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Comparative Analysis of Cardiac
Catheterisations with Complications
(HRG E13) & Cardiac Catheterisations
without Complications (HRG E14).

Adam Cook
Declan O'Neill

2000

**Comparative Analysis of Cardiac
Catheterisations with Complications
(HRG E13) and Cardiac Catheterisations
without Complications (HRG E14)**

**Adam Cook
Declan O'Neill**

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| • Third operative procedure | 19 |
| • Fourth operative procedure | 20 |
| • Sex | 20 |
| • Provider – all | 21 |
| • Provider - cardiac/non-cardiac units | 22 |
| • Health Authority of residence | 22 |
| • Number of days between procedure and death | 22 |

Summary Tables

**1995/96-1997/98 New South East Region (Plus London Has formerly in South Thames East)
E13 & E14**

Proportion of complicated/uncomplicated HRGs and rate of death within HRG

| | 1995/96 | 1996/97 |
|----------------|---------|---------|
| 1995/96 | | |
| Proportions | 1.7% | 98.3% |
| Death rate | 5.5% | 0.6% |
| 1996/97 | | |
| Proportions | 1.5% | 98.5% |
| Death rate | 6.3% | 0.5% |
| 1997/98 | | |
| Proportions | 1.3% | 98.7% |
| Death rate | 4.9% | 0.4% |

Deaths occurring on day of procedure

| | 1995/96 | 1996/97 |
|--------------------------|---------|---------|
| 1995/96 | | |
| Number | 0 | 10 |
| Proportion of all deaths | 0% | 11.4% |
| Death rate | 0% | 0.07% |
| 1996/97 | | |
| Number | 2 | 10 |
| Proportion of all deaths | 14.3% | 13.3% |
| Death rate | 0.9% | 0.07% |
| 1997/98 | | |
| Number | 1 | 8 |
| Proportion of all deaths | 11.1% | 14.5% |
| Death rate | 0.5% | 0.06% |

Deaths within one day of procedure

| | 1995/96 | 1996/97 |
|--------------------------|---------|---------|
| 1995/96 | | |
| Number | 3 | 24 |
| Proportion of all deaths | 23.1% | 27.3% |
| Death rate | 1.3% | 0.18% |
| 1996/97 | | |
| Number | 4 | 26 |
| Proportion of all deaths | 28.6% | 34.7% |
| Death rate | 1.8% | 0.18% |
| 1997/98 | | |
| Number | 3 | 20 |
| Proportion of all deaths | 33.3% | 36.4% |
| Death rate | 1.6% | 0.14% |

1997/98 New South East Region (Plus London Has formerly in South Thames East) E13 & E14

Admitting diagnosis in patients who died

| Diagnosis | | | | |
|--|----------|-------------|-----------|-------------|
| I20 - Angina pectoris | | | 5 | 9% |
| I21 - Acute myocardial infarction | | | 12 | 22% |
| I22 - Subsequent myocardial infarction | | | 1 | 2% |
| I23 - Certain current complication follow acute myocardial infarct | | | 1 | 2% |
| I25 - Chronic ischaemic heart disease | | | 10 | 18% |
| I27 - Other pulmonary heart diseases | | | 1 | 2% |
| I35 - Nonrheumatic aortic valve disorders | | | 1 | 2% |
| I42 - Cardiomyopathy | 1 | 11% | 1 | 2% |
| I46 - Cardiac arrest | 1 | 11% | | |
| I50 - Heart failure | 7 | 78% | | |
| I71 - Aortic aneurysm and dissection | | | 1 | 2% |
| R07 - Pain in throat and chest | | | 1 | 2% |
| Others | | | 21 | 38% |
| Total | 9 | 100% | 55 | 100% |

Admission Method

| Admission Method | | | | |
|------------------|-----|-----|-----|-----|
| Elective | 33% | 53% | 7% | 80% |
| Emergency | 56% | 30% | 55% | 10% |
| Transfer | 11% | 16% | 38% | 10% |

Patient Classification

| Patient Classification | | | | |
|------------------------|------|-----|-----|-----|
| Inpatient | 100% | 66% | 98% | 44% |
| Daycase | | 34% | 2% | 56% |

Sex

| Patient Sex | | | | |
|-------------|-----|-----|-----|-----|
| Male | 67% | 70% | 62% | 69% |
| Female | 33% | 30% | 38% | 31% |

Provider

| Provider | | | | |
|-----------------------|-----|-----|-----|-----|
| Teaching Hospital | 44% | 70% | 51% | 75% |
| Non-Teaching Hospital | 66% | 30% | 49% | 25% |

1997/98 New South East Region (Plus London Has formerly in South Thames East) E13 & E14

Age by admitting diagnosis for deaths

| IRC | Diagnosis | Under 30 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-99 | Total | |
|-------|--|----------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| E13 | I42 - Cardiomyopathy | | | | | | | 1 | | 1 | |
| | I46 - Cardiac arrest | 1 | | | | | | | | 1 | |
| | I50 - Heart failure | | | 2 | 1 | 1 | | 2 | 1 | 7 | |
| | Total | 1 | 0 | 0 | 2 | 1 | 1 | 0 | 2 | 1 | 9 |
| E14 | I20 - Angina pectoris | | | | 1 | 1 | | 1 | | 2 | 5 |
| | I21 - Acute myocardial infarction | | | | | 1 | 4 | 3 | 2 | 2 | 12 |
| | I22 - Subsequent myocardial infarction | | | | | | | | 1 | | 1 |
| | I23 - Certain current complication follow acute myocardial infarct | | | | | | | | 1 | | 1 |
| | I25 - Chronic ischaemic heart disease | | | | | 1 | 1 | 3 | 1 | 4 | 10 |
| | I27 - Other pulmonary heart diseases | | | | | | | 1 | | | 1 |
| | I35 - Nonrheumatic aortic valve disorders | | | | | | | | | 1 | 1 |
| | I42 - Cardiomyopathy | | | | | 1 | | | | | 1 |
| | I71 - Aortic aneurysm and dissection | | | | | | | | 1 | | 1 |
| | R07 - Pain in throat and chest | | | | | | | | | 1 | 1 |
| | Others | 4 | 1 | 4 | | 2 | 1 | 4 | 1 | 4 | 21 |
| Total | 4 | 1 | 4 | 0 | 1 | 6 | 6 | 12 | 7 | 14 | 55 |

3-Year Comparative Table

New South East Region (plus London HAs formerly in South Thames East) 1995/6 - 1997/8

