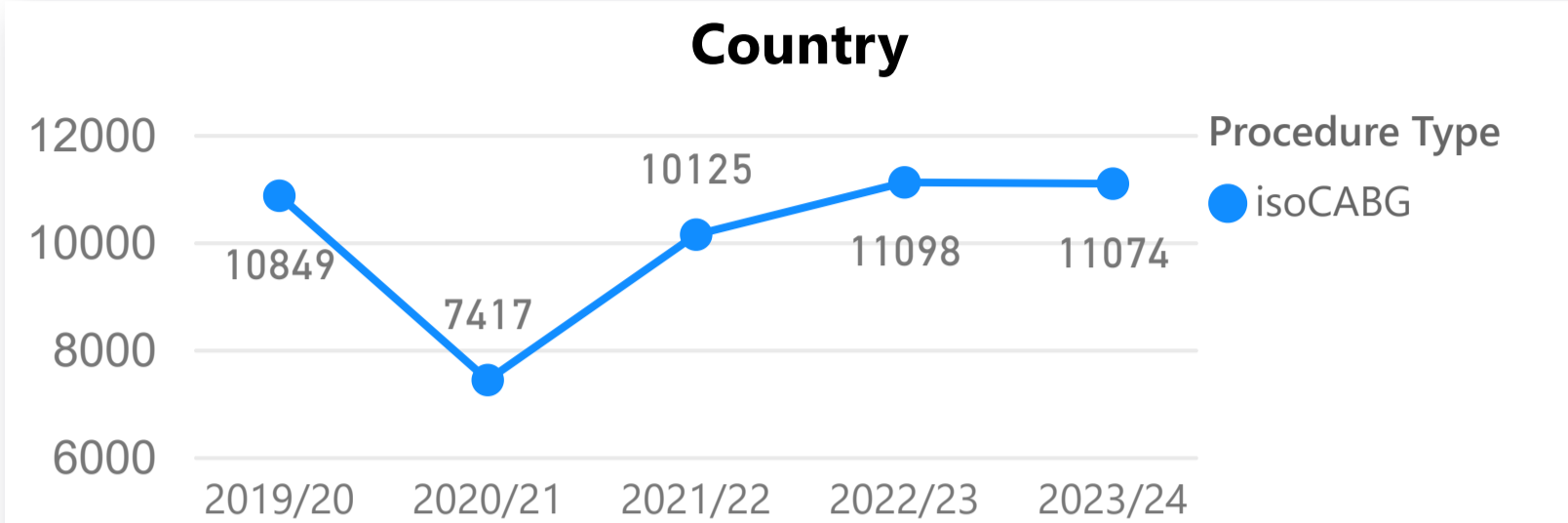
- isoAVR
- isoCABG
- isoMVR

## Year

- 2019/20
- 2020/21
- 2021/22
- 2022/23

## Hospital

- Select all
- ANT. Spire St Anthonys Hospital
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and Ches...
- BRI. Bristol Royal Infirmary



| Hospital                                | 2019/20      | 2020/21     | 2021/22      | 2022/23      | 2023/24      | Aggregate    |
|---|--------------|-------------|--------------|--------------|--------------|--------------|
| ANT. Spire St Anthonys Hospital         | 23           | 5           | 22           | 11           | 25           | 86           |
| BAL. Barts and the London               | 956          | 688         | 797          | 834          | 851          | 4126         |
| BAS. Basildon Hospital                  | 275          | 223         | 332          | 334          | 357          | 1521         |
| BHL. Liverpool Heart and Chest Hospital | 755          | 491         | 711          | 696          | 599          | 3252         |
| BRI. Bristol Royal Infirmary            | 438          | 315         | 402          | 412          | 456          | 2023         |
| CBS. Spire Southampton Hospital         | 13           | 39          | 21           | 83           | 95           | 251          |
| CCL. Cleveland Clinic London            |              |             |              | 36           | 36           | 72           |
| CHH. Castle Hill Hospital               |              |             |              | 298          | 343          | 641          |
| CHN. Nottingham City Hospital           | 223          | 194         | 210          | 189          | 214          | 1030         |
| CRO. Cromwell Hospital                  | 9            | 9           | 3            | 5            | 24           | 50           |
| FRE. Freeman Hospital                   | 230          | 221         | 171          | 178          | 156          | 956          |
| GEO. St George's Hospital               | 344          | 153         | 270          | 238          | 227          | 1232         |
| GRL. Glenfield Hospital                 | 444          | 219         | 326          | 402          | 360          | 1751         |
| HAM. Hammersmith Hospital               | 318          | 184         | 251          | 253          | 250          | 1256         |
| HH. Harefield Hospital                  | 431          | 408         | 428          | 470          | 433          | 2170         |
| KCH. King's College Hospital            | 359          | 192         | 292          | 269          | 157          | 1269         |
| <b>Total</b>                            | <b>10849</b> | <b>7417</b> | <b>10125</b> | <b>11098</b> | <b>11074</b> | <b>50563</b> |

# Operations with or without median sternotomy - number of deaths



## Sternotomy.Median

- Both
- Unknown
- With
- Without

## Procedure Type

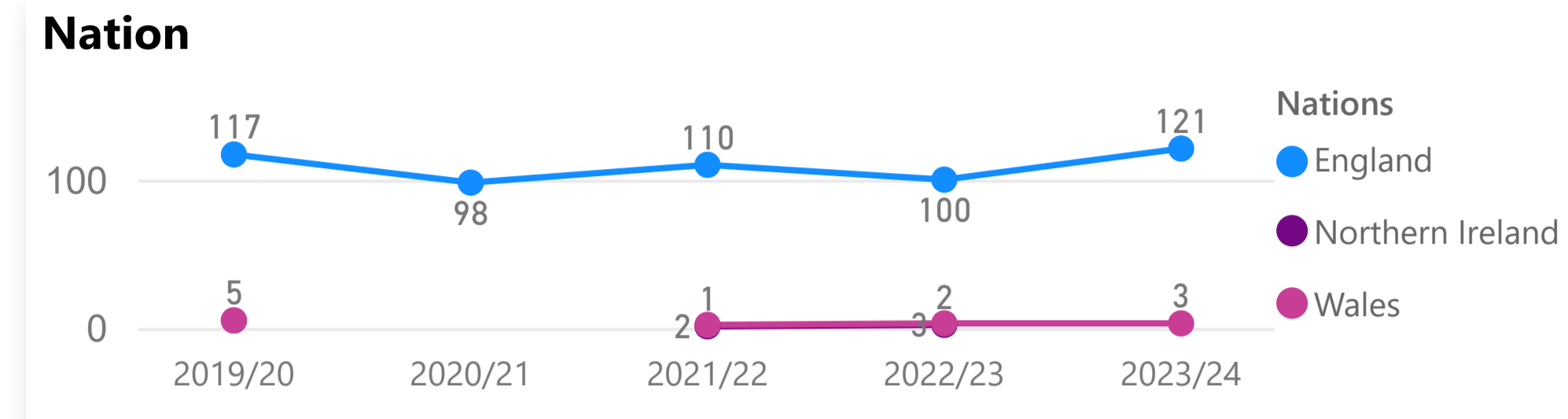
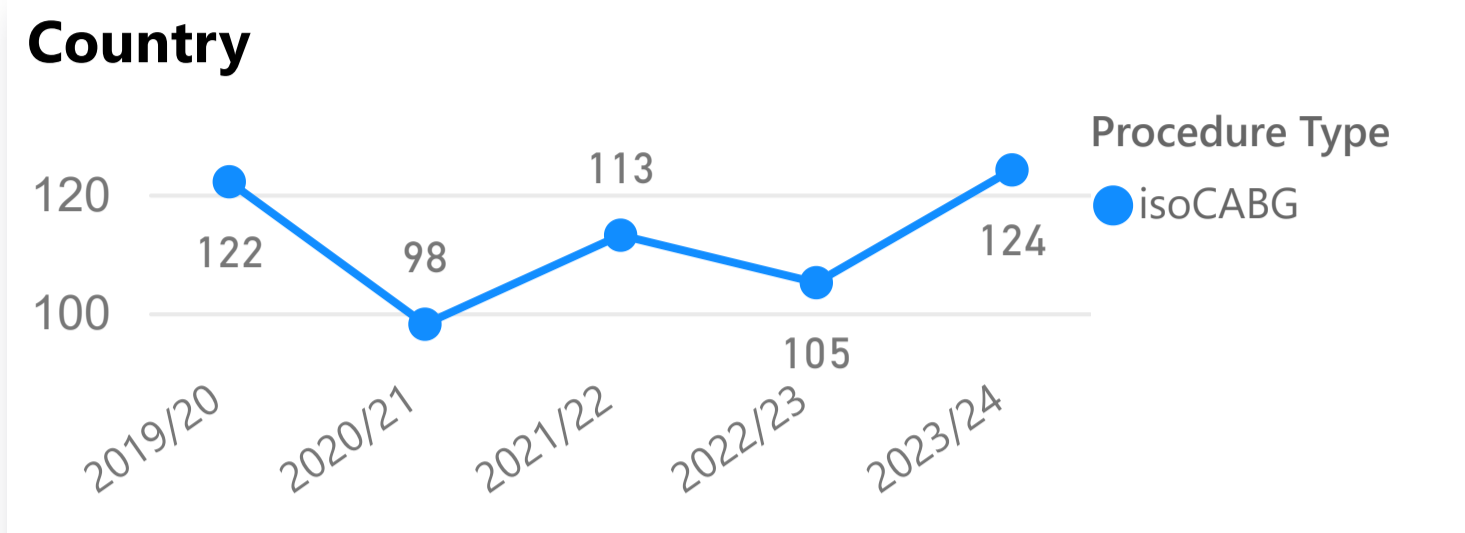
- isoAVR
- isoCABG
- isoMVR

