



# Outcomes after Elective Repair of Infra-renal Abdominal Aortic Aneurysm

A report from

The Vascular Society

**March 2012** 

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#### **Foreword**

Any surgeon or surgical team should be able to describe what they do, define how well they do it and share that information openly. This is an essential step in continuous quality improvement and the essence of professionalism.

This report which demonstrates a dramatic reduction in mortality for Abdominal Aortic Aneurysm Surgery over a relatively short period of time is a tribute to the Vascular Society, contributing Surgeons and their quality improvement programme.

It demonstrates how collecting, analysing and reflecting on clinical outcomes can result in significant improvements. Equally, it raises difficult questions related to volume and outcome, which cannot be avoided once the relationship has been confirmed.

The Society has campaigned for a national screening programme to reduce deaths from a condition that kills many older people each year. The evidence that Abdominal Aneurysms can be repaired safely provides reassurance that those patients found to have AAA will benefit from the service that the NHS provides.

Bruce E. Keogh

Medical Director of the National Health Service in England

### **Preface**

It is a pleasure to preface the first report prepared by the Vascular Society on outcomes following elective infra-renal abdominal aortic aneurysm (AAA) surgery in the United Kingdom. In the past, more than 50% of AAA operations were emergencies, usually because the aneurysm had ruptured. Overall; 85-90% of patients with ruptured AAA died and until recently, AAA was responsible for about 10,000 deaths each year in the UK. Accordingly, there has been a concerted drive towards identifying and treating as many patients as possible through elective interventions (initially by open surgery and latterly by endovascular or 'keyhole' techniques).

However, elective surgery is not without risk. In the 2008 VASCUNET report, the UK was reported to have the highest mortality rate following elective AAA repair (7.5%), when compared with European/Australasian countries. This was the catalyst for the Vascular Society to implement a Quality Improvement Programme (QIP) in 2009, whose aim was to halve the elective surgical mortality rate to 3.5% by 2014. This aspiration became even more important following the introduction of the NHS Abdominal Aortic Aneurysm Screening Programme (NAASP). The screening programme established clear standards of practice regarding procedural mortality rates which had to be audited and open to external scrutiny. In January 2012, the Healthcare Quality Improvement Partnership published its policy on reporting for the National Clinical Audit and Patient Outcomes Programme and asked for greater accessibility to national clinical audit data. Today's report on mortality rates after elective AAA repair complies fully with this request and enables colleagues, patients, commissioners and managers to compare practices around the country.

This report is based on data submitted by Vascular Society Members to the National Vascular Database (NVD) for the two year period 1<sup>st</sup> October 2008 to 30<sup>th</sup> September 2010. Before publication, each Vascular Unit and Hospital Information Governance Officer was invited (on three occasions) to verify its data before the database closed in January 2012. Data are presented for open/endovascular aneurysm repair (and overall mortality) for each UK Unit with a 'traffic light' system based on mortality standards set down by NAAASP (<6% mortality rate = green; 6.1-10% = amber and >10% = red). Some hospitals have no data for endovascular repair. This may be because that particular Unit only offers open surgery to all its patients (now increasingly rare), or because it either refers or performs endovascular surgery in an adjacent larger volume centre.

In addition, information is provided regarding the completeness of data submission to the NVD. This was determined by comparing the number of aortic procedures submitted to the NVD against national statistics submitted to the Department of Health through hospital coding. If the percentage submission is less than 100%, this means that not all aortic cases are being submitted to the NVD. If the percentage is >100%, this means that procedures are being missed by Hospital coders. Accordingly, the reader can match published mortality rates against the quality of data submission; i.e. Units with apparently excellent mortality

rates (but poor data submission) will inevitably attract more questions regarding reliability than those Units with low mortality and excellent rates of data submission.

Happily, the headline news is generally good. The mortality rate following 8380 elective infra-renal aortic procedures is 2.4%. This is well within the 3.5% target set down by our QIP and is compelling evidence of the commitment of UK Vascular Units to optimise patient safety. Interestingly, despite the significant reduction in overall mortality, there is still strong evidence that case volume influences outcome. The 31 highest volume hospitals (which perform 57% of all elective AAA procedures in the UK) have mortality rates that are under half those seen in the 32 hospitals with the lowest volume of AAA procedures. These data lend support to the current move towards performing major arterial surgery in larger volume units in order to further optimise outcomes.

There are, however, areas for concern regarding data submission quality and coding. It is a condition for treating NAAASP screened patients that data are submitted to the NVD. In the near future, it is also likely that this will be a condition for reimbursement from Commissioners. It is therefore essential that appropriate time is built into the consultant job plan to enable data to be submitted in a timely fashion to the NVD. In addition, there are major variations in quality regarding hospital coding, with some units having almost twice as many cases registered on the NVD as submitted nationally. Not only does this compromise reporting standards based on nationally collected data, but it must represent a huge loss of income to individual hospitals. Hopefully, this report will encourage Hospital Chief Executives to review coding standards in their own institutions in order to improve the quality of data submission.

In closing, I would like to thank all members of the Vascular Society for contributing to this report and it is our intention to repeat this audit every two years in order to monitor practice. It is also an appropriate moment to thank David Mitchell for his sterling work in leading and completing this challenging project in his role as Chairman of the VS Audit Committee.

Professor A Ross Naylor MD, FRCS

President of the Vascular Society of Great Britain and Ireland

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#### **Glossary**

AAA Abdominal Aortic Aneurysm. This is an abnormal expansion of the aorta. If left

untreated it may enlarge and rupture causing fatal internal bleeding

EVAR Endovascular Aneurysm Repair. A method of repair AAA by placing a graft within the

aneurysm from a small cut in the groin.

NAAASP National Abdominal Aortic Aneurysm Screening Programme. A programme funded

by the Department of Health to screen men over the age of 65 years for AAA

NHS The National Health Service

NVD National Vascular Database. An on-line database funded by The Vascular Society to

collect data on major vascular procedures. Surgeons can enter data about

procedures and outcomes.

OPCS Office of Population and Censuses Surveys. A procedural classification list for

describing procedures undertaken during episodes of care in the NHS

SUS Secondary User Services. This is an extract of the national Hospital Episode Statistics

data. It has had all patient identifiable information removed and describes, dates of admission and discharge, the name of the hospital, surgeon and the procedure codes for the episode of care. It does not provide information about mode of admission, so it is not possible to distinguish elective and emergency EVAR as they have the same

OPCS code.

### **About this report**

- This is the first Vascular Society public outcome report for elective Abdominal Aortic Aneurysm (AAA) surgery in the United Kingdom
- The report contains information about unit outcomes for elective AAA repair between October 2008 and September 2010. The report is organised in the same way for each unit (see explanation chart at the beginning of the report section)
- Data on outcomes is derived from surgeon collected data held on the Vascular Society's National Vascular Database (NVD)
- We are reporting raw data, <u>unadjusted for case-mix</u>. This should be borne in mind when comparing outcomes between units.
- We report data between 1/10/2008 and 30/09/2010. Cases included are those discharged from hospital or who died after AAA repair between these two dates.

#### **Executive summary**

- More AAA were repaired by EVAR than open surgery
- The overall elective mortality in this report is 2.4%. Mortality is 4.3% in 3584 open repairs and 0.9% in 4796 EVAR
- This report confirms the previously described volume:outcome relationship with lower mortality in higher volume units
- There is no evidence that any unit is a significant outlier for mortality
- We cannot report outcomes for a small number of units because they failed to provide any data
- Most units with data entry achieve the NAAASP standard (less than 6%) for operative mortality
- Surgeon contributed data entry to the NVD remains variable
- The validation exercise in 2011 uncovered evidence of mis-coding of SUS data by NHS Trusts

#### Recommendations

- NHS Trusts and their clinical teams are encouraged to undertake regular reviews of coding and clinical audit data.
- Where data are less than 100% clinicians and NHS Trusts should focus on improving data entry
- Where data exceed 100%, clinicians and NHS Trusts should undertake coding reviews with their clinical teams
- The Department of Health has stated that measuring outcomes through clinical audit is at the heart of high quality care. Surgeons (and hospital management) need to recognise this and allow time for collecting audit data within job plans.
- NHS Trusts are encouraged to adopt the care pathway and standards outlined in the Vascular Society's quality improvement programme. This can be accessed at <a href="https://www.vsqip.org.uk">https://www.vsqip.org.uk</a>. Information about the Vascular Society is available at
   www.vascularsociety.org.uk
- All team members should be involved in implementation of the pathway. A clinical lead should be nominated to monitor and report on the adoption of the pathway

### **Regional Data Maps**



Fig 1. Map of UK showing elective infra-renal AAA mortality by region for England and for the Celtic Nations.

