

## **HEART FAILURE IN NORTH WEST LONDON**

### **Heart failure admissions: 2001/2 – 2003/4**

- 1,916 emergency admissions per year (105.6 per 100,000, or 611.3 per 100,000 among those aged 60+)
- Rate increased with age & was slightly higher among males
- Rates highest in Hounslow and lowest in Kensington and Chelsea
- Rates not particularly different between White, Black/Black British or Asian/Asian British ethnic groups

### **In-hospital deaths of heart failure patients: 2001/2 – 2003/4**

- 14.5% of patients died in hospital (278 deaths per year)
- Rate rose with age & was higher among males in older age groups
- 25% of male patients aged 85+ died in hospital
- Highest in Hounslow (17.1%) & lowest in Brent (9.7%)
- Particularly low among Black/Black British patients (6.2%)
- Highest in West Middlesex University NHS Trust (21.4%) & lowest in North West London Hospitals NHS Trust (10.4%)

### **Length of stay of heart failure patients: 2001/2 – 2003/4**

- 27,362 bed-days per year for heart failure
- Length of stay ranged from 0 to 357 days, peaking at 5-9 days, with a mean of 14.7 days and a median of 9 days
- Mean higher among females than males & increased with age
- Mean highest in Hammersmith and Fulham (20.3 days), lowest in Harrow (11.3 days)
- Mean highest among white patients (15.6 days) & lowest among Asian/Asian British patients (12.3 days)
- Mean highest in Hammersmith Hospitals NHS Trust (20.8 days) & lowest in North West London Hospitals NHS Trust (10.8 days)
- Mean much higher among patients that died in hospital (21.3 days) than patients that did not die (13.6 days)

### **Heart failure deaths: 2004**

- Commonly underreported as underlying cause of death
- 250 heart failure deaths among NWL residents (13.6 per 100,000, or 148.6 per 100,000 among those aged 70+)
- Over ½ occurred among people aged 85+ & rate was slightly higher among females than males
- Mortality rate highest in Harrow and lowest in Westminster
- Age-standardised rate highest in Hounslow and lowest in Westminster

### **LVD prevalence & primary care management: March 2005**

- 5,153 patients on CHD and LVD disease register (prevalence of 0.25%)
- It is estimated that between 7,602 and 21,413 people suffer from heart failure in North West London
- 7 practices have no LVD disease register, and over ¼ of GP practices have fewer than 5 LVD patients
- 88.7% of LVD patients have had their diagnosis confirmed
- 85.6% of LVD patients are treated with ACE inhibitors or A2 antagonists

## **1. HEART FAILURE ADMISSIONS**

The following criteria were used when extracting admissions from the Admitted Patient Care (APC) database:

- 2001-2002, 2002-2003, 2003-2004
- Heart failure as primary diagnosis (ICD10 = I50)
- London Borough residence code
- Only those admitted as an emergency (admission method code 20-29)
- Spells, rather than Finished Consultant Episodes (spells are equivalent to admissions)

### **1.1 Admissions by age and sex**

There were 5,749 admissions over the 3 years. The number of admissions was higher among males than females at all ages, except among those aged 80+. Among those aged 85+, the number of admissions among males was approximately half the number among females.

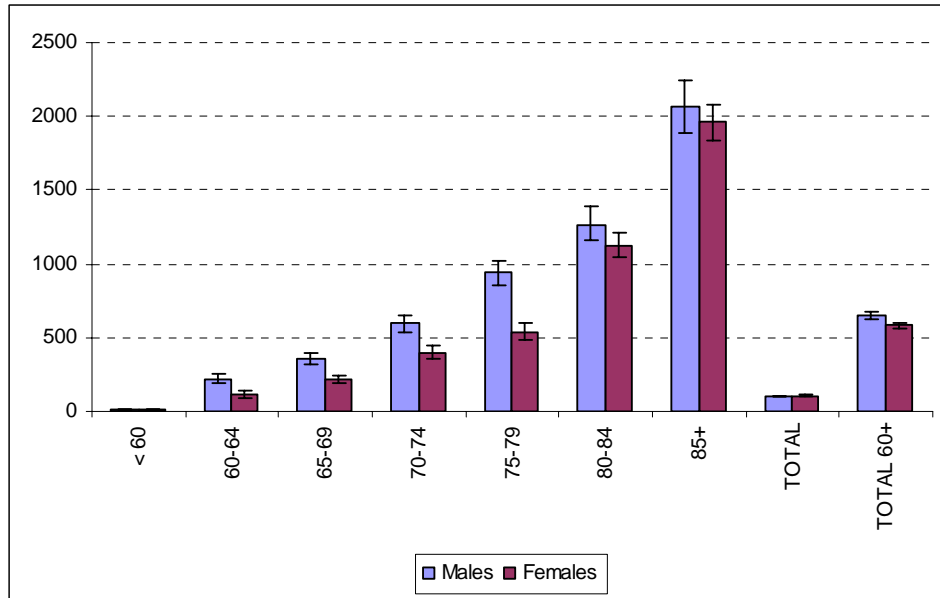
Over 90% of admissions were among those aged 60+.

There was no consistent direction of change in the number of admissions per year over the 3 years.