## Year

- 2019/20
- 2020/21
- 2021/22
- 2022/23

## Hospital

- Select all
- ANT. Spire St Anthonys Hospital
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and Chest ...
- BRI. Bristol Royal Infirmary



| Hospital                                | 2019/20    | 2020/21   | 2021/22    | 2022/23    | 2023/24    | Aggregate  |
|---|------------|-----------|------------|------------|------------|------------|
| BAL. Barts and the London               | 12         | 5         | 13         | 7          | 17         | 54         |
| BAS. Basildon Hospital                  | 4          | 7         | 5          | 5          | 4          | 25         |
| BHL. Liverpool Heart and Chest Hospital | 12         | 18        | 8          | 5          | 7          | 50         |
| BRI. Bristol Royal Infirmary            | 3          | 3         | 1          | 2          | 6          | 15         |
| CHH. Castle Hill Hospital               |            |           |            | 7          | 3          | 10         |
| CHN. Nottingham City Hospital           | 7          | 6         | 7          | 1          | 3          | 24         |
| FRE. Freeman Hospital                   | 1          |           | 1          |            | 2          | 4          |
| GEO. St George's Hospital               | 4          | 4         | 1          | 4          | 2          | 15         |
| GRL. Glenfield Hospital                 | 7          | 10        | 6          | 7          | 6          | 36         |
| HAM. Hammersmith Hospital               |            | 1         | 2          | 3          | 1          | 7          |
| HH. Harefield Hospital                  | 5          | 4         | 3          | 5          | 4          | 21         |
| KCH. King's College Hospital            | 5          |           | 3          |            | 2          | 10         |
| LGI. Leeds General Infirmary            |            |           | 1          | 2          | 1          | 4          |
| MAP. Mater Private Hospital             |            |           |            |            | 1          | 1          |
| MOR. Morrison Hospital                  | 3          |           | 2          | 3          | 3          | 11         |
| MRI. Middlesbrough Hospital             | 6          | 5         | 3          | 5          | 2          | 21         |
| <b>Total</b>                            | <b>122</b> | <b>98</b> | <b>113</b> | <b>105</b> | <b>124</b> | <b>562</b> |

# Valve implant types by patient age - isolated AVR



## Age Group

- Select all
- <50
- >70
- 50-60
- 60-70

## isoAVR Implant Type

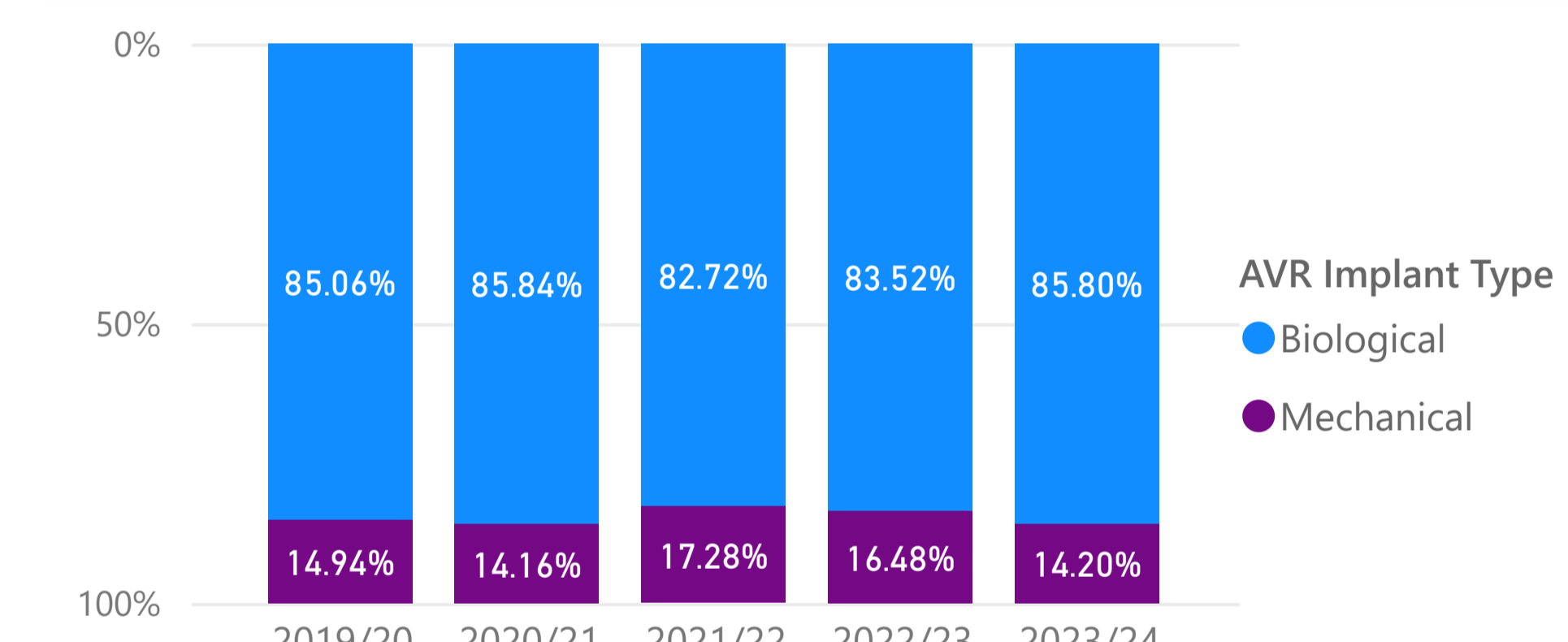
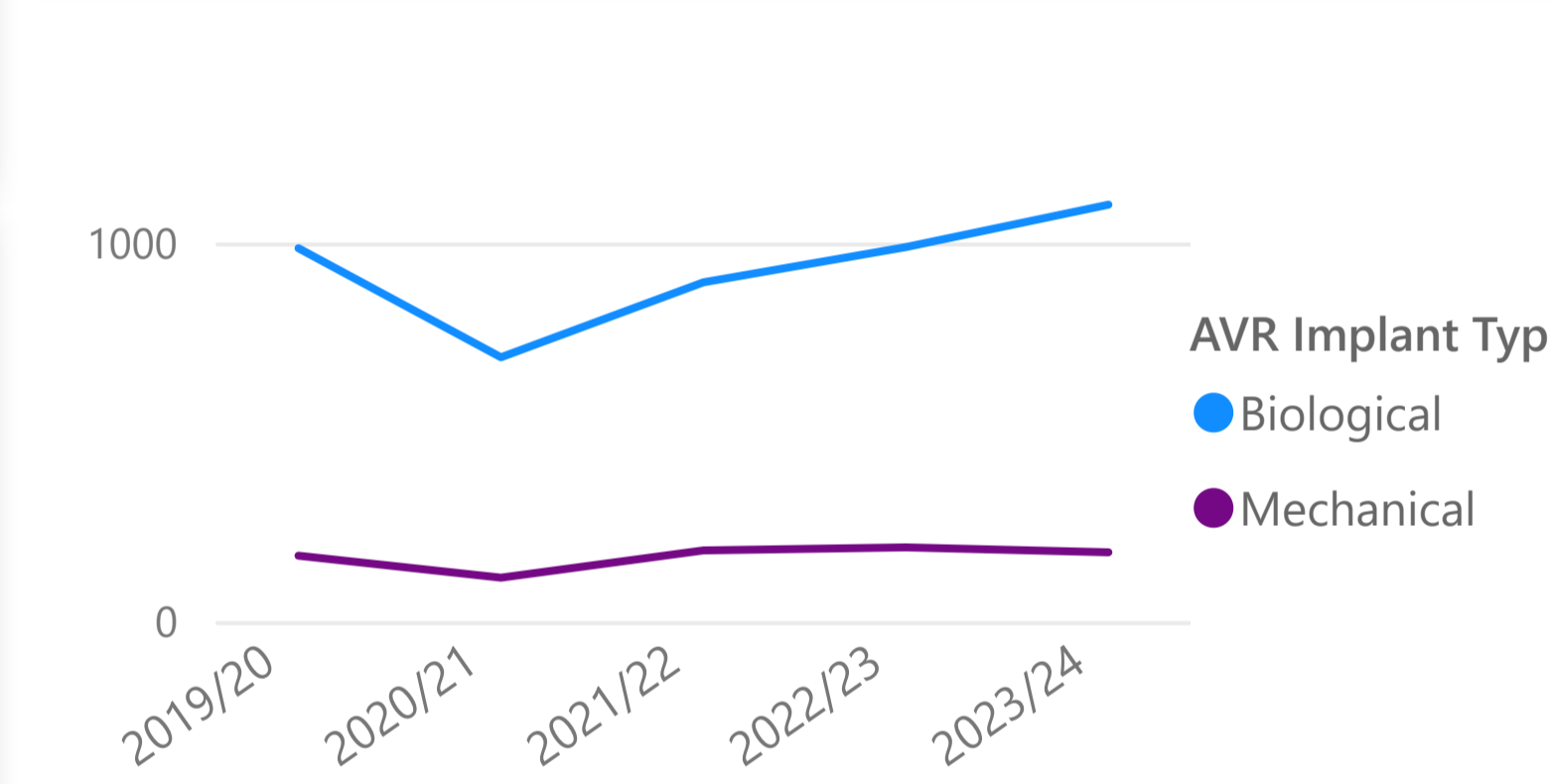
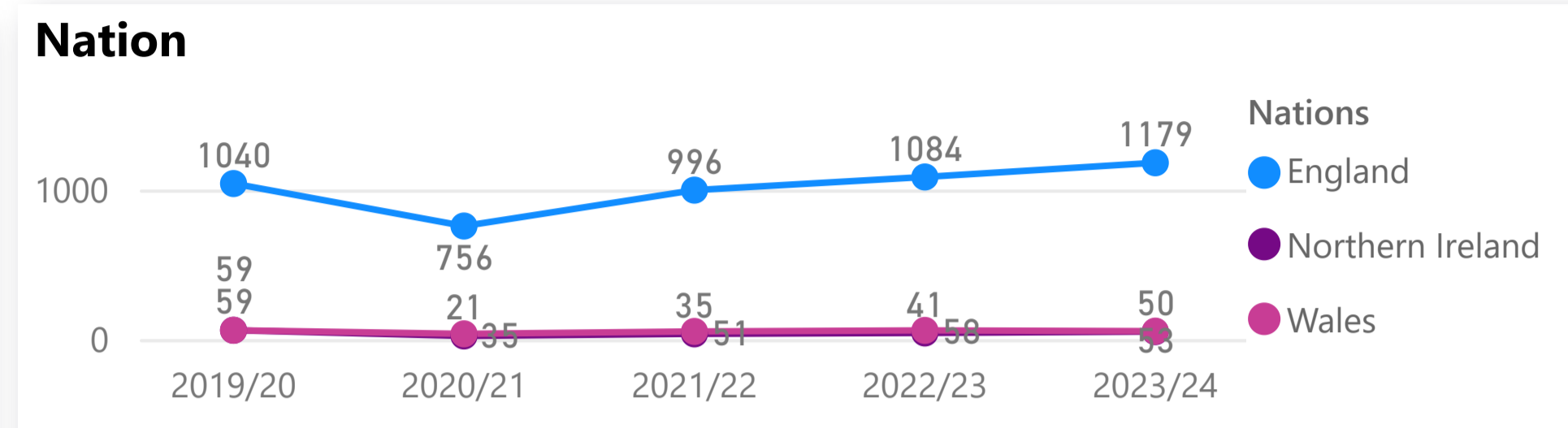
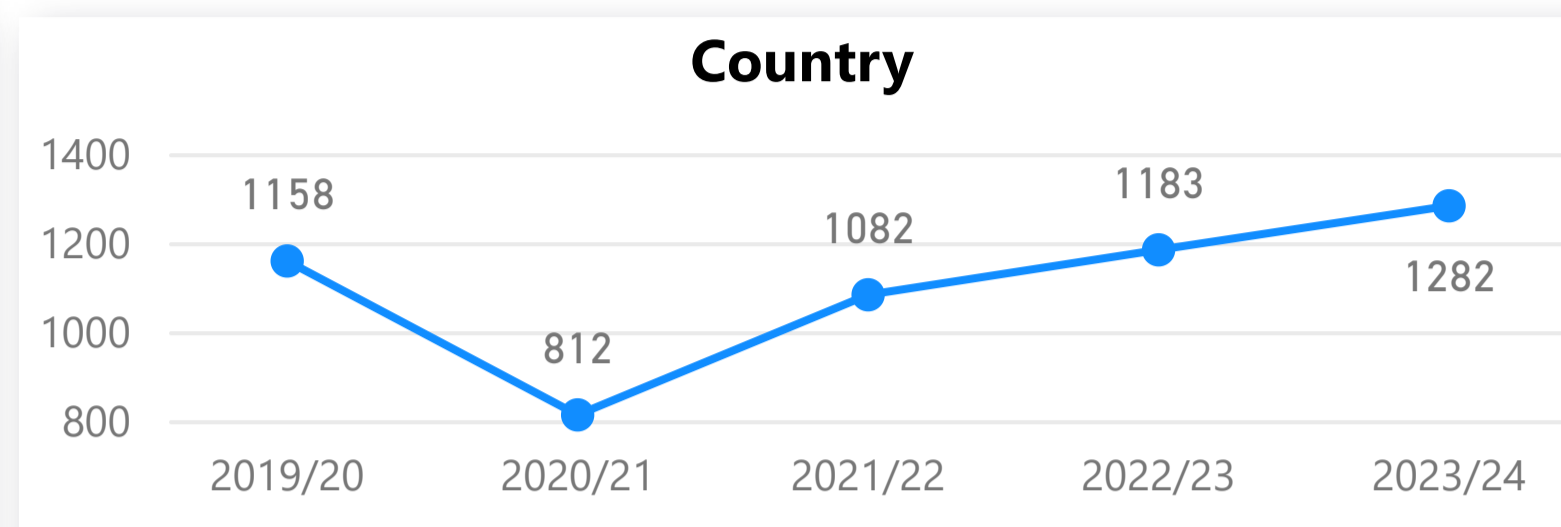
- Select all
- Autograft
- Biological
- Homograft
- Mechanical