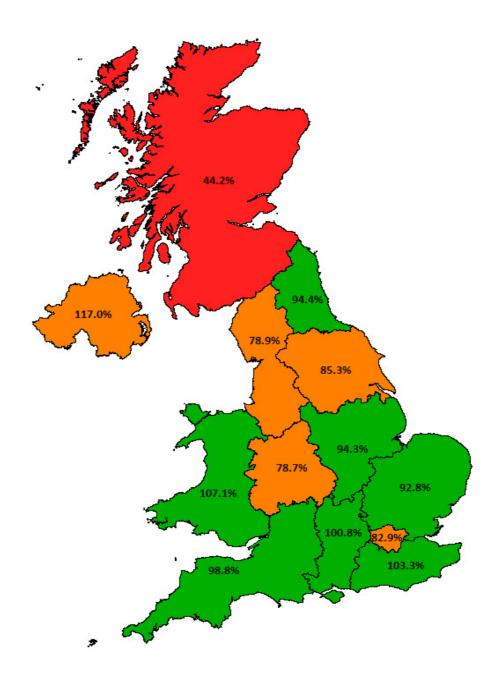


Fig 2. Map showing data contribution rates for elective infra-renal AAA data to the National Vascular Database, compared to administrative data for the regions of England and for the Celtic Nations.

### Variation in mortality by volume of surgery undertaken in units

This chart shows the variation in outcome for the volume of cases undertaken in a two year period. This chart is constructed using the data presented in this report. There is clear evidence of a volume: outcome relationship.

The dotted line is plotted at 2 standard deviations. There is no statistical evidence that any unit in this report is an outlier for mortality following elective infra-renal AAA repair (see the section on data governance at the end of the report)

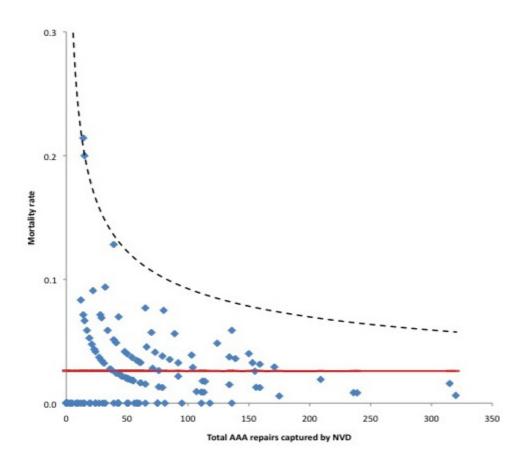


Fig 3. Chart plotting number of cases of elective AAA repairs in the NVD against mortality rate for the UK. The dotted line represents 2 standard deviations from the data norm and is the alert line for governance purposes

Overall 8380 patients are included in this report. Of these, 197 died giving a national elective hospital mortality rate of 2.4%. There is evidence that larger volume hospitals have better outcomes than smaller volume hospitals. There is no evidence of differing data submission quality, or outcomes comparing the northern part of the UK with the south.

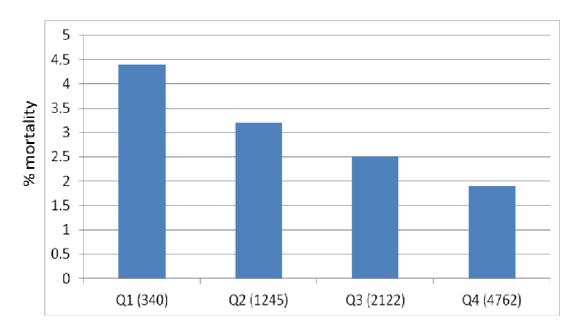


Fig 4. Bar chart showing mortality rate for hospital quartiles

This chart shows mortality rates for each quartile of hospital numbers providing care. Hospitals were ranked in order of the number of patients treated from lowest to highest. 32 consecutive hospitals make up each quartile, except Q4 which contains 31 hospitals. The numbers in brackets are the total number of patients treated by the hospitals in each quartile, for example in Q1 each hospital treated an average of 10.6 patients. Q2 has an average of 38.9, Q3 66.3 and Q4 153.65 patients.

### Specimen report

### Regional data

Data are reported regionally. The first page of each regional report is a chart displaying a comparison between the NVD data contribution and the SUS data for each hospital. This is derived by comparing OPCS codes for infra-renal AAA repair between the two datasets. The NVD column of data is coloured according to The VSGBI standards for data contribution quality in comparison to the number of cases recorded in the SUS data. These are:

•	No contribution	Black
•	Poor contribution (less than 76%)	Red
•	Average contribution (76 to 90%, or >110%)	Amber
•	Good contribution (91 to 110%)	Green

The second bar in dark red is the total number of cases in the SUS data for the hospital. This data is also given in each hospital table (see below).

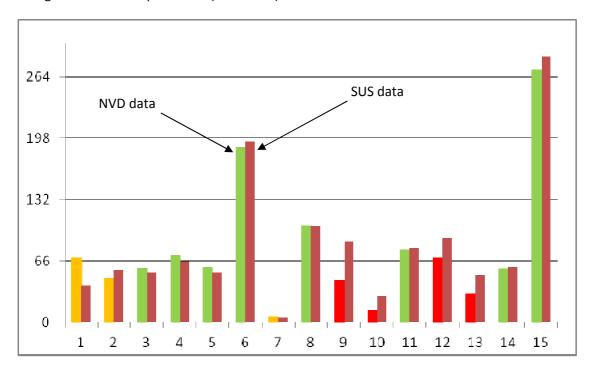


Fig 5. Illustrative regional bar chart showing NVD data and SUS data (or national equivalent for Celtic Nations) for each unit

#### **Unit data**

Data are also presented for each hospital in table format as shown below. The data contribution field is the numerical proportion of NVD data compared to SUS as shown in the bar chart above.

Hospitals: This will describe the hospital(s) providing the service
Region: The region of the UK in which the unit is situated

Data contribution: Described as "good" (green), "average" (amber), "poor" (red) or "nil" (black)

Mortality: Data are given as number of patients treated by open and endovascular

(EVAR) repair. The number of patients who died in hospital during the period of the audit is given. The death rate is expressed as a percentage for open repair and EVAR with an overall rate given for the unit. This last rate is colour coded according to NAAASP standard, <6% is green, 6.1 to 10% is amber and >10% is coded red. Where no data is submitted, the overall mortality field is

coloured black.

			Data contribution						
	Open			EV	AR		Over	all	
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	

Table 1. Showing table layout for reporting both unit mortality data and data contribution

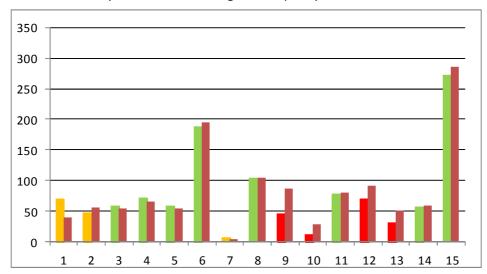
Units with data shown in pale grey have reported to us that their service is no longer provided within the Trust, but has been transferred to an adjacent higher volume centre.

### **Guidance for patients using this report**

- The data in this report is <u>not adjusted for individual patient risk (case mix)</u>. Bigger units tend to take on more complex (higher risk) cases and might be expected to have slightly worse outcomes. Larger units in this report have better outcomes than smaller units
- This report is not able to comment on the rate at which patients are turned down for AAA
  repair. A national snapshot audit in the autumn of 2011 showed that about 24% of patients
  assessed for AAA repair are turned down, mostly due to a lack of fitness to withstand
  surgery.
- Mortality data are likely to be most reliable when data are good. Units with poor data may have different outcomes when they report their data more fully
- This report describes elective infra-renal AAA death rates only, it does not comment on other aspects of care quality.
- Vascular services are being re-configured throughout the UK and the hospitals in each unit may change with time.
- Patients should expect to be able to request individualised mortality risk and information about unit outcomes.

### **East Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Units with no contribution are coded black. Users of this report should use this information together with the mortality data when deciding on the quality of service offered.