Number of heart failure admissions per year, and admission rate (per 100,000), by age & sex: 2001/2 – 2003/4

<b>Age group</b>	<b>Number</b>		<b>Admission rate</b>	
	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
< 60	101	61	13.0	8.1
60-64	74	42	219.6	114.8
65-69	110	70	359.6	215.8
70-74	147	112	595.1	395.8
75-79	167	132	938.2	541.8
80-84	161	222	1267.7	1128.6
85+	171	347	2064.3	1958.6
<b>TOTAL</b>	<b>931</b>	<b>986</b>	<b>103.1</b>	<b>108.1</b>
<b>TOTAL 60+</b>	<b>830</b>	<b>925</b>	<b>650.0</b>	<b>581.0</b>

Heart failure admission rates (per 100,000), by age & sex: 2001/2 – 2002/3



The heart failure admission rate increased substantially with age, and was higher among males than females in every age group, although the rates were relatively similar in the older age groups.

## 1.2 Admissions by borough of residence

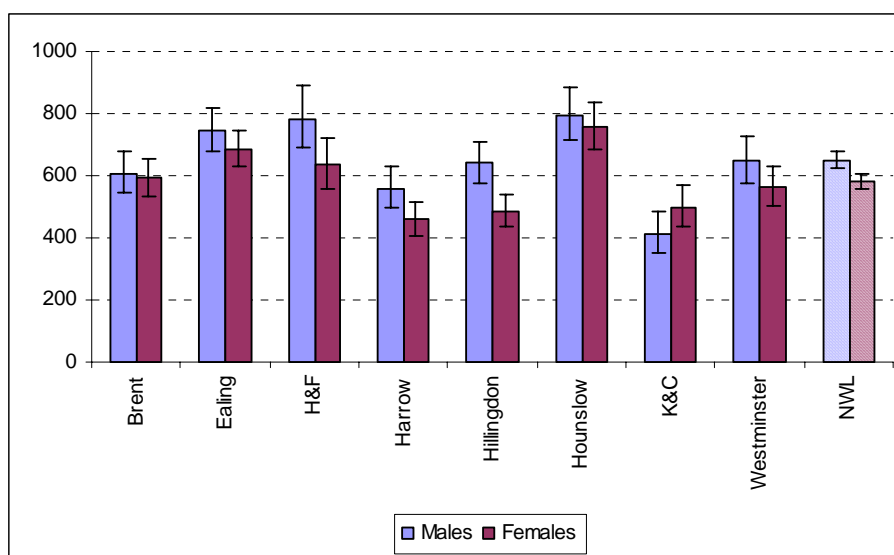
Number of heart failure admissions per year, and admission rate (per 100,000), by borough of residence: 2001/2 – 2003/4

Borough	Number of admissions per year	Admission rate	Admission rate: Age 60+	Age-standardised admission rate
Brent	274	102.3	598.6	96.0
Ealing	361	118.6	711.5	106.8
H&F	179	102.6	704.0	104.5
Harrow	218	103.3	500.8	71.3
Hillingdon	264	106.8	551.0	79.3
Hounslow	269	126.5	775.0	116.5
K&C	135	77.4	461.6	63.0
Westminster	215	97.2	601.8	87.9
<b>NWL SHA</b>	<b>1916</b>	<b>105.6</b>	<b>611.3</b>	<b>90.6</b>

Admission rates were highest in Hounslow (126.5 per 100,000) and lowest in Kensington and Chelsea (77.4 per 100,000).

Admission rates among those aged 60+ were highest in Hounslow (775.0 per 100,000) and lowest in Kensington and Chelsea (461.6 per 100,000).

Heart failure admission rates (per 100,000) among those aged 60+, by borough of residence and sex: 2001/2 – 2003/4



Among those aged 60+, rates were higher among males than females in most boroughs. In Kensington and Chelsea, rates were higher among females than males and, in Brent and Hounslow, rates were similar among males and females.

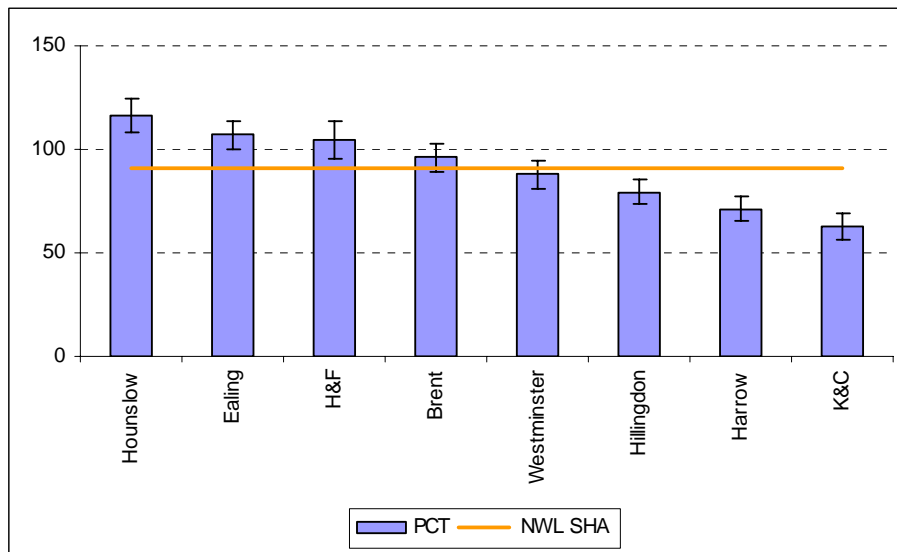
Male and female age-specific admission rates differed in very different ways between boroughs:

- Hounslow and Westminster had similar age & sex distributions;
- In Hillingdon, rates were much higher among males than females at all ages above 60, especially at age 85+;
- In Ealing and Harrow, rates were much higher among males than females aged 75-79, with rates for males increasing substantially from age 75, and rates for females increasing substantially from age 80;
- In Kensington and Chelsea, the rate among males aged 85+ was similar to those aged 80-84, but the rate among females aged 85+ was substantially higher than at age 80-84;
- In Brent in particular, the rate among those aged 85+ was substantially higher than among younger age groups.