HRG codes E13 and E14 Cardiac Catheterisation with and without complications

| | | | | |
|---------------------|-------------------------|------------|--------------|--------------|
| 1995/96 | Total Number | 238 | 13625 | 13863 |
| | Number of Deaths | 13 | 88 | 101 |
| | <i>Day of Death</i> | | | |
| | 0 days | | 10 | 10 |
| | 1 day | 3 | 14 | 17 |
| | 2 days | 1 | 14 | 15 |
| | 3-4 days | | 15 | 15 |
| | 5-7 days | 6 | 14 | 20 |
| | 8-14 days | 2 | 11 | 13 |
| | 15-30 days | | 8 | 8 |
| Over 30 days | 1 | 2 | 3 | |
| 1996/97 | Total Number | 224 | 14742 | 14966 |
| | Number of Deaths | 14 | 75 | 89 |
| | <i>Day of Death</i> | | | |
| | 0 days | 2 | 10 | 12 |
| | 1 day | 2 | 16 | 18 |
| | 2 days | | 5 | 5 |
| | 3-4 days | 4 | 8 | 12 |
| | 5-7 days | 3 | 14 | 17 |
| | 8-14 days | 3 | 10 | 13 |
| | 15-30 days | | 10 | 10 |
| Over 30 days | | 2 | 2 | |
| 1997/98 | Total Number | 183 | 14063 | 14246 |
| | Number of Deaths | 9 | 55 | 64 |
| | <i>Day of Death</i> | | | |
| | 0 days | 1 | 8 | 9 |
| | 1 day | 2 | 12 | 14 |
| | 2 days | 1 | 5 | 6 |
| | 3-4 days | | 10 | 10 |
| | 5-7 days | 3 | 10 | 13 |
| | 8-14 days | | 7 | 7 |
| | 15-30 days | 2 | 2 | 4 |
| Over 30 days | | 1 | 1 | |

HRG Code E13
Cardiac Catheterisation with Complications

1997/98 New South East Region (plus London HAs formerly in South Thames East)
HRG code E13 - Cardiac Catheterisation with Complications

| Diagnosis | | | | | | |
|---|------------|-------------|----------|-------------|------------|-------------|
| I08 - Multiple valve diseases | 2 | 1% | | | 2 | 1% |
| I11 - Hypertensive heart disease | 6 | 3% | | | 6 | 3% |
| I13 - Hypertensive heart & renal disease | 1 | 1% | | | 1 | 1% |
| I23 - Certain current complications after acute myocardial infarction | 2 | 1% | | | 2 | 1% |
| I24 - Other acute ischaemic heart diseases | 7 | 4% | | | 7 | 4% |
| I25 - Chronic ischaemic heart disease | 4 | 2% | | | 4 | 2% |
| I26 - Pulmonary embolism | 1 | 1% | | | 1 | 1% |
| I31 - Other diseases of pericardium | 3 | 2% | | | 3 | 2% |
| I33 - Acute & subacute endocarditis | 4 | 2% | | | 4 | 2% |
| I40 - Acute Myocarditis | 1 | 1% | | | 1 | 1% |
| I42 - Cardiomyopathy | 26 | 15% | 1 | 11% | 27 | 15% |
| I44 - Atrioventricular & left bundle-branch block | 26 | 15% | | | 26 | 14% |
| I45 - Other conduction disorders | 1 | 1% | | | 1 | 1% |
| I46 - Cardiac arrest | 2 | 1% | 1 | 11% | 3 | 2% |
| I47 - Paroxysmal tachycardia | 32 | 18% | | | 32 | 17% |
| I50 - Heart failure | 52 | 30% | 7 | 78% | 59 | 32% |
| I51 - Complications & ill-defined descriptions of heart disease | 1 | 1% | | | 1 | 1% |
| I71 - Aortic aneurysm & dissection | 2 | 1% | | | 2 | 1% |
| I95 - Hypotension | 1 | 1% | | | 1 | 1% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Admission Source | | | | | | |
|---|------------|-------------|----------|-------------|------------|-------------|
| Elective | 93 | 53% | 3 | 33% | 96 | 52% |
| Emergency | 53 | 30% | 5 | 56% | 58 | 32% |
| Transfer from other healthcare provider | 28 | 16% | 1 | 11% | 29 | 16% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Admission Source | | | | | | |
|-----------------------------------|------------|-------------|----------|-------------|------------|-------------|
| Usual place of residence | 145 | 83% | 8 | 89% | 153 | 84% |
| Other NHS provider (General Ward) | 29 | 17% | 1 | 11% | 30 | 16% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Patient Status | | | | | | |
|----------------|------------|-------------|----------|-------------|------------|-------------|
| Inpatient | 114 | 66% | 9 | 100% | 123 | 67% |
| Daycase | 60 | 34% | | | 60 | 33% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Discharge Status | | | | | | |
|-----------------------------------|------------|-------------|----------|-------------|------------|-------------|
| Usual place of residence | 137 | 79% | | | 137 | 75% |
| Other NHS provider (General Ward) | 10 | 6% | | | 10 | 5% |
| Died | | 0% | 9 | 100% | 9 | 5% |
| Other | 27 | 16% | | | 27 | 15% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)
HRG code E13 - Cardiac Catheterisation with Complications

| Discharge Method | Number | Percentage | Number | Percentage | Number | Percentage |
|-------------------------------|------------|-------------|----------|-------------|------------|-------------|
| Discharged on clinical advice | 147 | 84% | | | 147 | 80% |
| Died | | | 9 | 100% | 9 | 5% |
| Other | 27 | 16% | | | 27 | 15% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Age | Number | Percentage | Number | Percentage | Number | Percentage |
|--------------|------------|-------------|----------|-------------|------------|-------------|
| Under 30 | 7 | 4% | 1 | 11% | 8 | 4% |
| 30-39 | 11 | 6% | | | 11 | 6% |
| 40-44 | 6 | 3% | | | 6 | 3% |
| 45-49 | 13 | 7% | 2 | 22% | 15 | 8% |
| 50-54 | 20 | 11% | 1 | 11% | 21 | 11% |
| 55-59 | 24 | 14% | 1 | 11% | 25 | 14% |
| 60-64 | 23 | 13% | | | 23 | 13% |
| 65-69 | 32 | 18% | 2 | 22% | 34 | 19% |
| 70-74 | 20 | 11% | 1 | 11% | 21 | 11% |
| 75+ | 18 | 10% | 1 | 11% | 19 | 10% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Episode Duration | Number | Percentage | Number | Percentage | Number | Percentage |
|------------------|------------|-------------|----------|-------------|------------|-------------|
| 0 days | 73 | 42% | | | 73 | 40% |
| 1 day | 13 | 7% | 2 | 22% | 15 | 8% |
| 2 days | 11 | 6% | 1 | 11% | 12 | 7% |
| 3-4 days | 16 | 9% | 1 | 11% | 17 | 9% |
| 5-7 days | 23 | 13% | 1 | 11% | 24 | 13% |
| 8-14 days | 25 | 14% | 1 | 11% | 26 | 14% |
| 15-30 days | 13 | 7% | 1 | 11% | 14 | 8% |
| Over 30 days | | | 2 | 22% | 2 | 1% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Specialist | Number | Percentage | Number | Percentage | Number | Percentage |
|----------------------------|------------|-------------|----------|-------------|------------|-------------|
| 190 - Accident & Emergency | 1 | 1% | | | 1 | 1% |
| 300 - General Medicine | 45 | 26% | 5 | 56% | 50 | 27% |
| 320 - Cardiology | 127 | 73% | 3 | 33% | 130 | 71% |
| 361 - Nephrology | | | 1 | 11% | 1 | 1% |
| 430 - Geriatric Medicine | 1 | 1% | | | 1 | 1% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)