### Key

IXC y	
1	East and North Hertfordshire NHS Trust
2	Basildon and Thurrock University NHS Trust
3	Southend University Hospital NHS Foundation Trust
4	The Princess Alexandra Hospital NHS Trust
5	Ipswich Hospital NHS Trust
6	Norfolk and Norwich University Hospitals NHS Foundation Trust
7	Queen Elizabeth NHS Trust
8	Colchester Hospital University NHS Foundation Trust
9	Barking, Havering and Redbridge University Hospitals NHS Trust
10	Peterborough and Stamford Hospitals NHS Foundation Trust
11	Mid Essex Hospital Services NHS Trust
12	West Hertfordshire Hospitals NHS Trust
13	Barnet and Chase Farm Hospitals NHS Trust
14	Bedford Hospital NHS Trust
15	Cambridge University Hospitals NHS Foundation Trust

### East and North Hertfordshire NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Queen Elizabeth II Hospital, Lister Hospital

Region: East

Data contribution: average

			Data contribution						
Open			EVAR				Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 173% of HES
61	5	8.2	4	0	0.0	65	5	7.7	Standard: average

### Basildon & Thurrock NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Basildon & Thurrock University Hospital

Region: East

Data contribution: average

Case contribution	NVD – elective mortality												
to National Audit	erall	Ove		AR	EV	Open							
is 84% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: average	2.2	1	45	0.0	0	18	3.7	1	27				

# Southend University Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Southend University Hospital

Region: East

Data contribution: good

			Data contribution						
Open			EVAR				Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 107% of HES data.
19	0	0.0	32	1	3.1	51	1	2.0	Standard: good

### Princess Alexandra NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Princess Alexandra Hospital

Region: East

Data contribution: good

Case contribution	NVD – elective mortality												
to National Audit	rall	Ove		AR	EV		Open						
is 109% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: good	1.6	1	61	0.0	0	43	5.6	1	18				

### Ipswich Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Ipswich Hospital

Region: East

Data contribution: good

NVD – elective mortality												
EVAR	AR Overal											
y No Died Mort	Mortality No Died M	Aortality is 109% of HES data.										
0 28 0	0.0 56 0	0.0 Standard: good										

# Norfolk & Norwich University Hospital Foundation NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Norfolk & Norwich Hospital

Region: East

Data contribution: good

			Case contribution						
Open				EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 96% of HES
90	4	4.4	81	1	1.2	171	5	2.9	data. Standard: good

### Queen Elizabeth Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Kings Lynn

Region: East

Data contribution: average

			Data contribution						
	Open			EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 120% of HES
5	0	0.0	0	0	0.0	5	0	0.0	Standard: average

### Colchester Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Colchester General Hospital

Region: East

Data contribution: good

		Case contribution							
	Open EVAR Overall						to National Audit		
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 100% of HES
38	1	2.6	54	1	1.9	92	2	2.2	data. Standard: good

## Barking, Havering and Redbridge University Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: King George Hospital, Queens Hospital

Region: East

Data contribution: poor

NVD – elective mortality Data contribut								Data contribution	
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 51.7% of HES
11	0	0	30	1	3.3	41	1	2.4	Standard: poor

### Peterborough and Stamford Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Peterborough District Hospital

Region: East

Data contribution: poor

			Data contribution						
	Op	en		EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 41.4% of HES
12	1	8.3	0	0	0	12	1	8.3	Standard: poor

## Mid Essex Hospital Services NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Broomfield Hospital

Region: East

Data contribution: good

Data contribution		NVD – elective mortality							
to National Audit	rall	Ove		EVAR			Open		
is 97.5% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: good	0	0	75	0	0	47	0	0	28

## West Hertfordshire Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Watford General Hospital

Region: East

Data contribution: poor

Data contribution	NVD – elective mortality										
to National Audit	Overall			AR	EV		en	Ор			
is 75.8% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No		
Standard: poor	0	0	65	0	0	51	0	0	14		

### Barnet and Chase Farm Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Barnet Hospital, Chase Farm Hospital

Region: East

Data contribution: poor

Data contribution		NVD – elective mortality										
to National Audit	Overall			EVAR			Open					
is 60.8% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No			
Standard: poor	3.4	1	29	0	0	20	11.1	1	9			

### Bedford Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Bedford Hospital

Region: East

Data contribution: good

		l	NVD -	- electi	ve mortality	,			Data contribution				
	Ор	en		EV	AR		Ove	rall	to National Audit is 96.6% of HES				
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	data Standard: good				
20	1	5.0	30	0	0	50	1	2.0	Standard. good				

## Cambridge University Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Addenbrookes Hospital

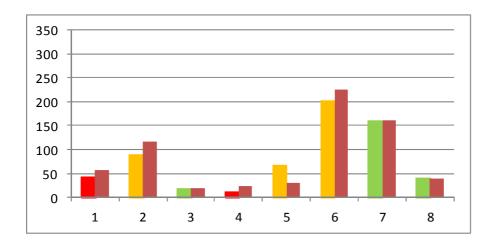
Region: East

Data contribution: good

Data contribution		NVD – elective mortality											
to National Audit	Overall			<b>AR</b>	EVA		en	Ор					
is 95.1% of HES data	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
	0.8	2	236	0.5	1	185	2.0	1	51				

### **East Midlands Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Hospitals with data marked in black made no contribution for the duration of this audit. Users of this report should use this information together with the mortality report for units when deciding on the quality of service offered.



#### Key

1	United Lincolnshire Hospitals NHS Trust
2	Derby Hospitals NHS Foundation Trust
3	Sherwood Forest Hospitals NHS Foundation Trust
4	Chesterfield NHS Trust Foundation
5	Kettering General Hospital NHS Foundation Trust
6	University Hospitals Of Leicester NHS Trust
7	Nottingham University Hospitals NHS Trust
8	Northampton General Hospital NHS Trust

### United Lincolnshire Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Lincoln County Hospital, Pilgrim Hospital

Region: East Midlands

Data contribution: poor

		ı	NVD -	- electi	ve mortality	/			Data contribution
	Open			EV	AR	Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 75.4% of HES
39	5	12.8	0	0	0.0	39	5	12.8	Standard: poor

### Derby Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Derby Hospital

Region: East Midlands

Data contribution: average

NVD – elective mortality Data contributi							Data contribution		
	Ор	en		EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 77.6% of HES
33	2	6.1	46	1	2.2	79	3	3.8	Standard: average

## Sherwood Forest Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: King's Mill Hospital, Newark Hospital

Region: East Midlands

Data contribution: good

Data contribution	NVD – elective mortality											
to National Audit	Overall			EVAR			Open					
is 100% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No			
Standard: good	20	3	15	0	0	0	20	3	15			

### Chesterfield NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Chesterfield Royal Hospital

Region: East Midlands

Data contribution: poor

Data contribution		NVD – elective mortality											
to National Audit	erall	Ove		AR	EV		en	Ор					
is 47.8% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: poor	0	0	10	0	0	0	0	0	10				

### Kettering Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Kettering General Hospital

Region: East Midlands

Data contribution: average

NVD – elective mortality Data contribution								Data contribution		
	Op	en		EV	AR		Ove	rall	to National Audit	
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 212.9% of HES	
46	0	0	4	0	0	50	0	0	data. Standard: average	

# University Hospitals of Leicester NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Leicester Royal Infirmary, Leicester General Hospital, Glenfield Hospital

Region: East Midlands

		NVD – elective mortality Data contribut						
Open			EVAR			Ove	rall	to National Audit
Died Mortali	No	No	Died	Mortality	No	Died	Mortality	is 89.8% of HES
1 2	49	126	0	0.0	175	1	0.6	Standard: average

## Nottingham University Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Nottingham City Hospital

Region: East Midlands

Data contribution: good

NVD – elective mortality Data contribution								Data contribution	
	Ор	en	EV	AR		to National Audit			
No E	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 100.6% of HES
20	2	10	94	0	0	114	2	1.8	data. Standard: good

## Northampton General Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Northampton General Hospital

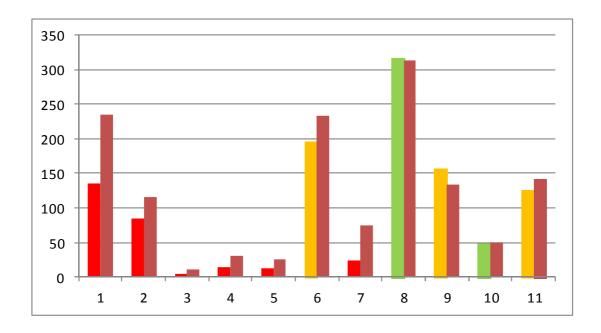
Region: East Midlands

Data contribution: good

Data contribution		NVD – elective mortality							
to National Audit	rall	Ove		AR	EV		Open		
is 102.5% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: good	2.7	1	37	0.0	0	23	7.1	1	14

### **London Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Units with no contribution are coded black. Users of this report should use this information together with the mortality data when deciding on the quality of service offered.