## Year

All ▾

## Hospital

All ▾



| Hospital                                | 2019/20     | 2020/21    | 2021/22     | 2022/23     | 2023/24     | Aggregate   |
|---|-------------|------------|-------------|-------------|-------------|-------------|
| ANT. Spire St Anthonys Hospital         | 1           |            | 1           | 2           | 4           | 8           |
| BAL. Barts and the London               | 66          | 44         | 50          | 63          | 67          | 290         |
| BAS. Basildon Hospital                  | 26          | 23         | 25          | 33          | 32          | 139         |
| BHL. Liverpool Heart and Chest Hospital | 66          | 42         | 64          | 52          | 53          | 277         |
| BRI. Bristol Royal Infirmary            | 49          | 39         | 47          | 44          | 48          | 227         |
| CBS. Spire Southampton Hospital         | 23          | 17         | 29          | 23          | 18          | 110         |
| CCL. Cleveland Clinic London            |             |            |             |             |             | 15          |
| <b>Total</b>                            | <b>1158</b> | <b>812</b> | <b>1082</b> | <b>1183</b> | <b>1282</b> | <b>5517</b> |

# Valve implant types by patient age - isolated MVR



## Age Group

- Select all
- <50
- >70
- 50-60

## isoMVR Implant Type

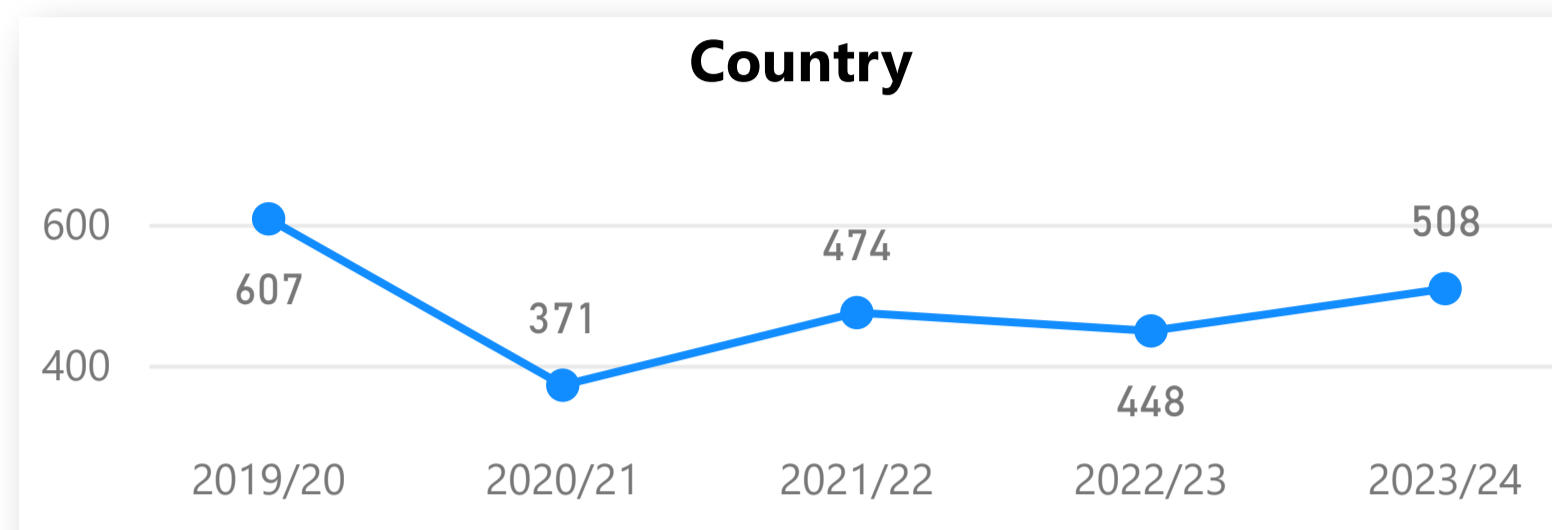
- Select all
- AnnuloplastyRing
- Biological
- Mechanical