HRG code E13 - Cardiac Catheterisation with Complications

| Primary operative procedure | | | | | | |
|-------------------------------------|------------|-------------|----------|-------------|------------|-------------|
| K63 - Contrast radiology of heart | 152 | 87% | 6 | 67% | 158 | 86% |
| K65 - Catheterisation of heart | 19 | 11% | 1 | 11% | 20 | 11% |
| L91 - Other vein related operations | | | 2 | 22% | 2 | 1% |
| X50 - External resuscitation | 3 | 2% | | | 3 | 2% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Secondary operative procedure | | | | | | |
|--|------------|-------------|----------|-------------|------------|-------------|
| No secondary operative procedure | 76 | 44% | 1 | 11% | 77 | 42% |
| K63 - Contrast radiology of heart | 83 | 48% | 3 | 33% | 86 | 47% |
| K65 - Catheterisation of heart | 3 | 2% | 1 | 11% | 4 | 2% |
| K68 - Drainage of pericardium | | | 1 | 11% | 1 | 1% |
| L26 - Transluminal operations on aorta | 2 | 1% | | | 2 | 1% |
| L43 - Transluminal operations on renal artery | 2 | 1% | | | 2 | 1% |
| L91 - Other vein related operations | 2 | 1% | | | 2 | 1% |
| M47 - Urethral catheterisation of bladder | | | 1 | 11% | 1 | 1% |
| X33 - Other blood transfusion | 1 | 1% | | | 1 | 1% |
| X50 - External resuscitation | 1 | 1% | 1 | 11% | 2 | 1% |
| Y53 - Percutaneous approach to organ under image control | 1 | 1% | | | 1 | 1% |
| Y82 - Local anaesthetic | 1 | 1% | 1 | 11% | 2 | 1% |
| Y90 - Other nonoperations | 1 | 1% | | | 1 | 1% |
| Z94 - Laterality of operation | 1 | 1% | | | 1 | 1% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Third operative procedure | | | | | | |
|--|------------|-------------|----------|-------------|------------|-------------|
| No third operative procedure | 157 | 90% | 6 | 67% | 163 | 89% |
| K63 - Contrast radiology of heart | 4 | 2% | | | 4 | 2% |
| K65 - Catheterisation of heart | 2 | 1% | 1 | 11% | 3 | 2% |
| L26 - Transluminal operations on aorta | 4 | 2% | | | 4 | 2% |
| L43 - Transluminal operations on renal artery | 1 | 1% | | | 1 | 1% |
| X40 - Compensation for renal failure | | | 1 | 11% | 1 | 1% |
| X50 - External resuscitation | 2 | 1% | 1 | 11% | 3 | 2% |
| Y53 - Percutaneous approach to organ under image control | 1 | 1% | | | 1 | 1% |
| Y82 - Local anaesthetic | 2 | 1% | | | 2 | 1% |
| Y90 - Other nonoperations | 1 | 1% | | | 1 | 1% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Fourth operative procedure | | | | | | |
|-------------------------------|------------|-------------|----------|-------------|------------|-------------|
| No fourth operative procedure | 174 | 100% | 8 | 89% | 182 | 99% |
| Y82 - Local anaesthetic | | | 1 | 11% | 1 | 1% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)

HRG code E13 - Cardiac Catheterisation with Complications

| Unknown | 1 | 1% | | | 1 | 1% |
|--------------|------------|-------------|----------|-------------|------------|-------------|
| Male | 121 | 70% | 6 | 67% | 127 | 69% |
| Female | 52 | 30% | 3 | 33% | 55 | 30% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| RA2 - Royal Surrey County & St. Lukes Hospital | 2 | 1% | 1 | 11% | 3 | 2% |
|---|------------|-------------|----------|-------------|------------|-------------|
| RAL - Royal Free Hampstead | 1 | 1% | | | 1 | 1% |
| RC5 - Harefield Hospital | 11 | 6% | | | 11 | 6% |
| RD1 - Royal United Hospital, Bath | 1 | 1% | | | 1 | 1% |
| RD8 - Milton Keynes General | 1 | 1% | | | 1 | 1% |
| RDL - Eastbourne Hospitals | 1 | 1% | | | 1 | 1% |
| RDM - Hastings & Rother Hospital | 2 | 1% | | | 2 | 1% |
| RDZ - Royal Bournemouth & Christchurch Hospital | 2 | 1% | 1 | 11% | 3 | 2% |
| RFL - Glenfield Hospital | 1 | 1% | | | 1 | 1% |
| RG2 - Greenwich Healthcare | 11 | 6% | | | 11 | 6% |
| RGU - Brighton Healthcare | 10 | 6% | 1 | | 11 | 6% |
| RGZ - Queen Mary's Sidcup | 1 | 1% | | | 1 | 1% |
| RHM - Southampton University Hospital | 13 | 7% | | | 13 | 7% |
| RHU - Portsmouth Hospitals | 11 | 6% | | | 11 | 6% |
| RHW - Royal Berkshire & Battle Hospitals | 5 | 3% | | | 5 | 3% |
| RJ1 - Guy's & St. Thomas' Hospital Trust | 42 | 24% | 3 | 33% | 45 | 25% |
| RJ2 - The Lewisham Hospital | 1 | 1% | | | 1 | 1% |
| RJ6 - Mayday Healthcare | 1 | 1% | | | 1 | 1% |
| RJ7 - St George's Healthcare | 24 | 14% | | | 24 | 13% |
| RJZ - King's Healthcare | 7 | 4% | 1 | 11% | 8 | 4% |
| RNS - Northampton General Hospital | 2 | 1% | | | 2 | 1% |
| RNX - Oxford Radcliffe Hospital | 21 | 12% | | | 21 | 11% |
| RPF - South Kent Hospitals | 1 | 1% | | | 1 | 1% |
| RPL - Worthing & Southlands Hospital | | | 1 | 11% | 1 | 1% |
| RPR - The Royal West Sussex Trust | | | 1 | 11% | 1 | 1% |
| RPX - Royal Brompton Hospital | 1 | 1% | | | 1 | 1% |
| RRV - University College London | 1 | 1% | | | 1 | 1% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Cardiac Units | 75 | 1% | 4 | 7% | 79 | 1% |
|-------------------|------------|-----------|----------|------------|------------|-----------|
| Non-Cardiac Units | 99 | 1% | 5 | 9% | 104 | 1% |
| Total | 174 | 1% | 9 | 16% | 183 | 1% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)