Within age groups, rates varied quite widely between boroughs. Among those aged 85+, for example:

- Rates among males ranged from 967 per 100,000 in Kensington and Chelsea (29 admissions), to 2,611 per 100,000 in Hammersmith and Fulham (47 admissions);
- Rates among females ranged from around 1,500 per 100,000 in Hillingdon and Harrow (127 and 135 admissions), to 2444 per 100,000 in Hounslow (132 admissions).

Age-standardised heart failure admission rates (per 100,000), by borough of residence: 2001/2 – 2003/4



Using age-standardisation, heart failure admission rates were reduced in all boroughs except in Hammersmith & Fulham, where there was little change. The reduction in rates was largest in Harrow and Hillingdon.

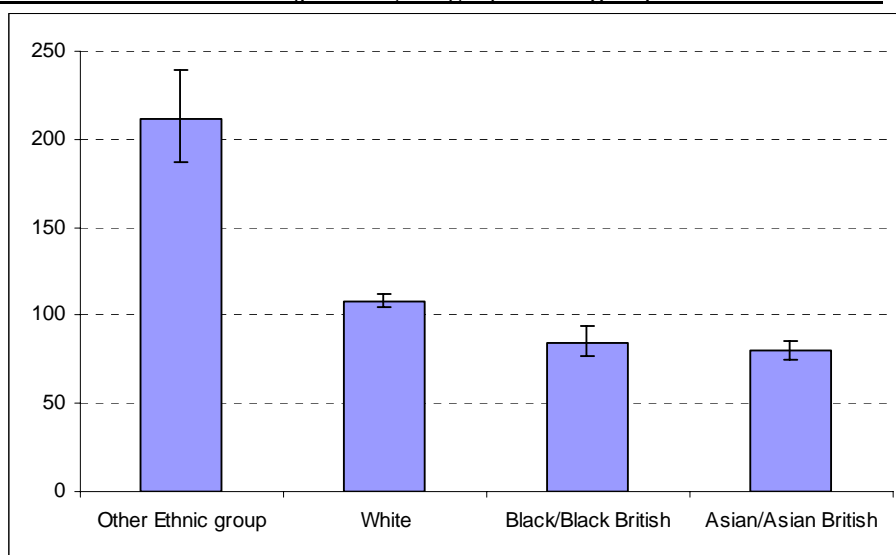
Age-standardised admissions rates were highest in Hounslow (116.5 per 100,000) and lowest in Kensington and Chelsea (63 per 100,000).

### 1.3 Admissions by ethnic group

Number of heart failure admissions per year, and admission rate (per 100,000), by ethnic group: 2001/2 – 2003/4

Ethnic group	Number	Admission rate
White	1226	108.1
Mixed	< 10	11.9
Asian/Asian British	259	79.8
Black/Black British	129	84.8
Chinese	< 5	16.1
Other ethnic group	89	211.8
Not stated/Blank	203	---
<b>TOTAL</b>	<b>1916</b>	<b>100.6</b>

Heart failure admission rates (per 100,000), by ethnic group: 2001/2 – 2003/4



The ethnicity status of 10.6% of patients was either not stated or blank. Patients from mixed or Chinese ethnic groups have been excluded, due to low numbers of admissions.

The high rate of heart failure admissions among patients from 'other' ethnic groups is likely to have been influenced by both low population numbers among older age groups and, in particular, by miscoding of patients. Although the rate among white patients was slightly higher than among Black/Black British or Asian/Asian British patients, the difference was not substantial.