## Year

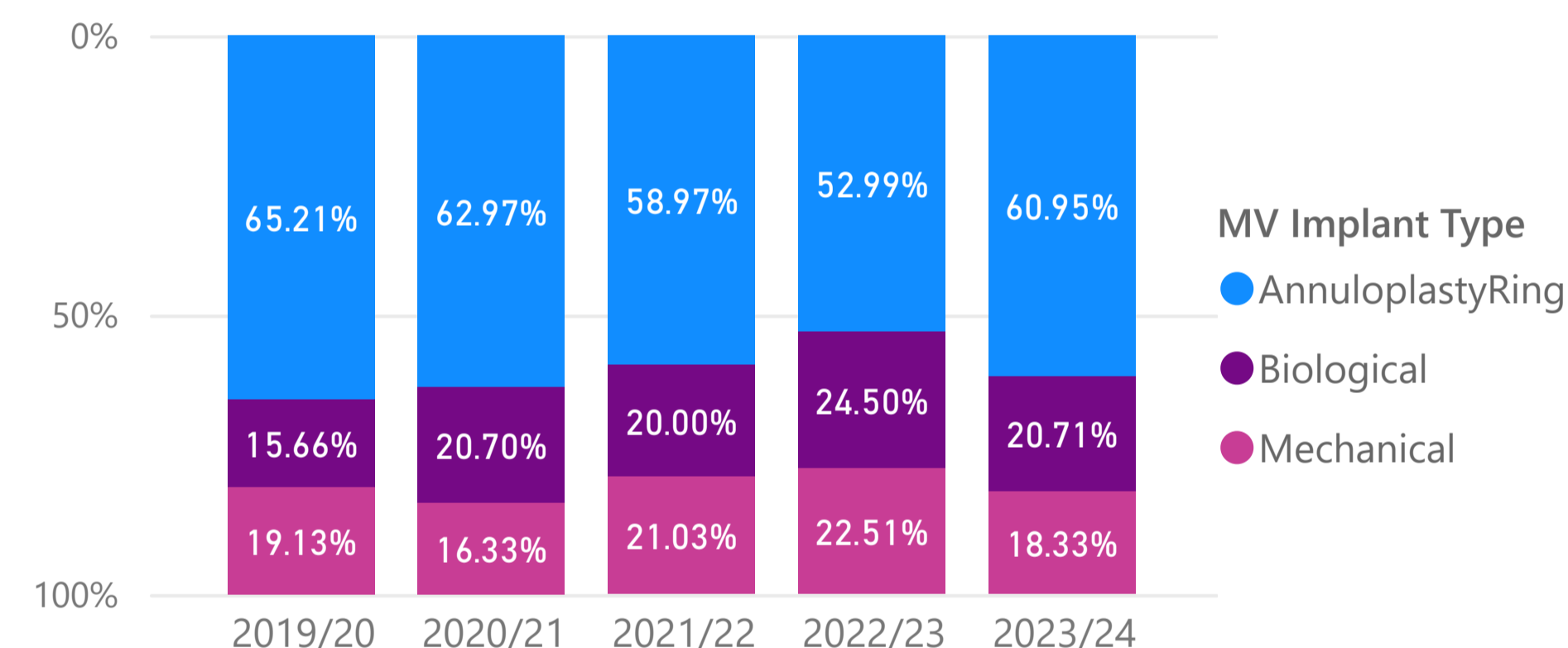
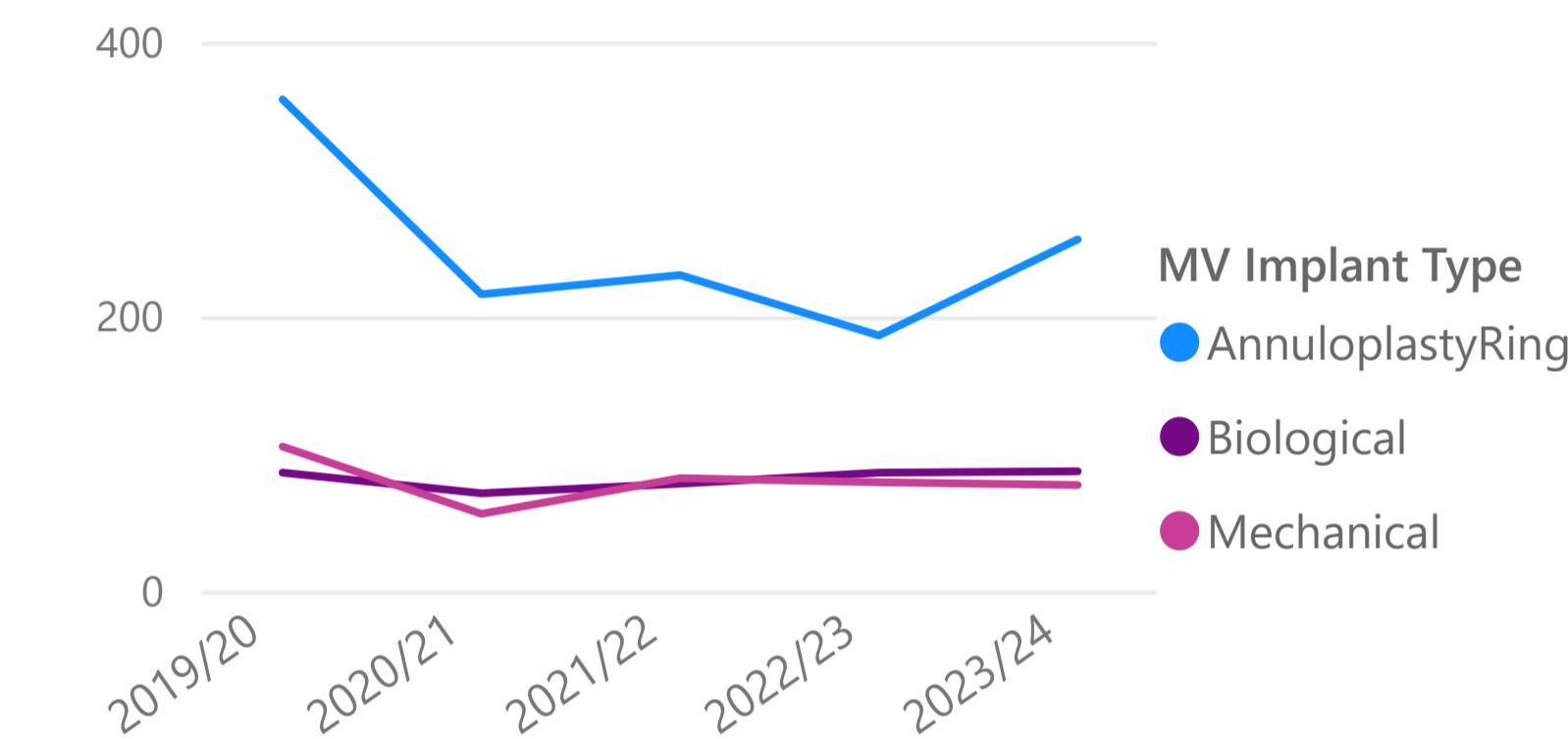
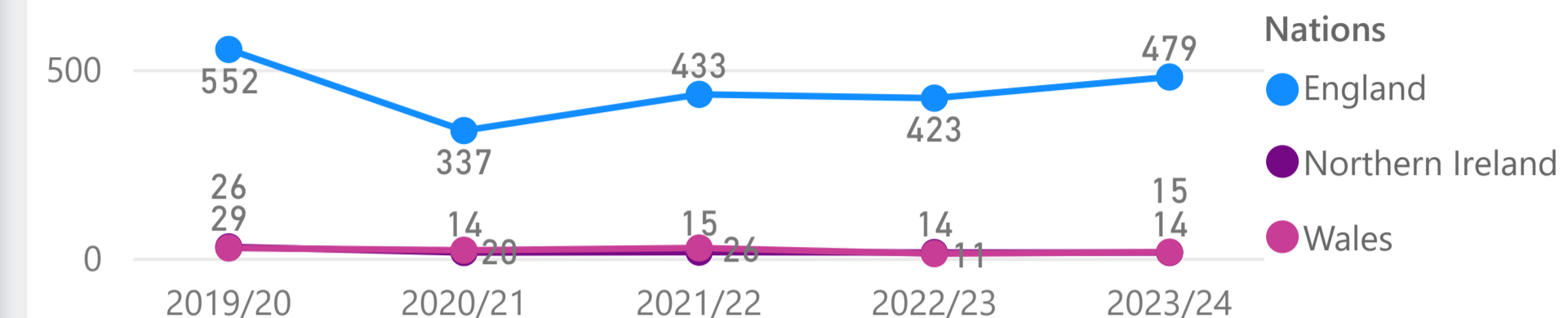
All ▼

## Hospital

All ▼



## Nation



| Hospital                                | 2019/20    | 2020/21    | 2021/22    | 2022/23    | 2023/24    | Aggregate   |
|---|------------|------------|------------|------------|------------|-------------|
| ANT. Spire St Anthonys Hospital         |            |            | 1          |            | 1          | 2           |
| BAL. Barts and the London               | 42         | 25         | 35         | 40         | 44         | 186         |
| BAS. Basildon Hospital                  | 16         | 6          | 17         | 21         | 13         | 73          |
| BHL. Liverpool Heart and Chest Hospital | 34         | 19         | 29         | 33         | 27         | 142         |
| BRI. Bristol Royal Infirmary            | 29         | 15         | 17         | 23         | 30         | 114         |
| CBS. Spire Southampton Hospital         | 18         | 4          | 15         | 9          | 17         | 63          |
| <b>Total</b>                            | <b>607</b> | <b>371</b> | <b>474</b> | <b>448</b> | <b>508</b> | <b>2408</b> |

# Consultant Activity (cases per year) - excluding emergencies and dual consultant procedures



## Hospital

- Select all
- ANT. Spire St Anthonys Ho...
- BAL. Barts and the London
- BAS. Basildon Hospital
- BHL. Liverpool Heart and C...
- BRI. Bristol Royal Infirmary
- CBS. Spire Southampton H...
- CCL. Cleveland Clinic London
- CHH. Castle Hill Hospital
- CHN. Nottingham City Hos...
- CRO. Cromwell Hospital
- FRE. Freeman Hospital
- GEO. St George's Hospital
- GRL. Glenfield Hospital

## Year

- Select all
- 2013/14
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19
- 2019/20
- 2020/21

| GMC          | 2013/14      | 2014/15      | 2015/16      | 2016/17      | 2017/18      | 2018/19      | 2019/20      | 2020/21      | 2021/22      | 2022/23      | 2023/24      | Total         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 3153444      | 327          | 331          | 299          | 297          | 298          | 291          | 361          | 187          | 200          | 113          | 138          | <b>2842</b>   |
| 4249887      | 216          | 309          | 287          | 302          | 299          | 281          | 341          | 164          | 221          | 192          | 153          | <b>2765</b>   |
| 3067473      | 297          | 291          | 268          | 263          | 290          | 305          | 314          | 178          | 215          | 181          | 143          | <b>2745</b>   |
| 3198007      | 278          | 259          | 245          | 248          | 245          | 268          | 327          | 178          | 167          | 152          | 144          | <b>2511</b>   |
| 6112764      | 236          | 224          | 239          | 221          | 231          | 284          | 318          | 162          | 219          | 187          | 146          | <b>2467</b>   |
| 2490928      | 347          | 360          | 380          | 378          | 362          | 210          | 101          | 76           | 76           | 41           |              | <b>2331</b>   |
| 3276042      | 275          | 240          | 270          | 287          | 268          | 180          | 201          | 106          | 137          | 160          | 152          | <b>2276</b>   |
| 3065110      | 171          | 181          | 192          | 226          | 223          | 226          | 203          | 161          | 228          | 239          | 203          | <b>2253</b>   |
| 6055244      | 196          | 218          | 251          | 241          | 227          | 228          | 216          | 135          | 182          | 181          | 173          | <b>2248</b>   |
| 4687610      | 228          | 257          | 183          | 197          | 180          | 212          | 197          | 147          | 191          | 217          | 200          | <b>2209</b>   |
| 6024981      | 214          | 268          | 233          | 202          | 188          | 194          | 174          | 156          | 196          | 153          | 148          | <b>2126</b>   |
| 2734118      | 262          | 230          | 298          | 243          | 236          | 160          | 162          | 128          | 137          | 117          | 131          | <b>2104</b>   |
| 4047889      | 262          | 296          | 310          | 244          | 213          | 178          | 143          | 62           | 100          | 106          | 130          | <b>2044</b>   |
| 4334905      | 160          | 179          | 178          | 187          | 188          | 224          | 189          | 141          | 175          | 190          | 185          | <b>1996</b>   |
| 3481985      | 190          | 209          | 181          | 204          | 208          | 199          | 161          | 103          | 158          | 181          | 164          | <b>1958</b>   |
| 3663439      | 118          | 206          | 194          | 219          | 210          | 193          | 198          | 127          | 154          | 158          | 140          | <b>1917</b>   |
| 4592860      | 199          | 242          | 213          | 214          | 207          | 175          | 167          | 76           | 124          | 158          | 118          | <b>1893</b>   |
| 4273868      | 188          | 197          | 220          | 184          | 197          | 196          | 194          | 90           | 113          | 156          | 154          | <b>1889</b>   |
| 6036218      | 212          | 201          | 256          | 177          | 144          | 130          | 155          | 120          | 137          | 161          | 147          | <b>1840</b>   |
| 4093330      | 250          | 239          | 215          | 211          | 158          | 163          | 168          | 142          | 179          | 109          |              | <b>1834</b>   |
| 20190909     | 208          | 178          | 182          | 191          | 220          | 111          | 151          | 90           | 165          | 129          | 122          | <b>1797</b>   |
| <b>Total</b> | <b>33049</b> | <b>33005</b> | <b>32231</b> | <b>32191</b> | <b>31179</b> | <b>30693</b> | <b>29573</b> | <b>19359</b> | <b>24802</b> | <b>25604</b> | <b>26405</b> | <b>318091</b> |