HRG code E13 - Cardiac Catheterisation with Complications

| Health Authority | Number | Percentage | Number | Percentage | Number | Percentage |
|-------------------------------------|------------|-------------|----------|-------------|------------|-------------|
| QA7 - Berkshire | 9 | 5% | | | 9 | 5% |
| QA8 - Buckinghamshire | 8 | 5% | | | 8 | 4% |
| QAA - Bexley & Greenwich | 12 | 7% | | | 12 | 7% |
| QAC - Bromley | 5 | 3% | | | 5 | 3% |
| QAE - East Kent | 10 | 6% | | | 10 | 5% |
| QAF - West Kent | 11 | 6% | 3 | 33% | 14 | 8% |
| QAH - Lambeth, Southwark & Lewisham | 21 | 12% | | | 21 | 11% |
| QAK - East Surrey | 6 | 3% | 1 | 11% | 7 | 4% |
| QAL - West Surrey | 10 | 6% | 1 | 11% | 11 | 6% |
| QAM - East Sussex, Brighton & Hove | 15 | 9% | 1 | 11% | 16 | 9% |
| QAN - West Sussex | 7 | 4% | 2 | 22% | 9 | 5% |
| QCC - Northamptonshire | 8 | 5% | | | 8 | 4% |
| QCE - Oxfordshire | 18 | 10% | | | 18 | 10% |
| QD1 - North & Mid Hampshire | 6 | 3% | | | 6 | 3% |
| QD2 - Portsmouth & SE Hampshire | 16 | 9% | | | 16 | 9% |
| QD3 - Southampton & SW Hampshire | 12 | 7% | 1 | 11% | 13 | 7% |
| Total | 174 | 100% | 9 | 100% | 183 | 100% |

| Days between procedure and complication | Number | Percentage |
|---|----------|-------------|
| 0 days | 1 | 11% |
| 1 day | 2 | 22% |
| 2 days | 1 | 11% |
| 3-4 days | | |
| 5-7 days | 3 | 33% |
| 8-14 days | | |
| 15-30 days | 2 | 22% |
| Over 30 days | | |
| Total | 9 | 100% |

HRG Code E14
Cardiac Catheterisation without
Complications

1997/98 New South East Region (plus London HAs formerly in South Thames East)

HRG code E14 - Cardiac Catheterisation *without* Complications

| Diagnosis | No. | % | No. | % | No. | % |
|--|--------------|-------------|-----------|-------------|--------------|-------------|
| E78 - Disorders of lipoprotein metabolism and other lipidaemias | 14 | 0.1% | | | 14 | 0.1% |
| I05 - Rheumatic mitral valve diseases | 50 | 0.4% | | | 50 | 0.4% |
| I08 - Multiple valve diseases | 86 | 1% | | | 86 | 1% |
| I10 - Essential (primary) hypertension | 49 | 0.3% | | | 49 | 0.3% |
| I20 - Angina pectoris | 1536 | 11% | 5 | 9% | 1541 | 11% |
| I21 - Acute myocardial infarction | 298 | 2% | 12 | 22% | 310 | 2% |
| I22 - Subsequent myocardial infarction | 30 | 0.2% | 1 | 2% | 31 | 0.2% |
| I23 - Certain current complication follow acute myocardial infarct | 10 | 0.1% | 1 | 2% | 11 | 0.1% |
| I24 - Other acute ischaemic heart diseases | 54 | 0.4% | | | 54 | 0.4% |
| I25 - Chronic ischaemic heart disease | 8051 | 57% | 10 | 18% | 8061 | 57% |
| I27 - Other pulmonary heart diseases | 14 | 0.1% | 1 | 2% | 15 | 0.1% |
| I34 - Nonrheumatic mitral valve disorders | 234 | 2% | | | 234 | 2% |
| I35 - Nonrheumatic aortic valve disorders | 589 | 4% | 1 | 2% | 590 | 4% |
| I42 - Cardiomyopathy | 107 | 1% | 1 | 2% | 108 | 1% |
| I45 - Other conduction disorders | 15 | 0.1% | | | 15 | 0.1% |
| I48 - Atrial fibrillation and flutter | 66 | 0.5% | | | 66 | 0.5% |
| I49 - Other cardiac arrhythmias | 14 | 0.1% | | | 14 | 0.1% |
| I51 - Complications and ill- Defined descriptions of heart disease | 64 | 0.5% | | | 64 | 0.5% |
| I71 - Aortic aneurysm and dissection | 25 | 0.2% | 1 | 2% | 26 | 0.2% |
| I77 - Other disorders of arteries and arterioles | 12 | 0.1% | | | 12 | 0.1% |
| Q20 - Congenital malformations of cardiac chambers and connections | 31 | 0.2% | | | 31 | 0.2% |
| Q21 - Congenital malformations of cardiac septa | 60 | 0.4% | | | 60 | 0.4% |
| Q22 - Congenital malformations of pulmonary and tricuspid valves | 15 | 0.1% | | | 15 | 0.1% |
| Q23 - Congenital malformations of aortic and mitral valves | 18 | 0.1% | | | 18 | 0.1% |
| Q24 - Other congenital malformations of heart | 13 | 0.1% | | | 13 | 0.1% |
| Q25 - Congenital malformations of great arteries | 36 | 0.3% | | | 36 | 0.3% |
| R00 - Abnormalities of heart beat | 20 | 0.1% | | | 20 | 0.1% |
| R06 - Abnormalities of breathing | 51 | 0.4% | | | 51 | 0.4% |
| R07 - Pain in throat and chest | 1629 | 12% | 1 | 2% | 1630 | 12% |
| R09 - Oth symptoms and signs involv circul and resp systems | 12 | 0.1% | | | 12 | 0.1% |
| R94 - Abnormal results of function studies | 16 | 0.1% | | | 16 | 0.1% |
| T82 - Comps cardiac & vasc prosthetic devs implants & grafts | 239 | 2% | | | 239 | 2% |
| Z03 - Med observ and evaluation for suspected diseases and conds | 13 | 0.1% | | | 13 | 0.1% |
| Z09 - Follow-up exam after treatment for conds oth than mal neos | 207 | 1% | | | 207 | 1% |
| Z13 - Special screening exam for other diseases and disorders | 115 | 1% | | | 115 | 1% |
| Z94 - Transplanted organ and tissue status | 11 | 0.1% | | | 11 | 0.1% |
| Others | 204 | 1% | 21 | 38% | 225 | 2% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Admission | No. | % | No. | % | No. | % |
|---|--------------|-------------|-----------|-------------|--------------|-------------|
| Elective | 11201 | 80% | 4 | 7% | 11205 | 80% |
| Emergency | 1397 | 10% | 30 | 55% | 1427 | 10% |
| Transfer from other healthcare provider | 1398 | 9.98% | 21 | 38% | 1419 | 10.09% |
| Unknown | 12 | 0.09% | | | 12 | 0.09% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)
HRG code E14 - Cardiac Catheterisation without Complications