### Key

1	Imperial College Healthcare NHS Trust
2	University College London Hospitals NHS Foundation Trust
3	Ealing Hospital NHS Trust
4	Whipps Cross University Hospital NHS Trust
5	The Hillingdon Hospital NHS Trust
6	Guy's and St Thomas' NHS Foundation Trust
7	Barts and the London NHS Trust
8	St George's Healthcare NHS Trust
9	Royal Free Hampstead NHS Trust
10	North West London Hospitals NHS Trust
11	King's College Hospital NHS Foundation Trust

### Imperial College Healthcare NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: St Mary's Hospital, Charing Cross Hospital

Region: London

Data contribution: poor

Data contribution		NVD – elective mortality											
to National Audit	rall	Ove		AR	EV		en	Op					
is 57.4% of HES data	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: poor	0	0	118	0	0	95	0	0	23				

## University College London Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: University College Hospital

Region: London

Data contribution: poor

	NVD – elective mortality Data contribution							Data contribution	
	Op	en		EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 73% of HES data
8	1	12.5	63	1	1.6	71	2	2.8	Standard: poor

### Ealing Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Ealing Hospital

Region: London

Data contribution: poor

		I	NVD -	- electi	ve mortality	/			Data contribution
	Op	en		EV	AR		Ove	rall	to National Audit is 40% of HES data
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	
1	0	0	3	0	0	4	0	0	Standard: poor

## Whipps Cross University Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Whipps Cross University Hospital

Region: London

Data contribution: poor

			Data contribution									
	Ор	en	EVAN						to National Audit			
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 45.2% of HES data			
7	0	0	7	0	0	14	0	0	Standard: poor			

This unit has since merged with Barts and the London NHS Trust

### The Hillingdon Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Hillingdon Hospital

Region: London

Data contribution: poor

			Data contribution						
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 48% of HES data
12	0	0	0	0	0	12	0	0	Standard: poor

## Guy's and St Thomas' NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Guy's Hospital, St Thomas Hospital

Region: London

			Data contribution						
	Open			EVA	<b>AR</b>		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 83.7% of HES
8	0	0	187	1	0.5	195	1	0.5	data Standard: average

### Barts and the London NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal London Hospital, St Bartholomew's Hospital

Region: London

Data contribution: poor

Data contribution			/	ve mortality	– electi	NVD -	ı		
to National Audit	erall	Ove		EVAR			Open		
is 32.4% of HES data	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: poor	0	0	15	0	0	11	0	0	4

### St George's Healthcare NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: St Georges Hospital

Region: London

Data contribution: good

Data contribution		NVD – elective mortality											
to National Audit	rall	'AR Overall			EV	Open							
is 101% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: good	0.8	2	239	0	0	74	1.2	2	165				

AAA patients from Epsom and St Helier requiring intervention are also treated here

### Royal Free Hampstead NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Free Hospital

Region: London

		Data contribution							
Open EVAR Ov							Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 117.2% of HES
7	1	14.3	127	4	3.1	134	5	3.7	Standard: average

## North West London Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Northwick Park Hospital

Region: London

Data contribution: good

Data contribution		NVD – elective mortality									
to National Audit	rall	Ove	Open EVAR								
is 96% of HES data	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No		
Standard: good	2.4	1	41	2.6	1	39	0	0	2		

## Kings College Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

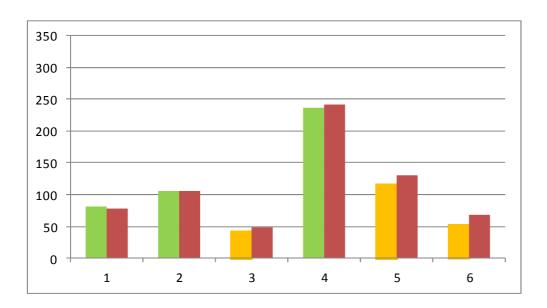
Hospitals: Kings College Hospital

Region: London

Data contribution		NVD – elective mortality										
to National Audit	rall	Ove	Open EVAR									
is 88% of HES data	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No			
Standard: average	0.8	1	125	0.9	1	117	0	0	8			

### **North East Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Hospitals with data marked in black made no contribution for the duration of this audit. Users of this report should use this information together with the mortality report for units when deciding on the quality of service offered.



### Key

1	County Durham and Darlington NHS Foundation Trust
2	City Hospitals Sunderland NHS Foundation Trust
3	Gateshead Health NHS Foundation Trust
4	The Newcastle Upon Tyne Hospitals NHS Foundation Trust
5	South Tees Hospitals NHS Foundation Trust
6	North Cumbria University Hospitals NHS Trust

### County Durham and Darlington NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: University Hospital of North Durham, Darlington Memorial Hospital

Region: North East

Data contribution: good

		ı	NVD -	- electi	ve mortality	,			Data contribution
	Ор	en		EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 103.8% of HES
48	3	6.3	25	0	0	73	3	4.1	Standard: good

## City Hospitals Sunderland NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Sunderland Royal Hospital

Region: North East

Data contribution: good

Data contribution		NVD – elective mortality											
to National Audit	erall	Ove	Open EVAR										
is 99.1% of HES	No Died Mortality			Mortality	Died	No	Mortality	Died	No				
Standard: good	3.5	3	85	2.9	2	70	6.7	1	15				

## Gateshead Health NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Queen Elizabeth Hospital

Region: North East

_				_	0 -				
		Data contribution							
	Ор	en		EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 89.6% of HES
9	0	0	30	2	6.7	39	2	5.1	Standard: average

### The Newcastle Upon Tyne Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Freeman Hospital, Royal Victoria Hospital

Region: North East

Data contribution: good

Data contribution		NVD – elective mortality										
to National Audit	rall	Open EVAR Overall										
is 97.5% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No			
Standard: good	1.9	4	209	0	0	153	7.1	4	56			

## South Tees Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: James Cook University Hospital,

Region: North East

Data contribution: average

		Data contribution							
	Ор	en		EV	VAR Overall			rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 89.3% of HES
19	1	5.3	88	0	0	107	1	0.9	Standard: average

## North Cumbria University Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

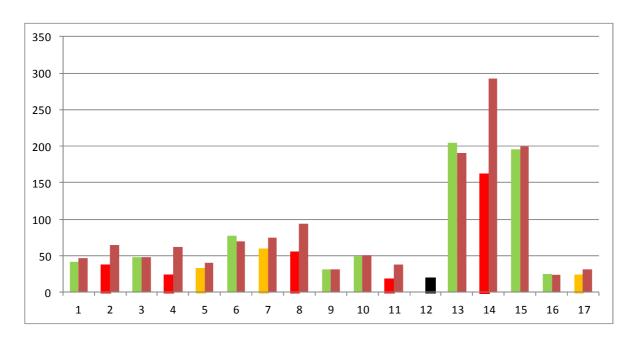
Hospitals: West Cumberland Hospital, Cumberland Infirmary

Region: North East

		Data contribution							
Open EVAR							Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 77.9% of HES
20	1	5.0	29	0	0	49	1	2.0	Standard: average

### **North West Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Hospitals with data marked in black made no contribution for the duration of this audit. Users of this report should use this information together with the mortality report for units when deciding on the quality of service offered.



#### Key

1	Tameside Hospital NHS Foundation Trust
2	Blackpool, Fylde and Wyre Hospitals NHS Foundation Trust
3	Royal Bolton Hospital NHS Foundation Trust
4	East Lancashire Hospitals NHS Trust
5	Wrightington, Wigan and Leigh NHS Foundation Trust
6	Pennine Acute Hospitals NHS Trust
7	University Hospitals Of Morecambe Bay NHS Trust
8	Lancashire Teaching Hospitals NHS Foundation Trust
9	Warrington and Halton Hospitals NHS Foundation Trust/North Cheshire NHS Trust
10	Wirral University Teaching Hospital NHS Foundation Trust

11	Aintree University Hospitals NHS Foundation Trust
12	Mid Cheshire Hospitals NHS Foundation Trust
13	Central Manchester University Hospitals NHS Foundation Trust
14	Royal Liverpool and Broadgreen University Hospitals NHS Trust
15	University Hospital Of South Manchester NHS Foundation Trust
16	Southport and Ormskirk Hospital NHS Trust
17	Countess Of Chester Hospital NHS Foundation Trust

## Tameside Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Tameside General Hospital

Region: North West

Data contribution: good

NVD – elective mortality Data contribut									Data contribution
	Open			EV	AR	Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 91.3% of HES data.
24	0	0	15	0	0	39	0	0	Standard: good

This unit has since merged with Pennine Acute Hospitals NHS Trust

# Blackpool, Fylde and Wyre Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Blackpool Victoria Hospital

Region: North West

Data contribution: poor

		Data contribution							
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 59.4% of HES
13	1	7.7	23	0	0	36	1	2.8	Standard: poor

# Royal Bolton Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Bolton Hospital,

Region: North West

			NVD -	- electi	ve mortality	,		Data contribution						
	Open			EV	AR	Overall			to National Audit					
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 100% of HES					
24	2	8.3	19	1	5.3	43	3	7.0	data. Standard: good					