# Discussion at pre-operation MDT - by procedure type



## Quorate\_preop\_MDT

Missing

No

Yes

## Procedure Type

All

isoAVR

isoCABG

isoMVR

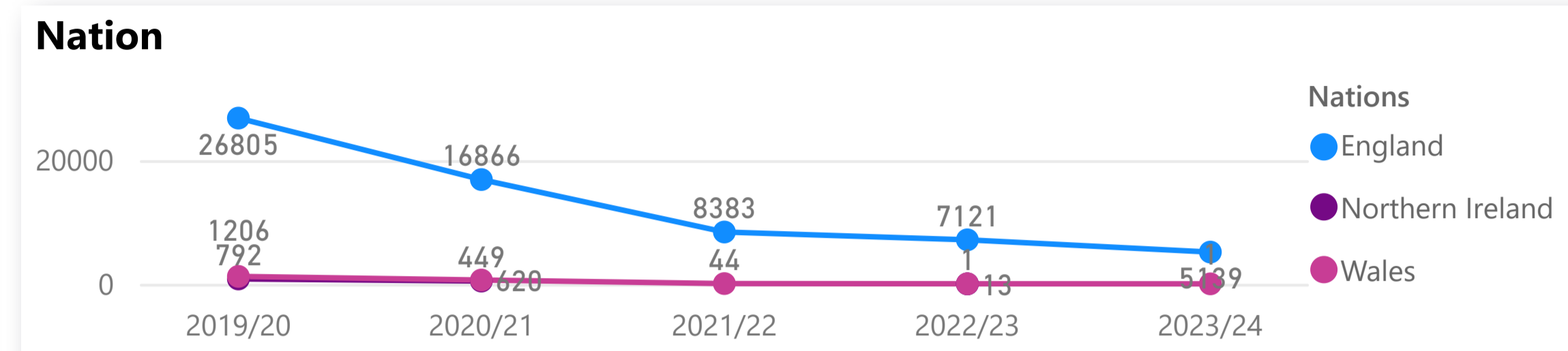
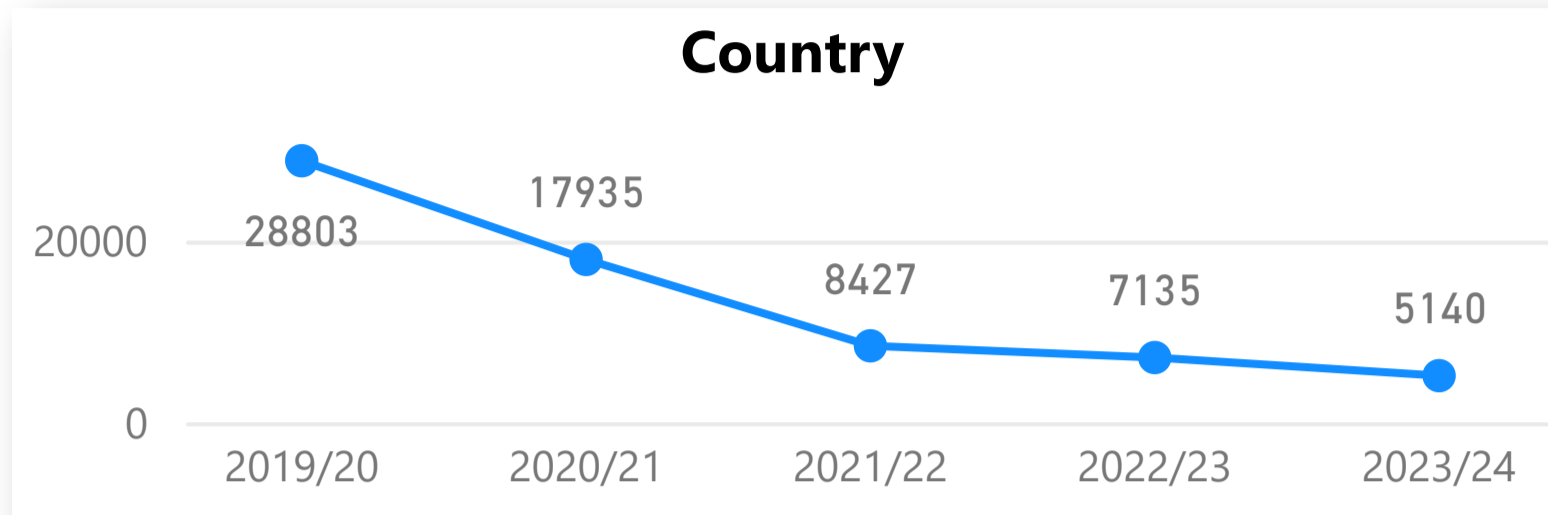
## Year

All



## Hospital

All



| Hospital                                | 2019/20      | 2020/21      | 2021/22     | 2022/23     | 2023/24     | Aggregate    |
|---|--------------|--------------|-------------|-------------|-------------|--------------|
| ANT. Spire St Anthonys Hospital         | 57           | 13           |             |             |             | <b>70</b>    |
| BAL. Barts and the London               | 1956         | 1432         | 22          | 94          | 60          | <b>3564</b>  |
| BAS. Basildon Hospital                  | 698          | 498          | 488         |             |             | <b>1684</b>  |
| BHL. Liverpool Heart and Chest Hospital | 1742         | 1108         | 1603        | 1503        | 1448        | <b>7404</b>  |
| BRI. Bristol Royal Infirmary            | 1177         | 874          | 1005        | 985         | 1053        | <b>5094</b>  |
| CBS. Spire Southampton Hospital         | 421          | 213          | 70          | 1           | 5           | <b>710</b>   |
| CCL. Cleveland Clinic London            |              |              |             | 129         | 174         | <b>303</b>   |
| CHH. Castle Hill Hospital               | 831          | 370          | 35          | 25          | 47          | <b>1308</b>  |
| CHN. Nottingham City Hospital           | 537          | 456          | 2           | 1           |             | <b>996</b>   |
| CRO. Cromwell Hospital                  | 15           | 23           | 9           |             | 70          | <b>117</b>   |
| FRE. Freeman Hospital                   | 595          | 2            | 1           | 5           |             | <b>603</b>   |
| GEO. St George's Hospital               | 657          | 200          |             | 10          | 15          | <b>882</b>   |
| GRL. Glenfield Hospital                 | 962          | 545          |             |             |             | <b>1507</b>  |
| HAM. Hammersmith Hospital               | 611          | 323          | 64          | 146         | 148         | <b>1292</b>  |
| HH. Harefield Hospital                  | 1018         | 910          | 28          | 10          | 33          | <b>1999</b>  |
| KCH. King's College Hospital            | 780          | 413          | 672         | 721         | 378         | <b>2964</b>  |
| <b>Total</b>                            | <b>28803</b> | <b>17935</b> | <b>8427</b> | <b>7135</b> | <b>5140</b> | <b>67440</b> |

# Number of patients receiving blood transfusion (any component) - by procedure type



## Blood\_transfusion

- Missing
- No
- Yes

## Procedure Type

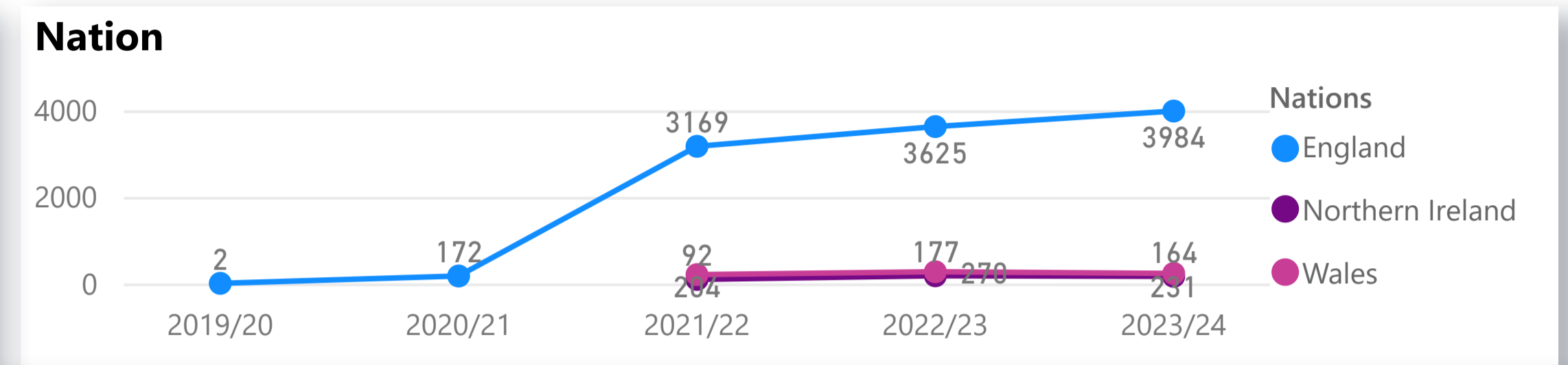
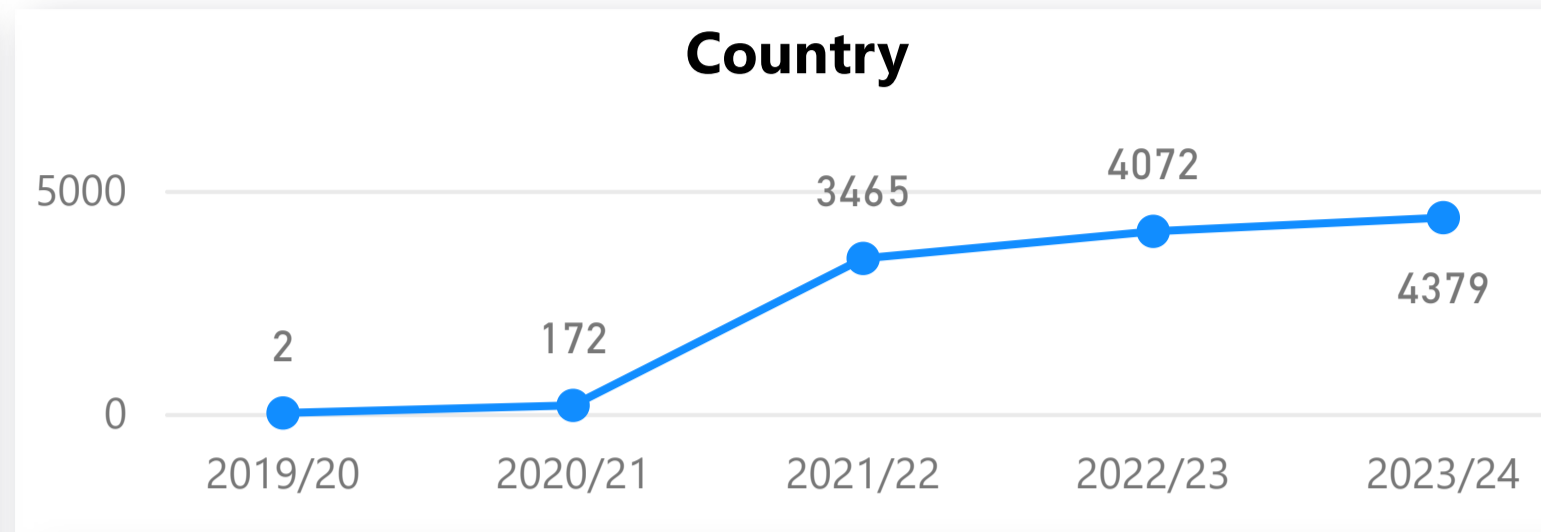
- All
- isoAVR
- isoCABG
- isoMVR