| Admission Source | 1997/98 | | 1996/97 | | 1995/96 | |
|---|--------------|-------------|-----------|-------------|--------------|-------------|
| | No. | % | No. | % | No. | % |
| Usual place of residence | 12329 | 88% | 33 | 60% | 12362 | 88% |
| Temporary place of residence | 105 | 1% | | | 105 | 1% |
| Sent by order of penal establishment/court/police | 4 | 0.03% | | | 4 | 0.03% |
| Special hospital | 2 | 0.01% | | | 2 | 0.01% |
| Other NHS provider (General Ward) | 1545 | 11% | 22 | 40% | 1567 | 11% |
| Other NHS provider (Maternity Ward) | 1 | 0.01% | | | 1 | 0.01% |
| Other NHS provider (Mental Health Ward) | 2 | 0.01% | | | 2 | 0.01% |
| Other | 20 | 0.14% | | | 20 | 0.14% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Discharge Status | 1997/98 | | 1996/97 | | 1995/96 | |
|------------------|--------------|-------------|-----------|-------------|--------------|-------------|
| | No. | % | No. | % | No. | % |
| Inpatient | 6219 | 44% | 54 | 98% | 6273 | 45% |
| Daycase | 7789 | 56% | 1 | 2% | 7790 | 55% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Discharge Status | 1997/98 | | 1996/97 | | 1995/96 | |
|---|--------------|-------------|-----------|-------------|--------------|-------------|
| | No. | % | No. | % | No. | % |
| Usual place of residence | 12536 | 89% | | | 12536 | 89% |
| Temporary place of residence | 23 | 0.2% | | | 23 | 0.2% |
| Sent by order of penal establishment/court/police | 3 | 0.02% | | | 3 | 0.02% |
| Special hospital | 21 | 0.1% | | | 21 | 0.1% |
| Other NHS provider (General Ward) | 396 | 3% | | | 396 | 3% |
| Other NHS provider (Maternity Ward) | 1 | 0.01% | | | 1 | 0.01% |
| Other NHS provider (Mental Health Ward) | 2 | 0.01% | | | 2 | 0.01% |
| Local Authority Care | 1 | 0.01% | | | 1 | 0.01% |
| Died | | | 55 | 100% | 55 | 0.4% |
| Non NHS Healthcare provider | 3 | 0.02% | | | 3 | 0.02% |
| Other | 1022 | 7% | | | 1022 | 7% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Discharge Status | 1997/98 | | 1996/97 | | 1995/96 | |
|-------------------------------|--------------|-------------|-----------|-------------|--------------|-------------|
| | No. | % | No. | % | No. | % |
| Discharged on clinical advice | 12975 | 93% | | | 12975 | 92% |
| Discharged self | 20 | 0.1% | | | 20 | 0.1% |
| Died | | | 55 | 100% | 55 | 0.4% |
| Other | 1013 | 7% | | | 1013 | 7% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)

HRG code E14 - Cardiac Catheterisation *without* Complications

| | Discharge | | Admission | | Total | |
|--------------|--------------|-------------|-----------|-------------|--------------|-------------|
| | No. | % | No. | % | No. | % |
| Under 30 | 238 | 2% | 4 | 7% | 242 | 2% |
| 30-39 | 370 | 3% | 1 | 2% | 371 | 3% |
| 40-44 | 506 | 4% | 4 | 7% | 510 | 4% |
| 45-49 | 1007 | 7% | | | 1007 | 7% |
| 50-54 | 1681 | 12% | 1 | 2% | 1682 | 12% |
| 55-59 | 2155 | 15% | 6 | 11% | 2161 | 15% |
| 60-64 | 2508 | 18% | 6 | 11% | 2514 | 18% |
| 65-69 | 2435 | 17% | 12 | 22% | 2447 | 17% |
| 70-74 | 1890 | 13% | 7 | 13% | 1897 | 13% |
| 75+ | 1218 | 9% | 14 | 25% | 1232 | 9% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Episode Duration | Discharge | | Admission | | Total | |
|------------------|--------------|-------------|-----------|-------------|--------------|-------------|
| | No. | % | No. | % | No. | % |
| 0 days | 8472 | 60% | 3 | | 8475 | 60% |
| 1 day | 1904 | 14% | 7 | 13% | 1911 | 14% |
| 2 days | 1253 | 9% | 7 | 13% | 1260 | 9% |
| 3-4 days | 718 | 5% | 9 | 16% | 727 | 5% |
| 5-7 days | 695 | 5% | 16 | 29% | 711 | 5% |
| 8-14 days | 651 | 5% | 7 | 13% | 658 | 5% |
| 15-30 days | 290 | 2% | 2 | 4% | 292 | 2% |
| Over 30 days | 25 | | 4 | 7% | 29 | 0% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Main Diagnosis | Discharge | | Admission | | Total | |
|-------------------------------|--------------|-------------|-----------|-------------|--------------|-------------|
| | No. | % | No. | % | No. | % |
| 100 - General Surgery | 8 | 0.1% | | | 8 | 0% |
| 101 - Urology | 2 | 0.01% | | | 2 | 0% |
| 150 - Neurosurgery | 1 | 0.01% | | | 1 | 0% |
| 170 - Cardiothoracic Surgery | 70 | 0.5% | 1 | 2% | 71 | 1% |
| 190 - Accident & Emergency | 1 | 0.01% | 3 | 5% | 4 | 0% |
| 300 - General Medicine | 2052 | 15% | 22 | 40% | 2074 | 15% |
| 301 - Gastroenterology | 26 | 0.2% | 1 | 2% | 27 | 0% |
| 302 - Endocrinology | 18 | 0.1% | | | 18 | 0% |
| 303 - Haematology (Clinical) | 1 | 0.01% | | | 1 | 0% |
| 320 - Cardiology | 11700 | 84% | 22 | 40% | 11722 | 83% |
| 340 - Dermatology | 6 | 0.04% | 1 | 2% | 7 | 0% |
| 350 - Infectious Diseases | 2 | 0.01% | 1 | 2% | 3 | 0% |
| 360 - Genito-Urinary Medicine | 12 | 0.1% | | | 12 | 0% |
| 361 - Nephrology | 20 | 0.1% | | | 20 | 0% |
| 400 - Neurology | 1 | 0.01% | | | 1 | 0% |
| 410 - Rheumatology | 2 | 0.01% | | | 2 | 0% |
| 420 - Paediatrics | 52 | 0.4% | 2 | 4% | 54 | 0% |
| 430 - Geriatric Medicine | 33 | 0.2% | 2 | 4% | 35 | 0% |
| 800 - Radiotherapy | 1 | 0.01% | | | 1 | 0% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)
HRG code E14 - Cardiac Catheterisation *without* Complications