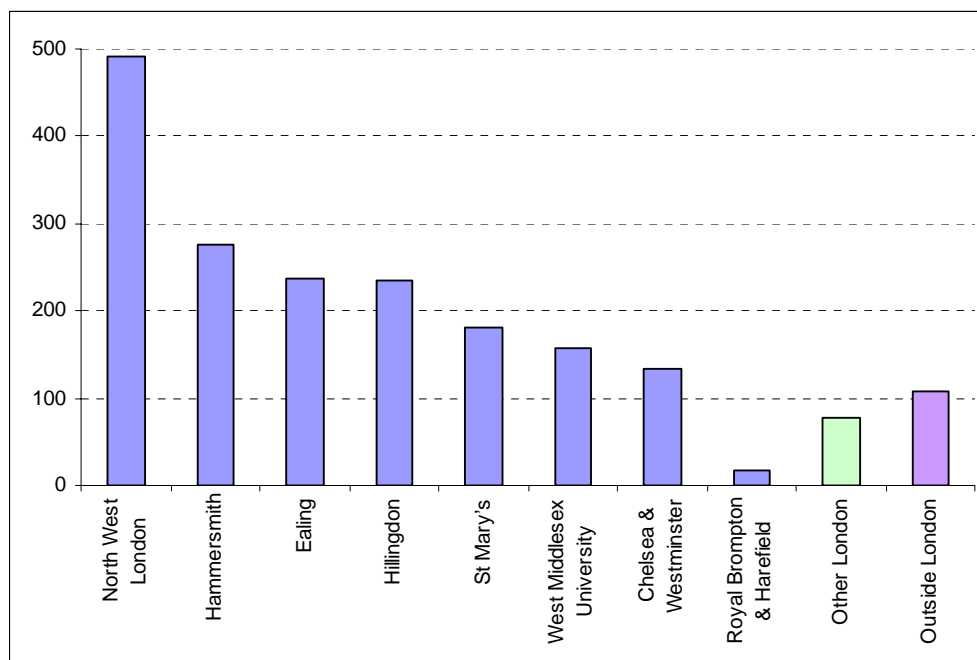
For Black/Black British residents, Westminster and Hammersmith and Fulham had particularly high admission rates and Harrow had a particularly low admission rate. For residents coded as being from 'other' ethnic groups, Harrow, Hillingdon and Hounslow had very high admission rates, and Kensington and Chelsea had a low rate. Among males aged 75+, the highest rate was among Asian/Asian British patients, particularly at ages 85+. Among females aged 65+, the rate among white patients was much lower than among Asian/Asian British and Black/Black British patients.

## 1.4 Admissions by NHS Trust

Number of heart failure admissions per year, by NHS Trust: 2001/2 – 2003/4

NHS Trust	Number
Chelsea & Westminster	133
Ealing	238
Hammersmith	276
Hillingdon	234
North West London	492
Royal Brompton & Harefield	18
St Mary's	180
West Middlesex University	157
Other London	78
Outside London	107
<b>TOTAL</b>	<b>1916</b>

The number of heart failure admissions per year, by NHS Trust: 2001/2 – 2003/4



## 2. IN-HOSPITAL DEATHS OF HEART FAILURE PATIENTS

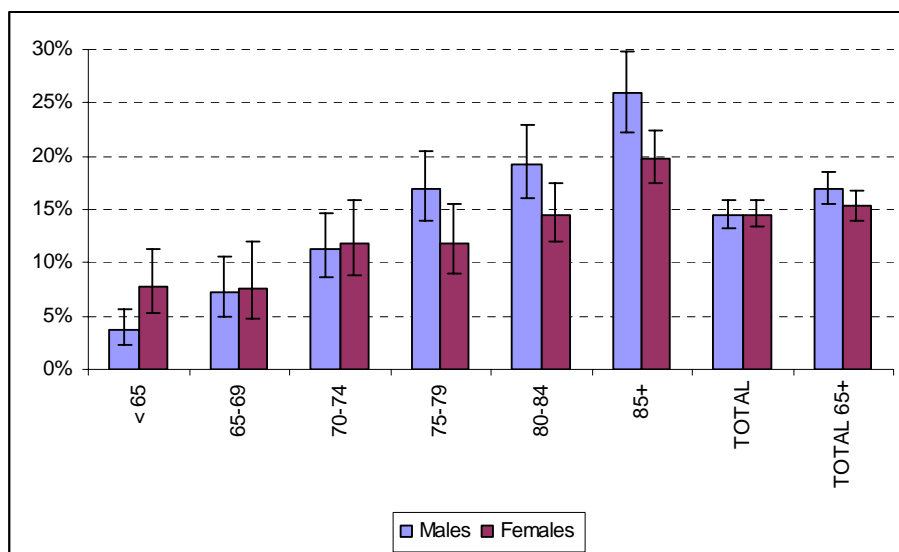
In the APC database, patients that died in hospital can be identified. However, it cannot be assumed that this death was caused by the primary diagnosis. A total of 834 patients died in hospital during 2001/2 – 2003/4, following admission with heart failure as the primary diagnosis. Overall, the percentage of patients that died was 14.5%.

### 2.1 In-hospital deaths by age & sex

Number and percentage of heart failure patients that died in hospital per year, by age & sex: 2001/2 – 2003/4

Age group	Number of patients that died in hospital		Total number of patients		% of patients that died	
	Males	Females	Males	Females	Males	Females
< 65	6	8	174	103	3.6%	7.8%
65-69	8	5	109	70	7.3%	7.6%
70-74	17	13	147	112	11.3%	11.9%
75-79	28	16	167	132	17.0%	11.9%
80-84	31	32	161	222	19.3%	14.5%
85+	44	69	171	346	25.9%	19.8%
<b>TOTAL</b>	<b>135</b>	<b>143</b>	<b>930</b>	<b>985</b>	<b>14.5%</b>	<b>14.6%</b>
<b>TOTAL 65+</b>	<b>128</b>	<b>135</b>	<b>756</b>	<b>882</b>	<b>17.0%</b>	<b>15.3%</b>

The percentage of heart failure patients that died in hospital, by age and sex: 2001/2 – 2003/4