## Year

All ▾

## Hospital

All ▾



| Hospital                        | 2019/20  | 2020/21    | 2021/22     | 2022/23     | 2023/24     | Aggregate    |
|---------------------------------|----------|------------|-------------|-------------|-------------|--------------|
| ANT. Spire St Anthonys Hospital |          |            | 12          | 8           | 16          | <b>36</b>    |
| BAL. Barts and the London       |          |            | 269         | 295         | 381         | <b>945</b>   |
| BAS. Basildon Hospital          |          |            | 8           | 14          | 38          | <b>60</b>    |
| CBS. Spire Southampton Hospital |          |            |             | 2           | 1           | <b>3</b>     |
| CCL. Cleveland Clinic London    |          |            |             | 25          | 19          | <b>44</b>    |
| CHH. Castle Hill Hospital       |          | 2          | 190         | 184         | 209         | <b>585</b>   |
| CHN. Nottingham City Hospital   |          |            | 87          | 78          | 109         | <b>274</b>   |
| CRO. Cromwell Hospital          |          |            |             | 7           | 8           | <b>15</b>    |
| FRE. Freeman Hospital           |          |            | 20          |             |             | <b>20</b>    |
| GEO. St George's Hospital       |          |            | 102         | 96          | 92          | <b>290</b>   |
| GRL. Glenfield Hospital         |          |            | 129         | 127         | 118         | <b>374</b>   |
| HAM. Hammersmith Hospital       |          |            |             | 85          | 27          | <b>112</b>   |
| HH. Harefield Hospital          |          |            | 299         | 364         | 170         | <b>833</b>   |
| LGI. Leeds General Infirmary    |          |            | 169         | 192         | 183         | <b>544</b>   |
| MAP. Mater Private Hospital     |          |            |             | 1           | 36          | <b>37</b>    |
| MOR. Morriston Hospital         |          |            | 79          | 122         | 118         | <b>319</b>   |
| <b>Total</b>                    | <b>2</b> | <b>172</b> | <b>3465</b> | <b>4072</b> | <b>4379</b> | <b>12090</b> |

# Dual consultant operations



## Nation

- Select all
- England
- Northern Ireland
- Wales

## Type

- 1. Number
- 2. Percent(%)
- 3. Deaths
- 4. Mortality(%)
- 5. Predicted Mortality(%)

## Year

All ▼

## Hospital

All ▼

| Country | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 |
|---------|---------|---------|---------|---------|---------|
| UK      | 30.77   | 17.00   | 20.68   | 17.46   | 22.52   |

| Nations | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 |
|---------|---------|---------|---------|---------|---------|
| England | 30.77   | 17.00   | 20.52   | 16.87   | 24.01   |
| Wales   |         |         | 66.67   | 37.50   | 6.67    |

| Hospital                                | 2019/20      | 2020/21      | 2021/22      | 2022/23      | 2023/24      | Aggregate    |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| BAL. Barts and the London               |              | 25.00        | 21.43        |              |              | 19.23        |
| BAS. Basildon Hospital                  |              |              | 66.67        | 6.25         | 38.89        | 30.91        |
| BHL. Liverpool Heart and Chest Hospital | 25.00        |              | 11.11        | 30.00        | 30.77        | 21.74        |
| BRI. Bristol Royal Infirmary            |              |              |              | 40.00        | 45.45        | 36.84        |
| CHH. Castle Hill Hospital               | 30.00        | 28.57        | 33.33        | 35.71        | 30.77        | 32.20        |
| CHN. Nottingham City Hospital           |              |              |              | 25.00        | 12.50        | 15.38        |
| GEO. St George's Hospital               |              |              | 42.86        | 33.33        | 25.00        | 26.09        |
| GRL. Glenfield Hospital                 | 6.25         | 21.05        | 30.00        | 10.53        | 30.43        | 20.62        |
| HAM. Hammersmith Hospital               |              |              | 18.18        |              | 13.33        | 8.57         |
| HH. Harefield Hospital                  | 20.00        | 16.13        | 17.86        | 18.75        |              | 16.26        |
| KCH. King's College Hospital            | 57.14        |              | 31.82        | 11.76        |              | 21.31        |
| LGI. Leeds General Infirmary            |              |              |              |              | 33.33        | 17.24        |
| MOR. Murrison Hospital                  |              |              |              | 75.00        |              | 21.43        |
| MRI. Manchester Royal Infirmary         | 50.00        | 66.67        |              |              | 50.00        | 27.27        |
| NCR. New Cross Hospital                 | 50.00        | 50.00        | 50.00        | 16.67        | 100.00       | 38.46        |
| NGS. Northern General Hospital          | 26.67        | 11.11        | 11.11        | 12.50        | 27.27        | 18.03        |
| NHB. Royal Brompton Hospital            | 62.50        | 23.08        | 33.33        | 33.33        |              | 35.48        |
| PAP. Papworth Hospital                  | 100.00       | 20.00        | 33.33        | 25.00        | 23.08        | 36.36        |
| <b>Total</b>                            | <b>30.77</b> | <b>17.00</b> | <b>20.68</b> | <b>17.46</b> | <b>22.52</b> | <b>20.85</b> |

# Consultant and Trainee activity



## Nation

- Select all
- England
- Northern Ireland
- Wales

## Type

- 1. Number
- 2. Percent(%)
- 3. By trainee
- 4. Trainee percent(%)

## Year

All ▾

## Hospital

All ▾

## Country 2019/20 2020/21 2021/22 2022/23

|           |      |      |      |      |
|-----------|------|------|------|------|
| <b>UK</b> | 5920 | 4132 | 5243 | 5095 |
|-----------|------|------|------|------|

## Nations 2019/20 2020/21 2021/22 2022/23

|                         |      |      |      |      |
|-------------------------|------|------|------|------|
| <b>England</b>          | 5717 | 4001 | 5103 | 4922 |
| <b>Northern Ireland</b> | 61   | 62   | 103  | 146  |
| <b>Wales</b>            | 142  | 69   | 37   | 27   |

## Hospital 2019/20 2020/21 2021/22 2022/23 2023/24 Aggregate

| Hospital                                | 2019/20     | 2020/21     | 2021/22     | 2022/23     | 2023/24     | Aggregate    |
|---|-------------|-------------|-------------|-------------|-------------|--------------|
| ANT. Spire St Anthonys Hospital         |             |             |             |             |             |              |
| BAL. Barts and the London               | 733         | 618         | 616         | 578         | 651         | <b>3196</b>  |
| BAS. Basildon Hospital                  | 169         | 116         | 136         | 152         | 155         | <b>728</b>   |
| BHL. Liverpool Heart and Chest Hospital | 192         | 103         | 241         | 260         | 222         | <b>1018</b>  |
| BRI. Bristol Royal Infirmary            |             |             |             |             |             |              |
| CBS. Spire Southampton Hospital         |             |             |             |             |             |              |
| CCL. Cleveland Clinic London            |             |             |             |             |             |              |
| CHH. Castle Hill Hospital               | 200         | 142         | 198         | 261         | 162         | <b>963</b>   |
| CHN. Nottingham City Hospital           | 80          | 53          | 85          | 87          | 110         | <b>415</b>   |
| CRO. Cromwell Hospital                  |             |             |             | 1           | 1           | <b>2</b>     |
| FRE. Freeman Hospital                   | 287         | 227         | 135         | 104         | 103         | <b>856</b>   |
| GEO. St George's Hospital               | 16          | 1           | 8           | 26          | 150         | <b>201</b>   |
| GRL. Glenfield Hospital                 | 198         | 132         | 208         | 223         | 222         | <b>983</b>   |
| HAM. Hammersmith Hospital               | 392         | 169         | 221         | 183         | 175         | <b>1140</b>  |
| HH. Harefield Hospital                  | 95          | 123         | 146         | 194         | 206         | <b>764</b>   |
| KCH. King's College Hospital            | 165         | 49          | 173         | 219         | 238         | <b>844</b>   |
| LGI. Leeds General Infirmary            | 40          | 20          | 16          | 14          | 43          | <b>133</b>   |
| <b>Total</b>                            | <b>5920</b> | <b>4132</b> | <b>5243</b> | <b>5095</b> | <b>5592</b> | <b>25982</b> |

# Cardiopulmonary bypass usage for isolated CABG



## Nation

- Select all
- England
- Northern Ireland
- Wales

## Cardio\_Pulmonary\_Bypass

- Missing
- No
- Yes

## Year

All ▼

## Hospital

All ▼

## Country 2014/15 2015/16 2016/17 2017/18

|           |       |       |       |       |
|-----------|-------|-------|-------|-------|
| <b>UK</b> | 12633 | 11230 | 11639 | 11221 |
|-----------|-------|-------|-------|-------|

## Nation 2014/15 2015/16 2016/17 2017/18

|                         |       |       |       |       |
|-------------------------|-------|-------|-------|-------|
| <b>England</b>          | 12231 | 10841 | 11286 | 10898 |
| <b>Northern Ireland</b> | 402   | 389   | 353   | 323   |

## Hospital 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21

|   |              |              |              |              |              |              |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| ANT. Spire St Anthonys Hospital         | 116          | 80           | 40           | 26           | 14           | 6            |
| BAL. Barts and the London               | 491          | 704          | 752          | 740          | 922          | 891          |
| BAS. Basildon Hospital                  | 484          | 394          | 360          | 307          | 358          | 295          |
| BHL. Liverpool Heart and Chest Hospital | 509          | 508          | 611          | 605          | 413          | 444          |
| BRI. Bristol Royal Infirmary            | 407          | 332          | 256          | 273          | 335          | 261          |
| CBS. Spire Southampton Hospital         | 128          | 101          | 120          | 115          | 109          | 160          |
| CCL. Cleveland Clinic London            |              |              |              |              |              |              |
| CHH. Castle Hill Hospital               | 366          | 355          | 309          | 299          | 409          | 449          |
| CHN. Nottingham City Hospital           | 201          | 164          | 92           | 159          | 146          | 155          |
| CRO. Cromwell Hospital                  |              |              | 7            | 10           | 13           | 3            |
| FRE. Freeman Hospital                   | 221          | 272          | 244          | 239          | 222          | 218          |
| GEO. St George's Hospital               | 378          | 368          | 469          | 454          | 340          | 322          |
| <b>Total</b>                            | <b>12633</b> | <b>11230</b> | <b>11639</b> | <b>11221</b> | <b>10995</b> | <b>10590</b> |