| Primary Operative Procedure | No | % | No | % | No | % |
|--|--------------|-------------|-----------|-------------|--------------|-------------|
| No Primary operative procedure | 1 | 0.01% | | | 1 | 0% |
| K63 - Contrast radiology of heart | 13548 | 97% | 23 | 42% | 13571 | 97% |
| K65 - Catheterisation of heart | 448 | 3% | 26 | 47% | 474 | 3% |
| L91 - Other vein related operations | 2 | 0.01% | 2 | 4% | 4 | 0% |
| L95 - Diag. transluminal operations on vein | 1 | 0.01% | | | 1 | 0% |
| M47 - Urethral catheterisation of bladder | 2 | 0.01% | | | 2 | 0% |
| X29 - Continuous infusion of therapeutic substance | 3 | 0.02% | 2 | 4% | 5 | 0% |
| X50 - External resuscitation | 3 | 0.02% | 2 | 4% | 5 | 0% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Secondary Operative Procedure | No | % | No | % | No | % |
|--|--------------|-------------|-----------|-------------|--------------|-------------|
| No secondary operative procedure | 6358 | 45% | 16 | 29% | 6374 | 45% |
| E05 - Surgical arrest of bleeding from internal nose | 1 | 0.01% | | | 1 | 0.01% |
| E49 - Diag. fiberoptic endoscopic exam. of lower respiratory tract | 1 | 0.01% | | | 1 | 0.01% |
| E51 - Diag. endoscopic exam. of lower respiratory tract using rigid bronchoscope | 2 | 0.01% | | | 2 | 0.01% |
| K63 - Contrast radiology of heart | 7143 | 51% | 15 | 27% | 7158 | 51% |
| K65 - Catheterisation of heart | 191 | 1% | 5 | 9% | 196 | 1% |
| K68 - Drainage of pericardium | 1 | 0.01% | | | 1 | 0.01% |
| L26 - Transluminal operations on aorta | 150 | 1% | 1 | 2% | 151 | 1% |
| L31 - Transluminal operations on carotid artery | 2 | 0.01% | | | 2 | 0.01% |
| L43 - Transluminal operations on renal artery | 6 | 0.04% | | | 6 | 0.04% |
| L63 - Transluminal operations on femoral artery | 4 | 0.03% | | | 4 | 0.03% |
| L72 - Diag. transluminal operations on other artery | 3 | 0.02% | | | 3 | 0.02% |
| L91 - Other vein related operations | 7 | 0.05% | 6 | 11% | 13 | 0.1% |
| L95 - Diag. transluminal operations on vein | 1 | 0.01% | | | 1 | 0.01% |
| M47 - Urethral catheterisation of bladder | 1 | 0.01% | | | 1 | 0.01% |
| S15 - Other biopsy of skin | 1 | 0.01% | | | 1 | 0.01% |
| S47 - Opening of skin | 1 | 0.01% | | | 1 | 0.01% |
| W36 - Diag. puncture of bone | 1 | 0.01% | | | 1 | 0.01% |
| X29 - Continuous infusion of therapeutic substance | 14 | 0.1% | 1 | 2% | 15 | 0.1% |
| X31 - Injection of radiocontrast material | 4 | 0.03% | | | 4 | 0.03% |
| X33 - Other blood transfusion | 1 | 0.01% | 1 | 2% | 2 | 0.01% |
| X35 - Other intravenous injection | 14 | 0.1% | | | 14 | 0.1% |
| X40 - Compensation for renal failure | 5 | 0.04% | 2 | 4% | 7 | 0.05% |
| X50 - External resuscitation | 7 | 0.05% | 2 | 4% | 9 | 0.06% |
| X55 - Other operations on unspecified organ | 1 | 0.01% | 1 | 2% | 2 | 0.01% |
| Y53 - Percutaneous approach to organ under image control | 7 | 0.05% | 1 | 2% | 8 | 0.06% |
| Y70 - Early operations not otherwise classified (NOC) | 2 | 0.01% | | | 2 | 0.01% |
| Y73 - Facilitating operations (NOC) | 2 | 0.01% | 3 | 5% | 5 | 0.04% |
| Y82 - Local anaesthetic | 64 | 0.5% | | | 64 | 0.5% |
| Y90 - Other nonoperations | 6 | 0.04% | | | 6 | 0.04% |
| Z36 - Branch of thoracic aorta | 1 | 0.01% | | | 1 | 0.01% |
| Z38 - Terminal branch of aorta | 1 | 0.01% | | | 1 | 0.01% |
| Z40 - Other vascular tissue | | | 1 | 2% | 1 | 0.01% |
| Z94 - Laterality of operation | 5 | 0.04% | | | 5 | 0.04% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)