## East Lancashire Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Burnley General Hospital, Royal Blackburn Hospital

Region: North West

Data contribution: poor

Data contribution	NVD – elective mortality Data contribut								
to National Audit	rall	Ove		EVAR			Open		
is 38.7% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: poor	0	0	24	0	0	20	0	0	4

# Wrightington, Wigan and Leigh NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Albert Edward Infirmary, Wrightington Hospital

Region: North West

Data contribution: average

			Data contribution						
	Ор	en		EV	AR		Ove	rall	to National Audit is 82.5% of HES data.
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	
16	2	12.5	16	1	6.3	32	3	9.4	Standard: average

### Pennine Acute Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Oldham Hospital

Region: North West

		ı	NVD -	- electi	ve mortality	<i>'</i>			Data contribution
	Open			EV	AR	Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 110% of HES data.
20	1	5.0	46	2	4.3	66	3	4.5	Standard: good

## University Hospitals of Morecambe Bay NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Lancaster Infirmary, Queen Victoria Hospital

Region: North West

Data contribution: average

	NVD – elective mortality Data contributi								Data contribution
	Open			EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 78.7% of HES
15	1	6.7	39	1	2.6	54	2	3.7	Standard: average

# Lancashire Teaching Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Preston Hospital

Region: North West

Data contribution: poor

	NVD – elective mortality Data contribu								Data contribution			
	Open			EV	AR	Overall			to National Audit			
No	Died	Mortality	No	Died	Mortality	is 58.5% of HES						
2	1	50.0	48	1	2.1	50	2	4.0	Standard: poor			

# Warrington and Halton Hospitals NHS Foundation Trust/North Cheshire NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Warrington Hospital, Halton Hospital

Region: North West

NVD – elective mortality									Data contribution
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 100% of HES
26	2	7.7	2	0	0	28	2	7.1	data. Standard: good

## Wirral University Teaching Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Arrowe Park Hospital, Clatterbridge Hospital

Region: North West

Data contribution: good

Data contribution	NVD – elective mortality Data contribu								
to National Audit	Overall			EVAR			Open		
is 98% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: good	4.2	2	48	0	0	3	4.4	2	45

# Aintree University Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: University Hospital Aintree, Walton Hospital

Region: North West

Data contribution: poor

Data contribution			/	ve mortality	- electi	NVD -	I		
to National Audit	Overall			AR	EV		Open		
is 50% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
	5.3	1	19	12.5	1	8	0	0	11

# Mid Cheshire Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Victoria Hospital (Northwich), Leighton Hospital

Region: North West

Data contribution: nil

			Data contribution						
	Op	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 0% of HES data.
0			0			0			Standard: nil

## Central Manchester University Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Manchester Royal Infirmary, St Mary's Hospital

Region: North West

Data contribution: good

Data contribution		NVD – elective mortality												
to National Audit	Open EVAR Overall													
is 107.4% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No					
Standard: good	3.3	5	153	1.6	2	127	11.5	3	26					

# Royal Liverpool and Broadgreen University Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: The Royal Liverpool University Hospital, Broadgreen Hospital

Region: North West

Data contribution: poor

Data contribution		NVD – elective mortality												
to National Audit	Open EVAR Overall													
is 55.3% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No					
Standard: poor	27         1         3.7         129         1         0.8         156         2         1.3													

# University Hospital Of South Manchester NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Wythenshawe Hospital

Region: North West

			Data contribution						
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 97.5% of HES data.
71	4	5.6	79	2	2.5	150	6	4.0	Standard: good

# Southport and Ormskirk Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Ormskirk and District General Hospital

Region: North West

Data contribution: good

Data contribution		NVD – elective mortality												
to National Audit	Open EVAR Overall													
is 104.2% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No					
	22 2 9.1 0 0 0 22 2 9.1													

# Countess of Chester Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

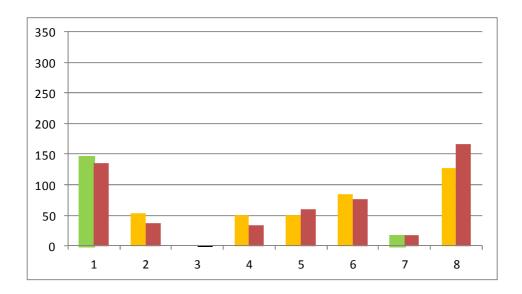
Hospitals: Countess of Chester Hospital

Region: North West

			Data contribution						
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 77.4% of HES
10	0	0	13	1	7.7	23	1	4.3	data. Standard: average

### **South Central Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Hospitals with data marked in black made no contribution for the duration of this audit. Users of this report should use this information together with the mortality report for units when deciding on the quality of service offered.



1	Southampton University Hospitals NHS Trust
2	Buckinghamshire Hospitals NHS Trust
3	Basingstoke and North Hampshire NHS Foundation Trust
4	Royal Berkshire NHS Foundation Trust
5	Heatherwood and Wexham Park Hospitals NHS Foundation Trust
6	Portsmouth Hospitals NHS Trust
7	Milton Keynes Hospital NHS Foundation Trust
8	Oxford Radcliffe Hospitals NHS Trust

## Southampton University Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Southampton General Hospital

Region: South Central

Data contribution: good

Data contribution		NVD – elective mortality												
to National Audit	Open EVAR Overall													
is 108.9% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No					
Standard: good	87 2 2.3 47 0 0 134 2 1.5								87					

## Buckinghamshire Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Wycombe Hospital, Stoke Mandeville Hospital

Region: South Central

Data contribution: average

			Data contribution						
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 145.9% of HES
33	1	Standard: average							

Basingstoke and North Hampshire NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Basingstoke and North Hampshire Hospital

Region: South Central

Data contribution: ni

			Data contribution						
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 0% of HES data
0	0 0 0								Standard: nil

This unit has since stopped performing AAA procedures and transfers their patients to Frimley Park Hospital

## Royal Berkshire NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Berkshire Hospital

Region: South Central

Data contribution: average

Data contribu	NVD – elective mortality												
Overall to National Au	Open EVAR Overall												
is 151.5% of H	Died	No	Mortality	Died	No	Mortality	Died	No					
data.  2.0 Standard: ave	1	49	0	0	34	6.7	1	15					

# Heatherwood and Wexham Park Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Heatherwood Hospital, Wexham Park Hospital

Region: South Central

Data contribution: average

			Data contribution						
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 83.3% of HES
13	0	data. Standard: average							

### Portsmouth Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Queen Alexandra Hospital, St Mary's Hospital

Region: South Central

Data contribution	NVD – elective mortality								
to National Audit	Overall			AR	EV		Open		
is 111.8% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: average	7.5	6	80	2.9	1	35	11.1	5	45

# Milton Keynes Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Milton Keynes Hospital

Region: South Central

Data contribution: good

	NVD – elective mortality Data contribution								
	Open			EV	AR	Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 94.4% of HES
14	1	7.1	1	0	0	15	1	6.7	Standard: good

# Oxford Radcliffe Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

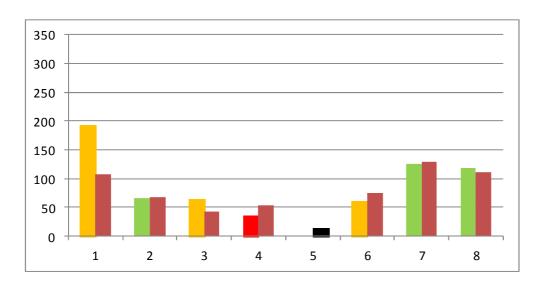
Hospitals: John Radcliffe Hospital

Region: South Central

		Data contribution							
Open				EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 76.5% of HES
52	0	0	59	1	1.7	111	1	0.9	Standard: average

### **South East Coast Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Hospitals with data marked in black made no contribution for the duration of this audit. Users of this report should use this information together with the mortality report for units when deciding on the quality of service offered.