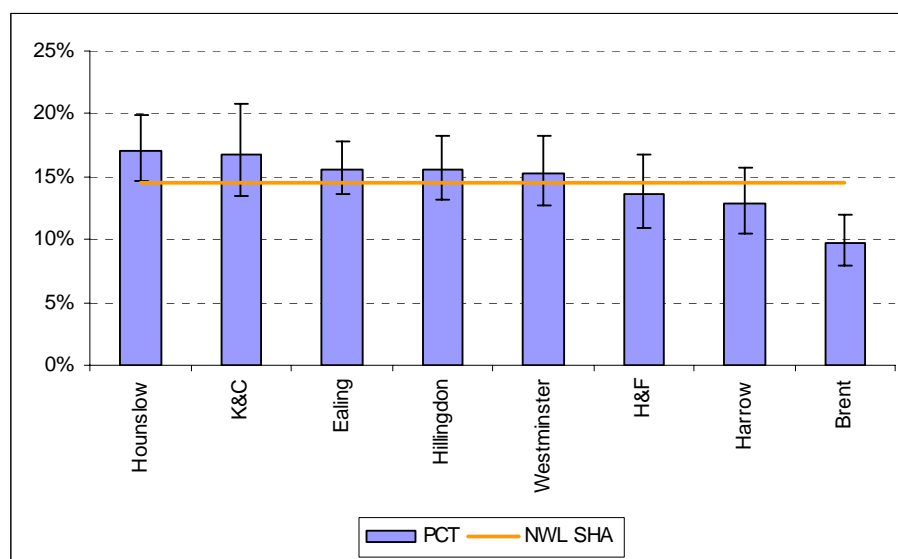
The percentage of patients that died in hospital increased with age. At age 75+ the percentage was higher among males. 25% of male patients aged 85+ died in hospital.

## **2.2 In-hospital deaths by borough of residence**

Number and percentage of heart failure patients that died in hospital per year, by borough of residence: 2001/2 – 2003/4

<b>Borough</b>	<b>Number of patients that died in hospital</b>	<b>Total number of patients</b>	<b>% of patients that died</b>
Brent	27	274	9.7%
Ealing	56	361	15.6%
H&F	24	179	13.6%
Harrow	28	218	12.9%
Hillingdon	41	264	15.5%
Hounslow	46	269	17.1%
K&C	23	135	16.8%
Westminster	33	215	15.3%
<b>NWL SHA</b>	<b>278</b>	<b>1915</b>	<b>14.5%</b>

The percentage of patients that died in hospital, following admission with heart failure as primary diagnosis, by borough of residence: 2001/2 – 2003/4



Apart from the low death rate among patients from Brent (9.7%), the differences between other boroughs were not large.

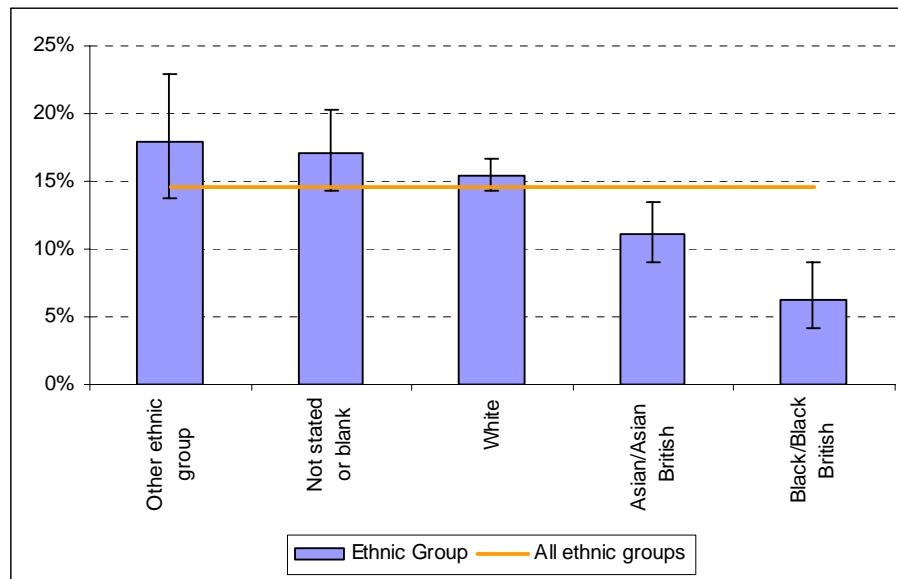
### 2.3 In-hospital deaths by ethnic group

Number and percentage of heart failure patients that died in hospital per year, by ethnic group: 2001/2 – 2003/4

<b>Ethnic Group</b>	<b>Number of patients that died in hospital</b>	<b>Total number of patients</b>	<b>% of patients that died</b>
White	189	1224	15.5%
Asian/Asian British	29	259	11.1%
Black/Black British	8	129	6.22%
Other ethnic group	16	89	17.9%
Not stated/Blank	35	203	17.1%
<b>TOTAL</b>	<b>278</b>	<b>1915</b>	<b>14.5%</b>

The number of patients that died per year among Chinese and mixed ethnic groups was less than 5.

The percentage of patients that died in hospital, following admission with heart failure as primary diagnosis, by ethnic group: 2001/2 – 2003/4



The percentage of patients that died in hospital was particularly low among Black/Black British patients (8 deaths, 121 admissions per year).