HRG code E14 - Cardiac Catheterisation *without* Complications

| Third Operative Procedure | Diagnosed | | Revised | | Total | |
|---|--------------|-------------|-----------|-------------|--------------|-------------|
| | No. | % | No. | % | No. | % |
| No third operative procedure | 12787 | 91% | 37 | 67% | 12824 | 91% |
| E49 - Diag. fiberoptic endoscopic exam. of lower respiratory tract | 1 | 0.01% | | | 1 | 0.01% |
| F13 - Restoration of tooth | 1 | 0.01% | | | 1 | 0.01% |
| K63 - Contrast radiology of heart | 225 | 2% | 1 | 2% | 226 | 2% |
| K65 - Catheterisation of heart | 78 | 1% | 1 | 2% | 79 | 1% |
| L26 - Transluminal operations on aorta | 534 | 4% | | | 534 | 4% |
| L31 - Transluminal operations on carotid artery | 1 | 0.01% | | | 1 | 0.01% |
| L35 - Transluminal operations on cerebral artery | 2 | 0.01% | | | 2 | 0.01% |
| L43 - Transluminal operations on renal artery | 4 | 0.03% | | | 4 | 0.03% |
| L47 - Transluminal operations on other visceral branch of abdominal aorta | 1 | 0.01% | | | 1 | 0.01% |
| L54 - Transluminal operations on iliac artery | 1 | 0.01% | | | 1 | 0.01% |
| L63 - Transluminal operations on femoral artery | 4 | 0.03% | | | 4 | 0.03% |
| L72 - Diag. transluminal operations on other artery | 2 | 0.01% | | | 2 | 0.01% |
| L91 - Other vein related operations | 2 | 0.01% | 3 | 5% | 5 | 0.04% |
| L95 - Diag. transluminal operations on vein | 2 | 0.01% | | | 2 | 0.01% |
| M47 - Urethral catheterisation of bladder | 2 | 0.01% | 2 | 4% | 4 | 0.03% |
| S57 - Exploration of other skin of other site | | | 1 | 2% | 1 | 0.01% |
| T12 - Puncture of pleura | 1 | 0.01% | | | 1 | 0.01% |
| W87 - Diag. endoscopic exam. of knee joint | 1 | 0.01% | | | 1 | 0.01% |
| X29 - Continuous infusion of therapeutic substance | 5 | 0.04% | | | 5 | 0.04% |
| X30 - Injection of therapeutic substance | 1 | 0.01% | | | 1 | 0.01% |
| X33 - Other blood transfusion | 6 | 0.04% | | | 6 | 0.04% |
| X34 - Other intravenous transfusion | | | 3 | 5% | 3 | 0.02% |
| X35 - Other intravenous injection | 79 | 1% | 3 | 5% | 82 | 1% |
| X40 - Compensation for renal failure - Compensation for renal failure | 1 | 0.01% | 1 | 2% | 2 | 0.01% |
| X50 - External resuscitation | 3 | 0.02% | | | 3 | 0.02% |
| X55 - Other operations on unspecified organ | 1 | 0.01% | | | 1 | 0.01% |
| Y22 - Drainage of organ (NOC) | 1 | 0.01% | | | 1 | 0.01% |
| Y40 - Dilatation of organ (NOC) | 1 | 0.01% | | | 1 | 0.01% |
| Y53 - Percutaneous approach to organ under image control | 2 | 0.01% | | | 2 | 0.01% |
| Y82 - Local anaesthetic | 225 | 2% | 1 | 2% | 226 | 2% |
| Y84 - Other anaesthetic | 15 | 0.1% | | | 15 | 0.1% |
| Y90 - Other nonoperations | 3 | 0.02% | 1 | 2% | 4 | 0.03% |
| Z33 - Other part of heart | 4 | 0.03% | | | 4 | 0.03% |
| Z34 - Aorta | 1 | 0.01% | | | 1 | 0.01% |
| Z36 - Branch of thoracic aorta | 2 | 0.01% | | | 2 | 0.01% |
| Z40 - Other vascular tissue | 1 | 0.01% | 1 | 2% | 2 | 0.01% |
| Z41 - Upper urinary tract | 1 | 0.01% | | | 1 | 0.01% |
| Z70 - Radius | 1 | 0.01% | | | 1 | 0.01% |
| Z89 - Arm region | 1 | 0.01% | | | 1 | 0.01% |
| Z92 - Other region of body | 2 | 0.01% | | | 2 | 0.01% |
| Z94 - Laterality of operation | 3 | 0.02% | | | 3 | 0.02% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)

HRG code E14 - Cardiac Catheterisation *without* Complications

| Fourth Operative Procedure | No | % | No | % | No | % |
|--|--------------|-------------|-----------|-------------|--------------|-------------|
| No fourth operative procedure | 13847 | 99% | 40 | 73% | 13887 | 99% |
| E05 - Surgical arrest of bleeding from internal nose | 1 | 0.01% | | | 1 | 0.01% |
| K63 - Contrast radiology of heart | 23 | 0.2% | 1 | 2% | 24 | 0.2% |
| K65 - Catheterisation of heart | 9 | 0.06% | 2 | 4% | 11 | 0.1% |
| L26 - Transluminal operations on aorta | 57 | 0.4% | | | 57 | 0.4% |
| L31 - Transluminal operations on carotid artery | 4 | 0.03% | | | 4 | 0.03% |
| L39 - Transluminal operations on subclavian artery | 2 | 0.01% | | | 2 | 0.01% |
| L43 - Transluminal operations on renal artery | 4 | 0.03% | | | 4 | 0.03% |
| L54 - Transluminal operations on iliac artery | 2 | 0.01% | | | 2 | 0.01% |
| L91 - Other vein related operations | 1 | 0.01% | | | 1 | 0.01% |
| M47 - Urethral catheterisation of bladder | 1 | 0.01% | 1 | 2% | 2 | 0.01% |
| S57 - Exploration of other skin of other site | | | 1 | 2% | 1 | 0.01% |
| X29 - Continuous infusion of therapeutic substance | 6 | 0.04% | 3 | 5% | 9 | 0.06% |
| X33 - Other blood transfusion | | | 2 | 4% | 2 | 0.01% |
| X34 - Other intravenous transfusion | | | 1 | 2% | 1 | 0.01% |
| X35 - Other intravenous injection | 12 | 0.1% | 2 | 4% | 14 | 0.1% |
| X50 - External resuscitation | 4 | 0.03% | 1 | 2% | 5 | 0.04% |
| Y20 - Other biopsy of organ (NOC) | 1 | 0.01% | | | 1 | 0.01% |
| Y33 - Puncture of organ (NOC) | 1 | 0.01% | | | 1 | 0.01% |
| Y53 - Percutaneous approach to organ under image control | 1 | 0.01% | | | 1 | 0.01% |
| Y82 - Local anaesthetic | 24 | 0.2% | | | 24 | 0.2% |
| Y84 - Other anaesthetic | 3 | 0.02% | | | 3 | 0.02% |
| Z36 - Branch of thoracic aorta | 1 | 0.01% | | | 1 | 0.01% |
| Z41 - Upper urinary tract | 1 | 0.01% | | | 1 | 0.01% |
| Z92 - Other region of body | | | 1 | 2% | 1 | 0.01% |
| Z94 - Laterality of operation | 3 | 0.02% | | | 3 | 0.02% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| | | | | | | |
|--------------|--------------|-------------|-----------|-------------|--------------|-------------|
| Unknown | 13 | 0.1% | | | 13 | 0% |
| Male | 9599 | 69% | 34 | 62% | 9633 | 68% |
| Female | 4396 | 31% | 21 | 38% | 4417 | 31% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)