1	East Kent Hospitals University NHS Foundation Trust
2	Western Sussex Hospitals NHS Trust
3	Medway NHS Foundation Trust
4	Ashford and St Peter's Hospitals NHS Trust
5	Surrey and Sussex Healthcare NHS Trust
6	East Sussex Hospitals NHS Trust
7	Frimley Park Hospital NHS Foundation Trust
8	Brighton and Sussex University Hospitals NHS Trust

## East Kent Hospitals University NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Kent and Canterbury Hospital

Region: South East Coast

Data contribution: average

NVD – elective mortality									Data contribution
Open				EVA	<b>AR</b>	Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 179.4% of HES data.
29	2	6.9	130	0	0	159	2	1.3	Standard: average

# Western Sussex Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: St Richards Hospital (Chichester), Worthing Hospital

Region: South East Coast

Data contribution: good

Data contribution	NVD – elective mortality Data contribution								
to National Audit	Overall			AR	EV		Open		
is 97.1% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: good	1.8	1	55	0	0	0	1.8	1	55

#### Medway NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Medway Maritime Hospital, Maidstone Hospital

Region: South East Coast

Data contribution	NVD – elective mortality								
to National Audit	Overall			AR	EV	Open			
is 148.8% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: average	0	0	58	0	0	17	0	0	41

## Ashford and St Peter's Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Ashford Hospital, St Peters Hospital Chertsey

Region: South East Coast

Data contribution: poor

		Data contribution							
	Open			EV	AR	Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 67.9% of HES
9	0	0	23	0	0	32	0	0	Standard: poor

# Surrey and Sussex Healthcare NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: East Surrey Hospital Region: South East Coast

Data contribution: nil

		I	NVD -	- electi	ve mortality	/			Data contribution
Open			EVAR			Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 0% of HES data
0			0			0			Standard: nil

### East Sussex Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Eastbourne General Hospital

Region: South East Coast

Data contribution	NVD – elective mortality								
to National Audit	Overall			AR	EV	Open			
is 80.3% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: average	3.3	2	61	2.6	1	38	4.3	1	23

# Frimley Park Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Frimley Park Hospital Region: South East Coast

Data contribution: good

Data contribution	NVD – elective mortality									
to National Audit	Overall			AR	EV		Open			
is 96.9% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No	
data. Standard: good	0.9	1	113	0	0	63	2.0	1	50	

# Brighton and Sussex University Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

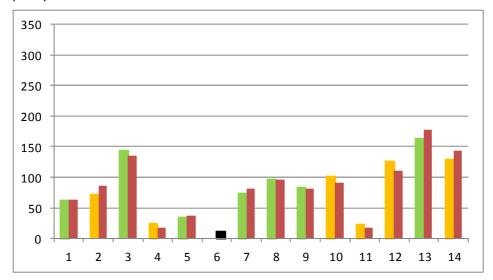
Hospitals: Royal Sussex County Hospital, Brighton General Hospital

Region: South East Coast

Data contribution	NVD – elective mortality									
to National Audit	Overall			AR	EV	Open				
is 106.3% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No	
Standard: good	0	0	95	0	0	69	0	0	26	

### **South West Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Hospitals with data marked in black made no contribution for the duration of this audit. Users of this report should use this information together with the mortality report for units when deciding on the quality of service offered.



1	Royal Devon and Exeter NHS Foundation Trust
2	Plymouth Hospitals NHS Trust
3	Gloucestershire Hospitals NHS Foundation Trust
4	Northern Devon Healthcare NHS Trust
5	Dorset County Hospital NHS Foundation Trust
6	Great Western NHS Foundation Trusts
7	University Hospitals Bristol NHS Foundation Trust
8	Royal Cornwall Hospitals NHS Trust
9	South Devon Healthcare NHS Foundation Trust
10	North Bristol NHS Trust
11	Salisbury NHS Foundation Trust
12	Taunton and Somerset NHS Foundation Trust
13	The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust
14	Royal United Hospital Bath NHS Trust

## Royal Devon and Exeter NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Devon & Exeter Hospital

Region: South West

Data contribution: good

		NVD – elective mortality Data contribut								
	Open			EV	AR	Overall			to National Audit	
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 96.9% of HES	
24	2	8.3	34	0	0.0	58	2	3.4	Standard: good	

### Plymouth Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Derriford Hospital

Region: South West

Data contribution: average

Data contribution	NVD – elective mortality								
to National Audit	erall	Ove		AR	EV		Open		
is 83.7% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: average	1.6	1	61	0.0	0	29	3.1	1	32

# Gloucestershire Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Gloucester Royal Hospital, Cheltenham General Hospital

Region: South West

Data contribution	NVD – elective mortality									
to National Audit	EVAR Overall						Open			
is 106.6% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No	
Standard: good	0.0	0	136	0.0	0	53	0.0	0	83	

# Northern Devon Healthcare NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: North Devon District Hospital

Region: South West

Data contribution: average

		Data contribution							
	Open			EV	AR	to National Audit			
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 141.2% of HES data.
21	1	4.8	0	0	0.0	21	1	4.8	Standard: average

This unit has since stopped performing AAA procedures and transfers their patients to Taunton and Somerset NHS Foundation Trust

# Dorset County Hospital NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Dorset County Hospital

Region: South West

Data contribution: good

Data contribution			/	ve mortality	- electi	NVD -	ļ		
to National Audit	Overall			AR	EV		Open		
is 94.6% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: good	5.9	2	34	0.0	0	0	5.9	2	34

# Great Western NHS Foundation Trusts: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Great Western Hospital, Fairford Hospital

Region: South West

Data contribution: nil

		ı	NVD -	- electi	ve mortality	,			Data contribution			
	Open			EV	AR		Ove	rall	to National Audit			
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 0% of HES data.			
0			0			0			Standard: nil			

## University Hospitals Bristol NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Bristol Royal Infirmary, Weston Super Mare General Hospital

Region: South West

Data contribution: good

	NVD – elective mortality Data contribut								
	Open			EV	AR	Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 91.4% of HES
40	4	10.0	30	0	0.0	70	4	5.7	Standard: good

# Royal Cornwall Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Cornwall Hospital

Region: South West

Data contribution: good

Data contribution			/	ve mortality	- electi	NVD -	I		
to National Audit	Overall			AR	EV		Open		
is 100% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: good	1.3	1	76	0.0	0	58	5.6	1	18

# South Devon Healthcare NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Torbay Hospital Region: South West

			Data contribution						
	Open			EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 103.7% of HES
16	0	0.0	59	0	0.0	75	0	0.0	Standard: good

### North Bristol NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Southmead Hospital, Frenchay Hospital

Region: South West

Data contribution: average

		I	NVD -	- electi	ve mortality	,			Data contribution
	Open			EV	AR	Overall			to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 111% of HES
48	3	6.3	41	2	4.9	89	5	5.6	data. Standard: average

### Salisbury NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Salisbury District Hospital

Region: South West

Data contribution: average

Data contribution	NVD – elective mortality Data contribu								
to National Audit	rall	Ove		AR	EV		Open		
is 127.8% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: average	5.9	1	17	0.0	0	0	5.9	1	17

# Taunton and Somerset NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Musgrove Park Hospital

Region: South West

Data contribution		NVD – elective mortality											
to National Audit	Open EVAR Overall												
	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
data. Standard: average	37 0 0.0 74 0 0.0 111 0 0.0												

### The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Bournemouth General Hospital, Poole Hospital

Region: South West

Data contribution: good

Data contribution		NVD – elective mortality											
to National Audit	Open EVAR Overall												
is 92.1% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
data. Standard: good	59 4 6.8 96 0 0.0 155 4 2.6												

### Royal United Hospital Bath NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

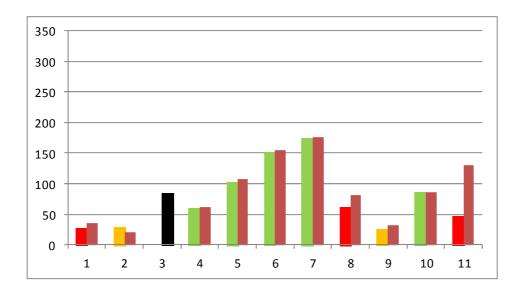
Hospitals: Royal United Hospital

Region: South West

Data contributi		NVD – elective mortality											
to National Aud	Open EVAR Overall												
is 90.3% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
	31 4 12.9 93 2 2.2 124 6 4.8												

### **West Midlands Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Hospitals with data marked in black made no contribution for the duration of this audit. Users of this report should use this information together with the mortality report for units when deciding on the quality of service offered.