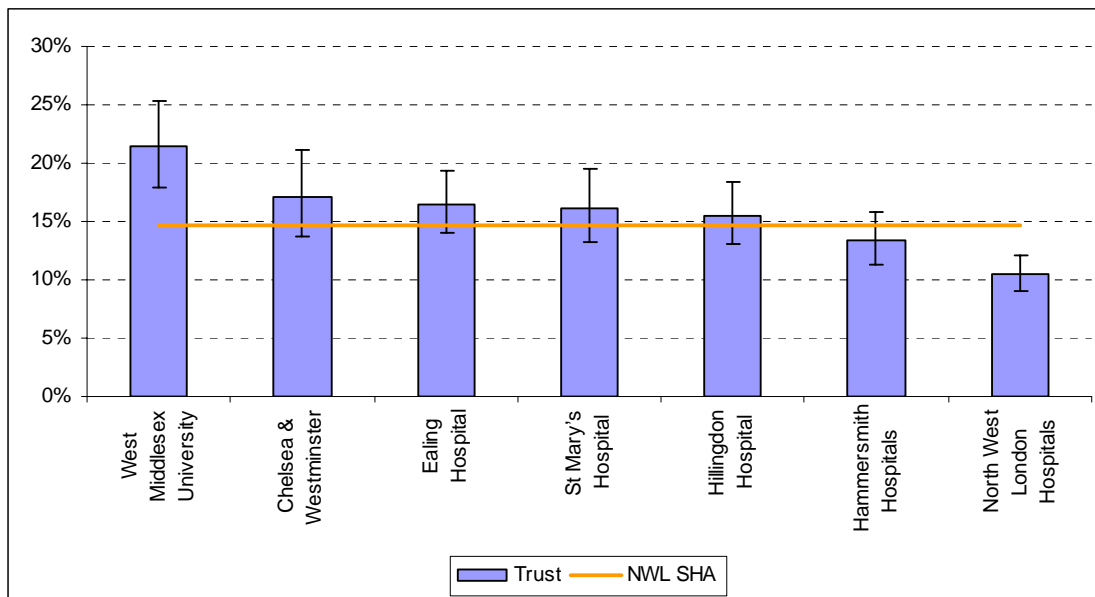
## 2.4 In-hospital deaths by NHS Trust

Number and percentage of heart failure patients that died in hospital per year, by NHS Trust: 2001/2 – 2003/4

NHS Trust	Number of patients that died in hospital	Total number of patients	% of patients that died
Chelsea & Westminster	23	132	17.1%
Ealing	39	238	16.5%
Hammersmith	36	234	15.6%
Hillingdon	36	234	15.6%
North West London	51	492	10.4%
St Mary's	29	180	16.1%
West Middlesex University	34	157	21.4%
<b>NWL SHA</b>	<b>253</b>	<b>1727</b>	<b>14.6%</b>

There were fewer than 5 deaths among patients at Royal Brompton & Harefield NHS Trust.

The percentage of patients that died in hospital, following admission with heart failure as primary diagnosis, by NHS Trust: 2001/2 – 2003/4

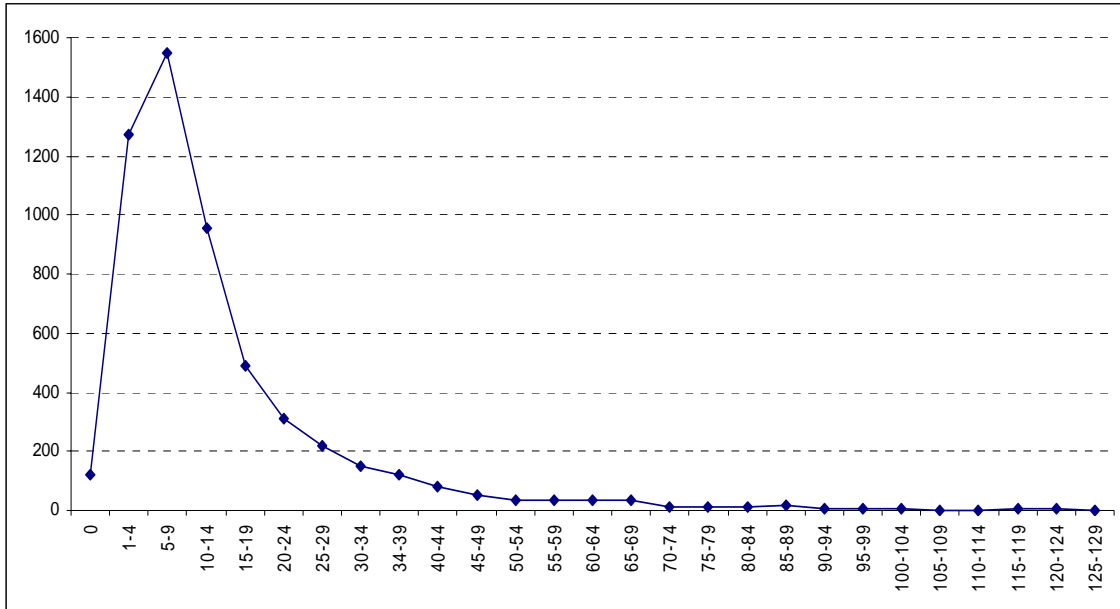


Excluding Royal Brompton & Harefield NHS Trust due to low admission numbers, the in-hospital death rate ranged from 10.4% (North West London Hospitals NHS Trust) to 21.4% (West Middlesex University NHS Trust). Apart from these two Trusts, there was little difference between the in-hospital death rates of other Trusts.

### 3. LENGTH OF STAY

There were 5,566 heart failure patients with length of stay recorded. Length of stay ranged from 0 to 357 days, with a mean of 14.7 days and a median of 9 days. In the figures below, length of stay is shown only up to 130 days, as only 28 patients (0.5%) had longer stays.