# Rates (%) of Off Pump Coronary Artery Bypass (OPCAB)



## Nation

- Select all
- England
- Northern Ireland
- Wales

## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19
- 2019/20

## Hospital

- Select all
- ANT. Spire St Anthony's Ho...
- BAL. Barts and the London
- BAS. Basildon Hospital

## Country 2014/15 2015/16 2016/17 2017/18

|           |       |       |       |       |
|-----------|-------|-------|-------|-------|
| <b>UK</b> | 16.69 | 18.54 | 18.37 | 18.42 |
|-----------|-------|-------|-------|-------|

## Nation 2014/15 2015/16 2016/17 2017/18

|                         |       |       |       |       |
|-------------------------|-------|-------|-------|-------|
| <b>England</b>          | 17.06 | 19.21 | 18.96 | 19.05 |
| <b>Northern Ireland</b> | 2.66  | 1.52  | 3.29  | 2.12  |
| <b>Wales</b>            | 17.24 | 14.09 | 13.11 | 12.42 |

## Hospital 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21

|   |              |              |              |              |              |              |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| ANT. Spire St Anthony's Hospital        | 37.30        | 27.93        | 24.53        | 50.94        | 70.21        | 76.00        |
| BAL. Barts and the London               | 4.10         | 3.69         | 11.74        | 16.38        | 7.98         | 7.09         |
| BAS. Basildon Hospital                  | 4.54         | 6.64         | 8.16         | 8.08         | 6.04         | 6.05         |
| BHL. Liverpool Heart and Chest Hospital | 41.96        | 43.62        | 35.82        | 35.57        | 46.57        | 44.01        |
| BRI. Bristol Royal Infirmary            | 38.61        | 39.96        | 51.61        | 45.73        | 33.66        | 41.08        |
| CBS. Spire Southampton Hospital         | 12.33        | 19.84        | 20.00        | 13.53        | 12.10        | 17.53        |
| CCL. Cleveland Clinic London            |              |              |              |              |              |              |
| CHH. Castle Hill Hospital               | 1.88         | 3.27         | 7.49         | 6.85         | 0.73         | 0.66         |
| CHN. Nottingham City Hospital           | 22.69        | 25.79        | 55.34        | 37.40        | 46.72        | 30.49        |
| CRO. Cromwell Hospital                  |              | 100.00       | 69.57        |              | 40.91        | 66.67        |
| FRE. Freeman Hospital                   | 18.75        | 6.53         | 4.69         | 15.55        | 14.62        | 5.22         |
| GEO. St George's Hospital               | 15.63        | 26.69        | 17.57        | 14.50        | 14.79        | 11.29        |
| <b>Total</b>                            | <b>16.69</b> | <b>18.54</b> | <b>18.37</b> | <b>18.42</b> | <b>16.65</b> | <b>15.39</b> |

# Number of bypass grafts performed - isolated CABG patients



## Nation

- Select all
- England
- Northern Ireland
- Wales

## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19
- 2019/20

## Hospital

- Select all
- ANT. Spire St Anthony's Ho...
- BAL. Barts and the London
- BAS. Basildon Hospital

## Country 0 1 2 3 4 5

**UK** | 229 6729 32296 70137 30577 4041

## Nation 0 1 2 3 4 5 6

|                         |     |      |       |       |       |      |     |
|-------------------------|-----|------|-------|-------|-------|------|-----|
| <b>England</b>          | 208 | 6586 | 31240 | 66249 | 27685 | 3561 | 360 |
| <b>Northern Ireland</b> | 4   | 56   | 468   | 1537  | 1181  | 244  | 24  |
| <b>Wales</b>            | 17  | 87   | 588   | 2351  | 1711  | 236  | 18  |

| Hospital                                | 0          | 1           | 2            | 3            | 4            | 5           | 6          | 7         | 8        | 9        | Bl       |
|---|------------|-------------|--------------|--------------|--------------|-------------|------------|-----------|----------|----------|----------|
| ANT. Spire St Anthony's Hospital        |            | 37          | 99           | 185          | 218          | 101         | 43         | 4         |          |          |          |
| BAL. Barts and the London               | 5          | 350         | 1648         | 4568         | 1968         | 154         | 2          |           |          |          |          |
| BAS. Basildon Hospital                  | 16         | 211         | 970          | 2063         | 772          | 75          | 11         | 2         |          |          |          |
| BHL. Liverpool Heart and Chest Hospital |            | 396         | 1830         | 4078         | 2031         | 366         | 25         | 4         |          |          |          |
| BRI. Bristol Royal Infirmary            | 34         | 428         | 1966         | 2585         | 479          | 43          | 4          | 2         |          |          |          |
| CBS. Spire Southampton Hospital         | 4          | 44          | 249          | 698          | 413          | 40          | 6          |           |          |          |          |
| CCL. Cleveland Clinic London            |            | 5           | 9            | 35           | 20           | 12          | 3          |           |          |          |          |
| CHH. Castle Hill Hospital               |            | 188         | 1193         | 1861         | 538          | 51          | 5          |           |          |          |          |
| CHN. Nottingham City Hospital           |            | 79          | 769          | 1285         | 354          | 61          | 16         | 3         |          |          |          |
| CRO. Cromwell Hospital                  | 4          | 9           | 29           | 42           | 20           | 10          | 1          |           |          |          |          |
| FRE. Freeman Hospital                   | 1          | 93          | 601          | 1330         | 530          | 51          | 4          |           |          |          |          |
| GEO. St George's Hospital               |            | 142         | 657          | 1689         | 1360         | 394         | 82         | 11        | 1        |          |          |
| <b>Total</b>                            | <b>229</b> | <b>6729</b> | <b>32296</b> | <b>70137</b> | <b>30577</b> | <b>4041</b> | <b>402</b> | <b>37</b> | <b>4</b> | <b>1</b> | <b>4</b> |

# Percentage of procedures by number of bypass grafts performed - isolated CABG patients



## Nation

- Select all
- England
- Northern Ireland
- Wales

## Year

- Select all
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- 2018/19
- 2019/20

## Hospital

- Select all
- ANT. Spire St Anthony's Ho...
- BAL. Barts and the London
- BAS. Basildon Hospital

## Country 0 1 2 3 4 5

|           |      |      |       |       |       |      |
|-----------|------|------|-------|-------|-------|------|
| <b>UK</b> | 0.20 | 4.60 | 22.30 | 48.40 | 21.10 | 2.80 |
|-----------|------|------|-------|-------|-------|------|

## Nation

|                         |      |      |       |       |       |      |      |   |
|-------------------------|------|------|-------|-------|-------|------|------|---|
| <b>England</b>          | 0.20 | 4.80 | 22.90 | 48.60 | 20.30 | 2.60 | 0.30 | C |
| <b>Northern Ireland</b> | 0.10 | 1.60 | 13.30 | 43.70 | 33.60 | 6.90 | 0.70 | C |
| <b>Wales</b>            | 0.30 | 1.70 | 11.70 | 46.80 | 34.00 | 4.70 | 0.40 | C |

| Hospital                                | 0           | 1           | 2            | 3            | 4            | 5           | 6           | 7           | 8           | 9           |
|---|-------------|-------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|
| ANT. Spire St Anthony's Hospital        |             | 5.30        | 14.20        | 26.60        | 31.40        | 14.50       | 6.20        | 0.60        |             |             |
| BAL. Barts and the London               | 0.10        | 4.00        | 18.90        | 52.40        | 22.60        | 1.80        | 0.00        |             |             |             |
| BAS. Basildon Hospital                  | 0.40        | 5.10        | 23.50        | 49.90        | 18.70        | 1.80        | 0.30        | 0.00        |             |             |
| BHL. Liverpool Heart and Chest Hospital |             | 4.50        | 20.80        | 46.30        | 23.00        | 4.20        | 0.30        | 0.00        |             |             |
| BRI. Bristol Royal Infirmary            | 0.60        | 7.60        | 35.10        | 46.10        | 8.50         | 0.80        | 0.10        | 0.00        |             |             |
| CBS. Spire Southampton Hospital         | 0.30        | 3.00        | 17.10        | 47.90        | 28.40        | 2.70        | 0.40        |             |             |             |
| CCL. Cleveland Clinic London            |             | 6.00        | 10.70        | 41.70        | 23.80        | 14.30       | 3.60        |             |             |             |
| CHH. Castle Hill Hospital               |             | 4.90        | 31.10        | 48.50        | 14.00        | 1.30        | 0.10        |             |             |             |
| CHN. Nottingham City Hospital           |             | 3.10        | 30.00        | 50.10        | 13.80        | 2.40        | 0.60        | 0.10        |             |             |
| CRO. Cromwell Hospital                  | 3.10        | 6.90        | 22.10        | 32.10        | 15.30        | 7.60        | 0.80        |             |             |             |
| FRE. Freeman Hospital                   | 0.00        | 3.60        | 23.00        | 51.00        | 20.30        | 2.00        | 0.20        |             |             |             |
| GEO. St George's Hospital               |             | 3.30        | 15.20        | 39.00        | 31.40        | 9.10        | 1.90        | 0.30        | 0.00        |             |
| <b>Total</b>                            | <b>0.20</b> | <b>4.60</b> | <b>22.30</b> | <b>48.40</b> | <b>21.10</b> | <b>2.80</b> | <b>0.30</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

# Other procedures by nation and hospital - case numbers



## Nation

All



## Other Procedures

- 0. No other cardiac procedure perf..
- 1. Lv aneurysmectomy
- 2. Acquired vsd
- 3. Atrial myxoma
- 4. Acute pulmonary embolectomy
- 5. Cardiac transplant
- 7. Cardiac trauma
- 8. Epicardial pacemaker
- 9. Pericardiectomy
- 10. Asd closure
- 11. ...