1	Walsall Hospitals NHS Trust
2	Mid Staffordshire NHS Foundation Trust
3	University Hospital Birmingham NHS Foundation Trust
4	The Dudley Group Of Hospitals NHS Foundation Trust
5	Shrewsbury and Telford Hospital NHS Trust
6	Heart Of England NHS Foundation Trust
7	Worcestershire Acute Hospitals NHS Trust
8	University Hospitals Coventry and Warwickshire NHS Trust
9	Sandwell and West Birmingham Hospitals NHS Trust
10	The Royal Wolverhampton Hospitals NHS Trust
11	University Hospital Of North Staffordshire NHS Trust

### Walsall Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Manor Hospital Region: West Midlands

Data contribution: poor

			Data contribution						
	Op	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 75% of HES data.
1	0	0	23	0	0	24	0	0	Standard: poor

# Mid Staffordshire NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Stafford Hospital Region: West Midlands

Data contribution: average

Data contribution		NVD – elective mortality											
to National Audit	Open EVAR Overall												
is 133.3% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: average	3.7	1	27	0	0	5	4.5	1	22				

## University Hospital Birmingham NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Queen Elizabeth Hospital

Region: West Midlands

Data contribution: nil

			Data contribution						
	Op	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 0% of HES data.
0			0			0			Standard: nil

## The Dudley Group of Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Russell's Hall Hospital, Corbett Hospital, Guest Hospital

Region: West Midlands

Data contribution: good

Data contribution		NVD – elective mortality											
to National Audit	Open EVAR Overall												
is 96.8% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: good	0	0	58	0	0	45	0	0	13				

# Shrewsbury and Telford Hospital NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Shrewsbury Hospital, The Princess Royal Hospital

Region: West Midlands

Data contribution: good

Data contribution		NVD – elective mortality											
to National Audit	Open EVAR Overall												
is 96.3% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: good	47 3 6.4 45 0 0 92 3 3.3												

# Heart of England NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Good hope hospital, Solihull Hospital, Heartlands

Region: West Midlands

NVD – elective mortality											
Open EVAR Overall											
Mortality No Died Mortality No Died	Mortality is 98.1% of HES										
1 10.5 101 1 1.0 139	3.6 Standard: good										

## Worcestershire Acute Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Worcester Royal Hospital, Alexandra Hospital, Kidderminster Hospital

Region: West Midlands

Data contribution: good

Data contribution		NVD – elective mortality											
to National Audit	Open EVAR Overall												
is 98.9% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
Standard: good	3.1	5	159	0	0	38	4.1	5	121				

# University Hospitals Coventry and Warwickshire NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: University Hospital Coventry

Region: West Midlands

Data contribution: poor

		Data contribution							
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	is 75.3% of HES	
32	1	3.1	23	0	0	55	1	1.8	Standard: poor

# Sandwell and West Birmingham Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: City Hospital, Birmingham & Sandwell Hospital

Region: West Midlands

		Data contribution							
	Ор	en	AR		Ove	rall	to National Audit		
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 81.3% of HES
15	1	6.7	9	0	0	24	1	4.2	Standard: average

## The Royal Wolverhampton Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: New Cross Hospital Region: West Midlands

Data contribution: good

Data contribution	NVD – elective mortality								
to National Audit	rall	Ove		EVAR			Open		
is 100% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: good	2.6	2	76	0	0	34	4.8	2	42

# University Hospital Of North Staffordshire NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

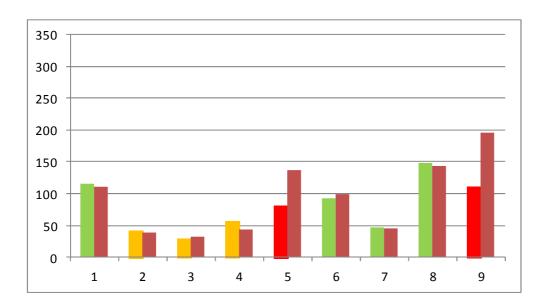
Hospitals: University Hospital of North Staffordshire, City General Hospital

Region: West Midlands

		Data contribution										
	Open			EV	AR		Ove	rall	to National Audit			
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 36.2% of HES			
9	0	0	34	0	0	43	0	0	Standard: poor			

### **Yorkshire Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Hospitals with data marked in black made no contribution for the duration of this audit. Users of this report should use this information together with the mortality report for units when deciding on the quality of service offered.



1	Doncaster and Bassetlaw Hospitals NHS Foundation Trust
2	Mid Yorkshire Hospitals NHS Trust
3	Northern Lincolnshire and Goole Hospitals NHS Foundation Trust
4	Bradford Teaching Hospitals NHS Foundation Trust
5	Leeds Teaching Hospitals NHS Trust
6	York Hospitals NHS Foundation Trust
7	Calderdale and Huddersfield NHS Foundation Trust
8	Hull and East Yorkshire Hospitals NHS Trust
9	Sheffield Teaching Hospitals NHS Foundation Trust

## Doncaster and Bassetlaw Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Doncaster Royal Infirmary, Bassetlaw Hospital

Region: Yorkshire

Data contribution: good

		Data contribution							
	Open			EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 103.6% of HES
47	3	6.4	56	1	1.8	103	4	3.9	data. Standard: good

### Mid Yorkshire Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Pindersfield General Hospital

Region: Yorkshire

Data contribution: average

		Data contribution						
Open	EVAR				Ove	rall	to National Audit	
Died Mortality	No	No	Died	Mortality	No	Died	Mortality	is 110.5% of HES
0 0	18	24	0	0	42	0	0	data. Standard: average

# Northern Lincolnshire and Goole Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Goole and District Hospital

Region: Yorkshire

Data contribution	NVD – elective mortality Da								
to National Audit	rall	Ove		EVAR			Open		
is 90.6% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No
Standard: average	0	0	27	0	0	0	0	0	27

## Bradford Teaching Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Bradford Royal Infirmary

Region: Yorkshire

Data contribution: average

		Data contribution							
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 129.5% of HES
31	0	0	20	0	0	51	0	0	Standard: average

# Leeds Teaching Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Leeds General Infirmary

Region: Yorkshire

Data contribution: poor

Data contribution	NVD – elective mortality										
to National Aud	rall	Ove		EVAR			Open				
is 59.1% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No		
	2.0	1	51	0	0	33	5.6	1	18		

# York Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: York Hospital Region: Yorkshire

NVD – elective mortality									Data contribution
	Open			EV	AR		Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 92.9% of HES
36	1	2.8	43	0	0	79	1	1.3	data. Standard: good

# Calderdale and Huddersfield NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Calderdale Royal Hospital, Huddersfield Royal infirmary

Region: Yorkshire

Data contribution: good

Data contribution	NVD – elective mortality									
to National Audit	Overall			EVAR			Open			
is 104.4% of HES data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No	
	4.9	2	41	0	0	12	6.9	2	29	

# Hull and East Yorkshire Hospitals NHS Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Hull Royal Infirmary

Region: Yorkshire

Data contribution: good

Data contribution		NVD – elective mortality										
to National Audit	rall	Ove		EVAR			Open					
is 104.2% of HES	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No			
Standard: good	5.9	8	136	2.4	1	41	7.4	7	95			

# Sheffield Teaching Hospitals NHS Foundation Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

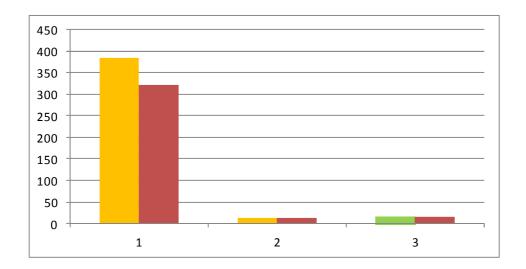
Hospitals: Northern General Hospital

Region: Yorkshire

		Data contribution							
	Op	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	is 56.6% of HES data.	
91	3	3.3	13	0	0	104	3	2.9	Standard: poor

### **Northern Ireland Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Units with no contribution are coded black. Users of this report should use this information together with the mortality data when deciding on the quality of service offered.



1	Belfast Health and Social Care Trust
2	Southern Health and Social Care Trust
3	Western Health and Social Care Trust

## Belfast Health and Social Care Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Belfast City Hospital, Royal Victoria Hospital

Region: Northern Ireland

Data contribution: average

Data contribution	NVD – elective mortality												
to National Aud	Open EVAR Overall												
ortality data.	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No				
1.6 Standard: avera	137 5 3.6 178 0 0 315 5 1.6								137				

# Southern Health and Social Care Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Craigavon Area Hospital

Region: Northern Ireland

Data contribution: average

		Data contribution							
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 85.7% of HES
9	0	Standard: average							

Western Health and Social Care Trust: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Altnagelvin Area Hospital

Region: Northern Ireland

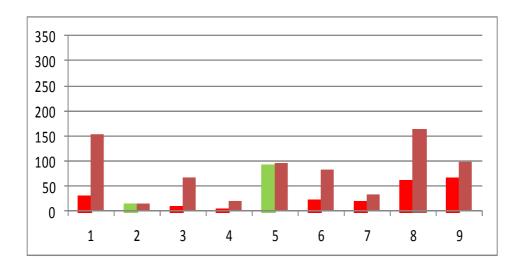
Data contribution: good

	ta com								
		Data contribution							
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 93.8% of HES
14	3	21.4	0	0	0	14	3	21.4	Standard: good

This unit has since stopped performing AAA procedures and transfers their patients to Belfast

### **Scotland Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Units with no contribution are coded black. Users of this report should use this information together with the mortality data when deciding on the quality of service offered.