HRG code E14 - Cardiac Catheterisation *without* Complications

| Provider | No. | % | No. | % | No. | % |
|---|--------------|-------------|-----------|-------------|--------------|-------------|
| RA2 - Royal Surrey County & St. Lukes Hospital | 194 | 1% | | | 194 | 1% |
| RA7 - United Bristol Healthcare | 1 | 0.01% | | | 1 | 0.01% |
| RAB - Freeman Group of Hospitals | 1 | 0.01% | | | 1 | 0.01% |
| RAL - Royal Free Hampstead | 6 | 0.04% | | | 6 | 0.04% |
| RC3 - Ealing Hospital | 2 | 0.01% | | | 2 | 0.01% |
| RC5 - Harefield Hospital | 672 | 5% | | | 672 | 5% |
| RCJ - South Tees Acute Hospitals | 1 | 0.01% | | | 1 | 0.01% |
| RD1 - Royal United Hospital, Bath | 7 | 0.05% | | | 7 | 0.05% |
| RD8 - Milton Keynes General | | | 3 | 5% | 3 | 0.02% |
| RDL - Eastbourne Hospitals | 503 | 4% | 6 | 11% | 509 | 4% |
| RDM - Hastings & Rother Hospital | 280 | 2% | 1 | 2% | 281 | 2% |
| RDU - Frimley Park Hospitals | 1 | 0.01% | | | 1 | 0.01% |
| RDZ - Royal Bournemouth & Christchurch Hospital | 70 | 0.5% | 1 | 2% | 71 | 1% |
| REF - Royal Cornwall Hospitals Trusts | 1 | 0.01% | | | 1 | 0.01% |
| RFL - Glenfield Hospital | 2 | 0.01% | | | 2 | 0.01% |
| RFZ - Northwick Park & St. Marks | 2 | 0.01% | | | 2 | 0.01% |
| RG1 - Mid Kent Healthcare | 1 | 0.01% | | | 1 | 0.01% |
| RG2 - Greenwich Healthcare | 473 | 3% | 2 | 4% | 475 | 3% |
| RG3 - Bromley Hospitals | | | 2 | 4% | 2 | 0.01% |
| RGM - Papworth Hospital | 25 | 0.2% | | | 25 | 0.2% |
| RGU - Brighton Healthcare | 417 | 3% | 4 | 7% | 421 | 3% |
| RGW - Kent & Canterbury Hospitals | | | 1 | 2% | 1 | 0.01% |
| RGZ - Queen Mary's Sidcup | 118 | 1% | | | 118 | 1% |
| RH8 - Royal Devon & Exeter Healthcare | 7 | 0.05% | | | 7 | 0.05% |
| RHH - East Surrey Healthcare | 21 | 0.1% | | | 21 | 0.1% |
| RHM - Southampton University Hospital | 1395 | 10% | 3 | 5% | 1398 | 10% |
| RHU - Portsmouth Hospitals | 653 | 5% | 1 | 2% | 654 | 5% |
| RHW - Royal Berkshire & Battle Hospitals | 578 | 4% | 1 | 2% | 579 | 4% |
| RJ1 - Guy's & St. Thomas' Hospital Trust | 3941 | 28% | 13 | 24% | 3954 | 28% |
| RJ2 - The Lewisham Hospital | | | 1 | 2% | 1 | 0.01% |
| RJ5 - St. Mary's | 102 | 1% | 1 | 2% | 103 | 1% |
| RJ6 - Mayday Healthcare | 32 | 0.2% | | | 32 | 0.2% |
| RJ7 - St George's Healthcare | 1428 | 10% | 5 | 9% | 1433 | 10% |
| RJZ - King's Healthcare | 1387 | 10% | 2 | 4% | 1389 | 10% |
| RKB - Walsgrave Hospitals | 3 | 0.02% | | | 3 | 0.02% |
| RM1 - Norfolk & Norwich Health Care | 1 | 0.01% | | | 1 | 0.01% |
| RM2 - South Manchester University Hospital | 1 | 0.01% | | | 1 | 0.01% |
| RN3 - Swindon & Marlborough Hospital | 15 | 0.1% | | | 15 | 0.1% |
| RNJ - The Royal Hospitals | 23 | 0.2% | | | 23 | 0.2% |
| RNX - Oxford Radcliffe Hospital | 1082 | 8% | 2 | 4% | 1084 | 8% |
| RNZ - Salisbury Healthcare | 1 | 0.01% | | | 1 | 0.01% |
| RPA - Medway | | | 1 | 2% | 1 | 0.01% |
| RPF - South Kent Hospitals | 1 | 0.01% | | | 1 | 0.01% |
| RPL - Worthing & Southlands Hospital | 2 | 0.01% | 3 | 5% | 5 | 0.04% |
| RPR - The Royal West Sussex Trust | 2 | 0.01% | | | 2 | 0.01% |
| RPX - Royal Brompton Hospital | 133 | 1% | | | 133 | 1% |
| RQM - Chelsea & Westminster Healthcare | 8 | 0.06% | | | 8 | 0.06% |
| RQN - Hammersmith Hospitals | 80 | 1% | | | 80 | 1% |
| RRK - University Hospital Birmingham | 2 | 0.01% | | | 2 | 0.01% |
| RRV - University College London | 333 | 2% | 2 | | 335 | 2% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

1997/98 New South East Region (plus London HAs formerly in South Thames East)
HRG code E14 - Cardiac Catheterisation *without* Complications

| Provider | No. | % | No. | % | Total | % |
|-------------------|--------------|-------------|-----------|-------------|--------------|-------------|
| Cardiac Units | 7104 | 51% | 21 | 38% | 7125 | 51% |
| Non-Cardiac Units | 6904 | 49% | 34 | 62% | 6938 | 49% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Provider | No. | % | No. | % | Total | % |
|------------------------------------|--------------|-------------|-----------|-------------|--------------|-------------|
| QA7 - Berkshire | 820 | 6% | 2 | 4% | 822 | 6% |
| QA8 - Buckinghamshire | 678 | 5% | 2 | 4% | 680 | 5% |
| QAA - Bexley & Greenwich | 948 | 7% | 4 | 7% | 952 | 7% |
| QAC - Bromley | 472 | 3% | 1 | 2% | 473 | 3% |
| QAE - East Kent | 1057 | 8% | 4 | 7% | 1061 | 8% |
| QAF - West Kent | 1397 | 10% | 5 | 9% | 1402 | 10% |
| QAH - Lambeth Southwark & Lewisham | 1446 | 10% | 4 | 7% | 1450 | 10% |
| QAK - East Surrey | 633 | 5% | 1 | 2% | 634 | 5% |
| QAL - West Surrey | 1114 | 8% | 5 | 9% | 1119 | 8% |
| QAM - East Sussex | 1383 | 10% | 11 | 20% | 1394 | 10% |
| QAN - West Sussex | 859 | 6% | 6 | 11% | 865 | 6% |
| QCE - Oxfordshire | 830 | 6% | 3 | 5% | 833 | 6% |
| QD1 - North & Mid Hampshire | 515 | 4% | 3 | 5% | 518 | 4% |
| QD2 - Portsmouth & SE Hampshire | 794 | 6% | 1 | 2% | 795 | 6% |
| QD3 - Southampton & SW Hampshire | 1010 | 7% | 3 | 5% | 1013 | 7% |
| QD4 - Isle of Wight | 52 | 0.4% | | | 52 | 0.4% |
| Total | 14008 | 100% | 55 | 100% | 14063 | 100% |

| Days between procedure | No. | % |
|------------------------|-----------|-------------|
| 0 days | 8 | 15% |
| 1 day | 12 | 22% |
| 2 days | 5 | 9% |
| 3-4 days | 10 | 18% |
| 5-7 days | 10 | 18% |
| 8-14 days | 7 | 13% |
| 15-30 days | 2 | 4% |
| Over 30 days | 1 | 2% |
| Total | 55 | 100% |