The length of stay of heart failure patients: 2001/2 – 2003/4



The length of stay of heart failure patients peaked at 5-9 days, and then fell sharply.

Length of stay of heart failure patients per year: 2001/2 – 2003/4

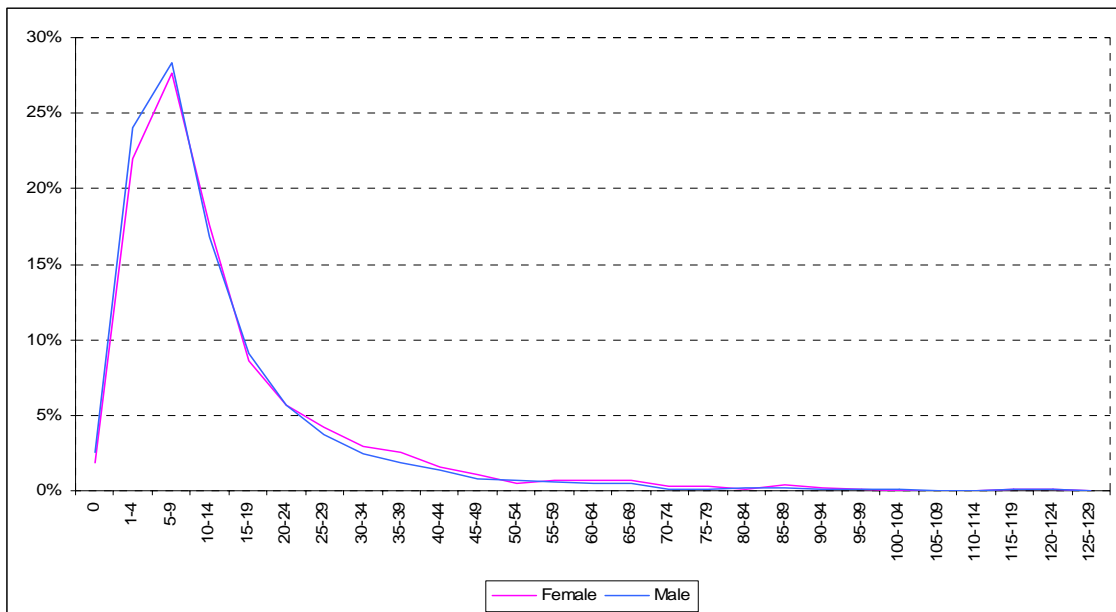
Patient group		Number of bed-days per year	Mean number of bed-days per patient	Median number of bed-days per patient	Minimum number of bed-days	Maximum number of bed-days
<b>All patients</b>		27,362	14.7	9	0	357
<b>Died ?</b>	Did not die	21,441	13.6	9	0	357
	Died in hospital	5,919	21.3	13	0	289
<b>Sex</b>	Male	12,208	13.5	8	0	235
	Female	15,154	15.9	9	0	357
<b>Age group</b>	60-64	1,377	12.3	8	0	177
	65-69	2,305	13.2	8	0	235
	70-74	3,167	12.7	9	0	169
	75-79	4,134	14.3	9	0	189
	80-84	6,105	16.4	10	0	275
	85+	8,288	16.5	10	0	289
<b>Borough</b>	Brent	3,062	11.5	8	0	230
	Ealing	5,389	15.2	9	0	289
	H&F	3,253	20.3	11	0	235
	Harrow	2,438	11.3	7	0	357
	Hillingdon	3,595	13.7	8	0	236
	Hounslow	4,466	16.8	10	0	240
	K&C	2,023	15.7	11	0	163
	Westminster	3,136	15.6	10	0	215
<b>Ethnic group</b>	White	18,447	15.6	9	0	289
	Asian/Asian British	3,152	12.3	8	0	357
	Black/Black British	1,830	15.3	10	0	169
	Other ethnic group	1,173	13.5	8	0	189
	Blank/Not stated	2,601	13.1	8	0	230
<b>NHS Trust</b>	Chelsea & Westminster	1,823	13.8	10	0	88
	Ealing	3,445	14.5	8.5	0	289
	Hammersmith	5,059	20.8	12	0	240
	Hillingdon	3,239	13.9	9	0	275
	North West London	5,281	10.8	7	0	156
	St Mary's	2,915	18.1	11	0	215
	West Middlesex	2,944	18.7	11	0	237

The mean and median length of stay for all heart failure patients in North West London are very similar to the national figures for 2001/2 – 2003/4 (mean: 14.3 days, median: 9 days), although the national figures are for both emergency and non-emergency admissions. The national mean and median length of stay for all diagnoses were much lower than for heart failure patients, at 8 and 2 days respectively.