1	NHS Greater Glasgow & Clyde
2	NHS Dumfries and Galloway
3	NHS Lanarkshire
4	NHS Ayrshire & Arran
5	NHS Grampian
6	NHS Highland
7	NHS Forth Valley
8	NHS Lothian
9	NHS Tayside + NHS Fife

### NHS Greater Glasgow & Clyde: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Southern General Hospital, Western Infirmary, Glasgow Royal Infirmary

Region: Scotland

Data contribution: poor

		Data contribution							
	Op	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 20.4% of HES
16	0	0.0	14	0	0.0	30	0	0.0	
									Standard: poor

#### NHS Dumfries and Galloway: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Dumfries & Galloway Royal Infirmary

Region: Scotland

Data contribution: good

Data contribution	NVD – elective mortality											
to National Audit	Open EVAR Overall											
is 107.1% of HES data	Mortality	Died	No	Mortality	Died	No	Mortality	Died	No			
Standard: good	14   1   71   0   0   14   1   71											

#### NHS Lanarkshire: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Wishaw General Hospital, Hairmyres Hospital

Region: Scotland

		Data contribution							
	Op	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 13.2% of HES
0									Standard: poor

### NHS Ayrshire & Arran: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Ayr Hospital Region: Scotland

Data contribution: poor

		Data contribution							
	Op	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 14.3% of HES
1	0	0.0	0	0	0.0	1	0	0.0	
									Standard: poor

### NHS Grampian: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Aberdeen Royal Infirmary

Region: Scotland

Data contribution: good

ective mortality Data	Data contr	ibution
LVAN		
ea   Mortality   No   Diea   Mortality	Mortality is 97.9% of	HES
0 0 0 81 0 0 0 0		good

### NHS Highland: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Raigmore Hospital

Region: Scotland

		Data contribution							
	Ор	to National Audit							
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 26.8% of HES
14	0	0.0	5	0	0.0	19	0	0.0	Standard: poor

### NHS Forth Valley: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Stirling Royal Infirmary

Region: Scotland

Data contribution: poor

		Data contribution							
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 63.6% of HES
20	0	0.0	0	0	0.0	20	0	0.0	data Standard: poor

### NHS Lothian: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Edinburgh Royal Infirmary, Royal Victoria Hospital

Region: Scotland

Data contribution: poor

		ı	NVD -	- electi	ve mortality	/			Data contribution
	Open			EVAR			Ove	rall	to National Audit is 37.2% of HES
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	data
44	2	4.5	16	0	0.0	60	2	3.3	Standard: poor

### NHS Tayside + NHS Fife: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

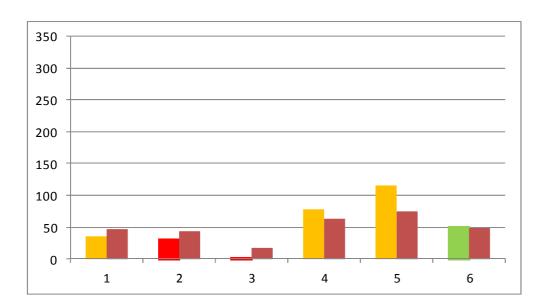
Hospitals: Ninewells Hospital, Queen Margaret Hospital

Region: Scotland

		Data contribution							
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 67.7% of HES
28	0	0.0	32	0	0.0	60	0	0.0	data Standard: poor

### **Wales Region Data quality**

Data entry for national clinical audit is shown in coloured bars to the left of the corresponding Trust data (in pink). Data contribution is colour coded as: Green = good, Amber = average, Red = poor. Units with no contribution are coded black. Users of this report should use this information together with the mortality data when deciding on the quality of service offered.



1	Cardiff and Vale University Health Board
2	Cwm Taf University Health Board
3	Hywel Dda Health Board
4	Abertawe Bro Morgannwg University Health Board
5	Betsi Cadwaladr University Health Board
6	Aneurin Bevan Health Board

## Cardiff and Vale University Health Board: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: University Hospital of Wales

Region: Wales

Data contribution: average

NVD – el	Data contribution		
Open	EVAR	Overall	to National Audit
Died Mortality No D	ied Mortality No	Died Mortality	is 76.6 of HES data
0 0 18	1 5.6 31	1 3.2	Standard: average

### Cwm Taf University Health Board: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Glamorgan Hospital

Region: Wales

Data contribution: poor

		Data contribution							
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 72.7% of HES
17	2	11.8	12	0	0	29	2	6.9	data Standard: poor

### Hywel Dda Health Board: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Prince Philip Hospital

Region: Wales

			NVD -	- electi	ve mortality	,			Data contribution
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 17.6% of HES
0	0	0	3	0	0	3	0	0	Standard: poor

# Abertawe Bro Morgannwg University Health Board: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Princess of Wales Hospital, Bridgend Morriston Hospital, Swansea

Region: Wales

Data contribution: average

		ı	NVD -	- electi	ve mortality	<i>'</i>			Data contribution
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 123.8% of HES
44	1	2.3	21	0	0	65	1	1.5	Standard: average

# Betsi Cadwaladr University Health Board: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Glan Clwyd Hospital, Wrexham Maelor Hospital, Ysbyty Gwynedd

Hospital

Region: Wales

Data contribution: average

		Data contribution							
	Open			EVAR			Ove	rall	to National Audit
No	Died	Mortality	No	Died	Mortality	No	Died	Mortality	is 154.7% of HES
73	2	2.7	39	0	0.0	112	2	1.8	Standard: average

### Aneurin Bevan Health Board: Elective Abdominal Aortic Aneurysm 1/10/2008 to 30/09/2010

Hospitals: Royal Gwent Hospital

Region: Wales

NVD – elective mortality Data contribution						
EVAR	EVAR			Open		
ied Mortality N	No Died	М	Died	No		
0 0.0 4	30 0		0	13		

#### Data validation and analysis

- Data were sent to surgical leads in each vascular unit in the spring of 2011. A request was
  made to share this data within each vascular team and for teams/trusts to validate their
  data. The same request for data validation was sent to the Information Governance lead for
  each NHS Trust undertaking AAA surgery.
- A second request was sent out in the summer of 2011 asking each vascular unit to check that the data submitted to the NVD and via SUS were correct.
- We provided each vascular unit and the information governance leads for the unit's hospital with a summary of the data submitted to the NVD as well as a summary of the SUS (or Celtic nation equivalent) data for the same unit and same time period.
- Data were based on OPCS codes: L19.4, L19.5, L19.6, L19.8, L27.1,L27.5, L27.6, L27.8, L27.9,
   L28.1, L28.5, L28.6, L28.8, L28.9
- Units were told that the operative mortality data would be published in early 2012.
- Units were encouraged to update the data they held on the national vascular database
- SUS data was obtained for the two year period for England. Patient Episode Data for Wales, Scotland and N Ireland was initially only available for the first year. We received the second year of data in the autumn of 2011. This was sent out to units in early December.
- All units throughout the UK were then contacted for a third time, following which final amendments to the data were allowed.
- The database was closed for analysis on 16<sup>th</sup> January 2012. The dataset on that day forms the basis of this report.
- We report outcomes for patients undergoing elective infra-renal AAA surgery after elective admission (using these fields in the NVD to define the cases included in the audit). The data exclude all supra-renal and thoracic aortic aneurysms.
- Outcome data are reported by actual number of cases treated and percentage mortality.
- The overall mortality for each unit is graded according to the standards set out by the National Abdominal Aortic Screening Programme (NAAASP)
- In order to assess data quality we also report the number of cases submitted to the NVD compared to the number of NHS Trust submitted cases in the SUS (or Celtic nation equivalent) data. This figure is derived by comparing OPCS codes given above for elective open surgical repair and EVAR between the two datasets.
- As a number of units were undertaking emergency infra-renal EVAR during this audit, we
  were unable to use the SUS data to describe the outcome of elective infra-renal AAA repair.
  This was due to mixing of emergency cases (that have a much higher risk) within the SUS
  dataset.

Data quality is colour coded using the approved Vascular Society standard

#### Data governance

- Data is regularly reviewed by the Audit committee chair. Any outlying performance is reported to the Vascular Society professional standards committee for further evaluation.
- The committee has a clear governance procedure to be followed in the event of outlying data. The first step is to request a formal data review. Outlying performance, or non-contribution of data is notified to the Medical director of the unit concerned with a recommendation to review practice and procedures. This is accompanied by a recommendation not to undertake the procedure of concern until this process is complete. The analysis standard is the same as that used by the Society of Cardiovascular and Thoracic Surgeons. Outlying performance reviews are triggered at 2 standard deviations from the mean.
- The Medical Directors of units that have failed to contribute, and those with mortality rates over 10% (coloured red) have been contacted.