## Year

All



## Hospital

All



## Country 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21

|           |     |     |     |     |     |     |
|-----------|-----|-----|-----|-----|-----|-----|
| <b>UK</b> | 150 | 153 | 176 | 184 | 168 | 176 |
|-----------|-----|-----|-----|-----|-----|-----|

## Nations

## 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21

|                         |     |     |     |     |     |     |
|-------------------------|-----|-----|-----|-----|-----|-----|
| <b>England</b>          | 140 | 140 | 157 | 163 | 168 | 176 |
| <b>Northern Ireland</b> | 3   | 4   | 6   | 11  | 13  | 12  |
| <b>Wales</b>            | 7   | 9   | 13  | 10  | 11  | 11  |

| Hospital                                | 2014/15    | 2015/16    | 2016/17    | 2017/18    | 2018/19    | 2019/20    | 2020/21 |
|---|------------|------------|------------|------------|------------|------------|---------|
| ANT. Spire St Anthonys Hospital         |            | 2          |            |            |            | 1          |         |
| BAL. Barts and the London               | 3          | 10         | 9          | 17         | 13         | 12         |         |
| BAS. Basildon Hospital                  | 2          | 2          | 4          | 4          | 6          | 6          |         |
| BHL. Liverpool Heart and Chest Hospital | 8          | 9          | 9          | 11         | 13         | 11         |         |
| BRI. Bristol Royal Infirmary            | 9          | 6          | 7          | 3          | 3          | 12         |         |
| CBS. Spire Southampton Hospital         |            |            | 1          |            | 1          |            |         |
| CCL. Cleveland Clinic London            |            |            |            |            |            |            |         |
| CHH. Castle Hill Hospital               | 4          | 4          | 2          | 3          | 2          | 7          |         |
| CHN. Nottingham City Hospital           |            | 4          | 4          | 3          | 4          | 2          |         |
| CRO. Cromwell Hospital                  |            |            |            |            |            | 1          |         |
| FRE. Freeman Hospital                   | 4          | 2          | 4          | 5          | 5          | 4          |         |
| GEO. St George's Hospital               | 4          | 3          | 7          | 4          | 8          | 3          |         |
| <b>Total</b>                            | <b>150</b> | <b>153</b> | <b>176</b> | <b>184</b> | <b>168</b> | <b>176</b> |         |

# Other procedures by nation and hospital - in-hospital deaths



## Nation

All

## Other Procedures

- 0. No other cardiac procedure perf..
- 1. Lv aneurysmectomy
- 2. Acquired vsd
- 3. Atrial myxoma
- 4. Acute pulmonary embolectomy
- 5. Cardiac transplant
- 7. Cardiac trauma
- 8. Epicardial pacemaker
- 9. Pericardiectomy
- 10. Asd closure
- 11. ...

## Year

All

## Hospital

All

## Country 2014/15 2015/16 2016/17 2017/18

|    |   |   |   |   |
|----|---|---|---|---|
| UK | 1 | 4 | 1 | 1 |
|----|---|---|---|---|

## Nations

|                  | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
|------------------|---------|---------|---------|---------|---------|---------|---------|
| England          | 1       | 4       | 1       | 1       | 0       | 0       | 0       |
| Northern Ireland | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| Wales            | 0       | 0       | 0       | 0       | 0       | 0       | 0       |

|                  |   |   |   |   |   |   |   |
|------------------|---|---|---|---|---|---|---|
| England          | 1 | 4 | 1 | 1 | 0 | 0 | 0 |
| Northern Ireland | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wales            | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Hospital                                | 2014/15  | 2015/16  | 2016/17  | 2017/18  | 2018/19  | 2019/20  | 2020/21 |
|---|----------|----------|----------|----------|----------|----------|---------|
| ANT. Spire St Anthonys Hospital         |          |          |          |          | 0        |          |         |
| BAL. Barts and the London               | 0        | 0        | 0        | 0        | 0        | 1        |         |
| BAS. Basildon Hospital                  |          | 0        | 0        |          |          |          |         |
| BHL. Liverpool Heart and Chest Hospital |          | 0        |          |          |          |          |         |
| BRI. Bristol Royal Infirmary            | 0        | 0        | 0        | 0        | 0        |          |         |
| CCL. Cleveland Clinic London            |          |          |          |          |          |          |         |
| CHH. Castle Hill Hospital               | 0        |          |          | 0        | 0        |          |         |
| CHN. Nottingham City Hospital           |          | 1        | 0        | 0        | 0        | 0        |         |
| FRE. Freeman Hospital                   |          | 0        | 0        |          | 0        |          |         |
| GEO. St George's Hospital               | 0        | 1        | 0        | 1        | 0        | 0        |         |
| GRL. Glenfield Hospital                 |          | 0        |          | 0        | 0        | 0        |         |
| HAM. Hammersmith Hospital               |          | 0        |          | 0        |          |          |         |
| <b>Total</b>                            | <b>1</b> | <b>4</b> | <b>1</b> | <b>1</b> | <b>4</b> | <b>2</b> |         |

# Other procedures by nation and hospital - in-hospital mortality (%)



## Nation

All



## Other Procedures

- 0. No other cardiac procedure perf..
- 1. Lv aneurysmectomy
- 2. Acquired vsd
- 3. Atrial myxoma
- 4. Acute pulmonary embolectomy
- 5. Cardiac transplant
- 7. Cardiac trauma
- 8. Epicardial pacemaker
- 9. Pericardiectomy
- 10. Asd closure
- 11. ...

## Year

All



## Hospital

All



## Country 2016/17 2017/18 2018/19 2019/20

|           |      |      |      |      |
|-----------|------|------|------|------|
| <b>UK</b> | 0.00 | 2.00 | 2.91 | 3.50 |
|-----------|------|------|------|------|

## Nations 2016/17 2017/18 2018/19 2019/20

|                         |      |       |      |      |
|-------------------------|------|-------|------|------|
| <b>England</b>          | 0.00 | 1.82  | 2.97 | 3.55 |
| <b>Northern Ireland</b> |      | 33.33 | 0.00 | 0.00 |
| <b>Wales</b>            |      | 0.00  | 0.00 | 2.50 |

| Hospital                        | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|---------------------------------|---------|---------|---------|---------|---------|---------|---------|
| ANT. Spire St Anthonys Hospital | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |         |
| BAL. Barts and the London       |         | 2.17    | 2.33    | 3.76    | 2.22    | 1.00    |         |
| BAS. Basildon Hospital          |         |         | 3.70    | 0.00    | 2.56    | 9.76    |         |
| BRI. Bristol Royal Infirmary    |         |         |         | 0.00    | 0.00    | 0.00    |         |
| CCL. Cleveland Clinic London    |         |         |         |         |         |         |         |
| CHH. Castle Hill Hospital       |         |         | 8.33    | 6.25    | 0.00    | 6.52    |         |
| CHN. Nottingham City Hospital   |         | 5.88    | 7.89    | 4.44    | 6.25    | 0.00    |         |
| CRO. Cromwell Hospital          |         | 0.00    |         |         | 0.00    |         |         |
| FRE. Freeman Hospital           |         | 0.00    | 3.23    | 0.00    | 7.69    | 0.00    |         |
| GEO. St George's Hospital       | 0.00    | 2.20    | 0.00    | 3.70    | 3.23    | 5.13    |         |
| GRL. Glenfield Hospital         |         | 0.00    | 4.00    | 1.61    | 8.70    | 4.76    |         |
| HH. Harefield Hospital          |         |         | 5.97    | 7.02    | 6.00    | 11.76   |         |
| HHW. Wellington Hospital North  |         | 0.00    |         |         |         |         |         |
| HSC. Harley Street Clinic       |         | 0.00    |         |         |         |         |         |

|       |   |        |   |
|-------|---|--------|---|
| AVR   | Aortic valve replacement                        | NACSA  | National Adult Cardiac Surgery Audit                    |
| BCIS  | British Cardiovascular Intervention Society     | NHSE   | NHS England   |
| BCS   | British Cardiovascular Society                  | NICOR  | National Institute for Cardiovascular Outcomes Research |
| CABG  | Coronary artery bypass grafting                 | NSTEMI | Non ST elevation myocardial infarction (heart attack)   |
| COP   | Clinical Outcomes Publication                   | NTN    | National Training Number (UK trainee)                   |
| CVA   | Cerebrovascular accident (stroke)               | PCI    | Percutaneous coronary intervention (stenting)           |
| DOSA  | Day of surgery admission                        | QA     | Quality assurance                                       |
| DSWI  | Deep sternal wound infection                    | QI     | Quality improvement                                     |
| EACTS | European Association for Cardiothoracic Surgery | SCTS   | Society for Cardiothoracic Surgery                      |
| ERAS  | Enhanced recovery after surgery                 | STEMI  | ST elevation myocardial infarction (heart attack)       |
| GIRFT | Getting It Right First Time                     | TAVI   | Transcatheter aortic valve implantation                 |
| GMC   | General Medical Council                         | TIA    | Transient ischaemic attack (transient mini-stroke)      |
| HDU   | High dependency unit                            | TVR    | Tricuspid valve replacement or repair                   |
| Iso   | Isolated  |        |   |
| ITU   | Intensive therapy (care) unit                   |        |   |
| LAAO  | Left atrial appendage occlusion                 |        |   |
| MVR   | Mitral valve replacement                        |        |   |
| MV    | Mitral valve repair                             |        |   |

|     |                                    |     |   |
|-----|------------------------------------|-----|---|
| ANT | St Anthony's Hospital, London      | MAT | Mater Misericordiae Hospital, Dublin              |
| BAL | Barts Heart Centre, London         | MOR | Morrison Hospital, Swansea                        |
| BAS | Basildon Hospital, Essex           | MRI | Manchester Royal Infirmary                        |
| BHL | Liverpool Heart and Chest Hospital | NCR | New Cross Hospital, Wolverhampton                 |
| BRI | Bristol Royal Infirmary            | NGS | Northern General Hospital, Sheffield              |
| CBS | Spire Hospital, Southampton        | NHB | Royal Brompton Hospital, London                   |
| CHH | Castle Hill Hospital, Hull         | PAP | Royal Papworth Hospital, Cambridge                |
| CHN | Nottingham City Hospital           | PLY | Derriford Hospital, Plymouth                      |
| CCL | Cleveland Clinic, London           | QEB | Queen Elizabeth Hospital, Birmingham              |
| CRO | Cromwell Hospital, London          | RAD | John Radcliffe Hospital, Oxford                   |
| FRE | Freeman Hospital, Newcastle        | RSC | Royal Sussex County Hospital, Brighton            |
| GEO | St George's Hospital, London       | RVB | Royal Victoria Hospital, Belfast                  |
| GRL | Glenfield Hospital, Leicester      | SCM | James Cook University Hospital, Middlesbrough     |
| HAM | Hammersmith Hospital, London       | SGH | Southampton General Hospital                      |
| HH  | Harefield Hospital, London         | STH | St Thomas' Hospital, London                       |
| HHW | Wellington Hospital, London        | STO | University Hospital of North Staffordshire, Stoke |
| HSC | Harley Street Clinic, London       | UHW | University Hospital of Wales, Cardiff             |
| KCH | Kings College Hospital, London     | VIC | Blackpool Victoria Hospital                       |
| LBH | London Bridge Hospital, London     | WAL | University Hospital, Coventry                     |
| LGI | Yorkshire Heart Centre, Leeds      | WYT | Wythenshawe Hospital, Manchester                  |