*(Source of data: Hospital Episode Statistics online)*

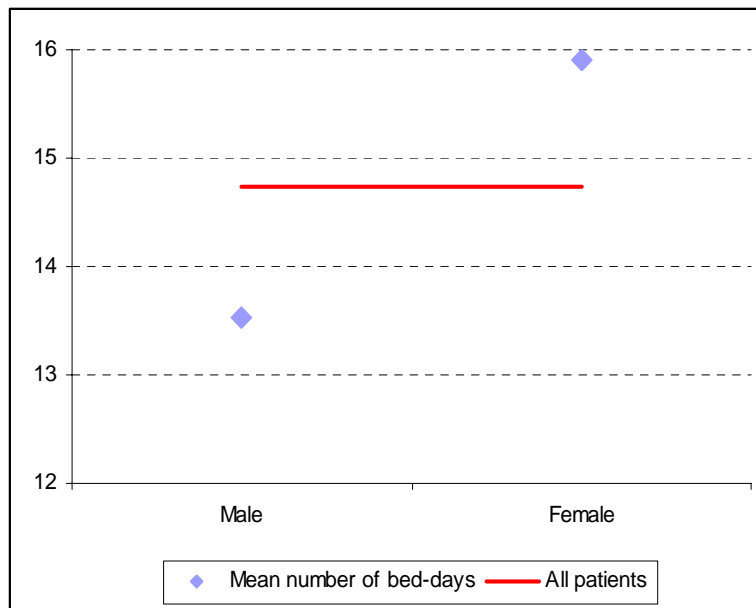
### 3.1 Length of stay by age & sex

Comparison of the distribution of length of stay, by sex: 2001/2 – 2003/4



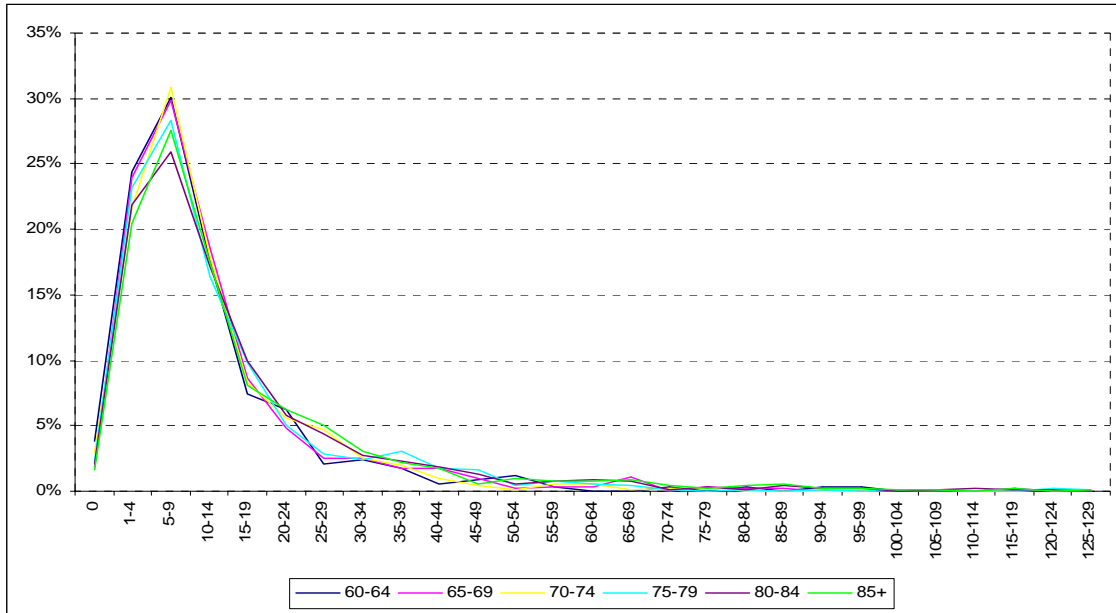
The distribution of the length of stay of heart failure patients was very similar among males and females.

Mean number of bed-days per patient, by sex: 2001/2 - 2003/4



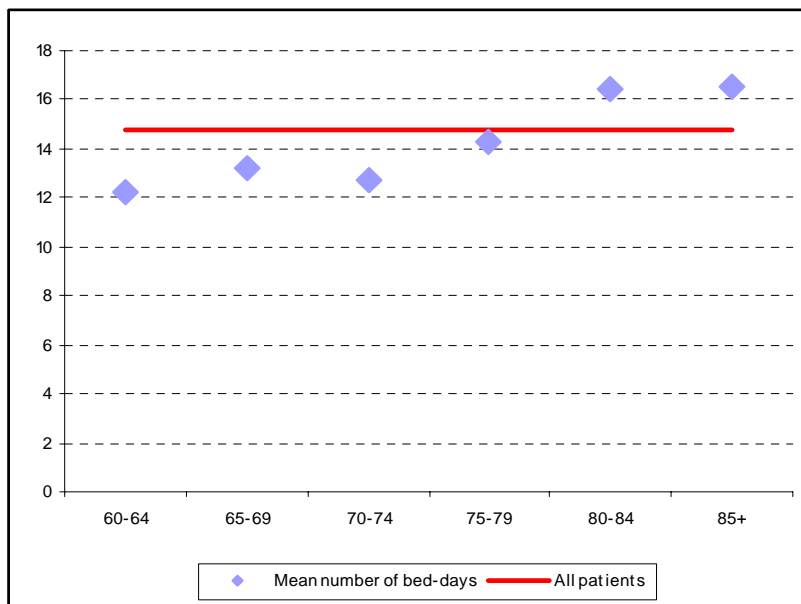
The mean number of bed-days per patient was higher among females (15.9 compared to 13.5).

Comparison of the distribution of length of stay among patients aged 60+, by age group: 2001/2 – 2003/4



The distribution of the length of stay was similar between age groups, with a slightly lower peak at 5-9 days among the older age groups.

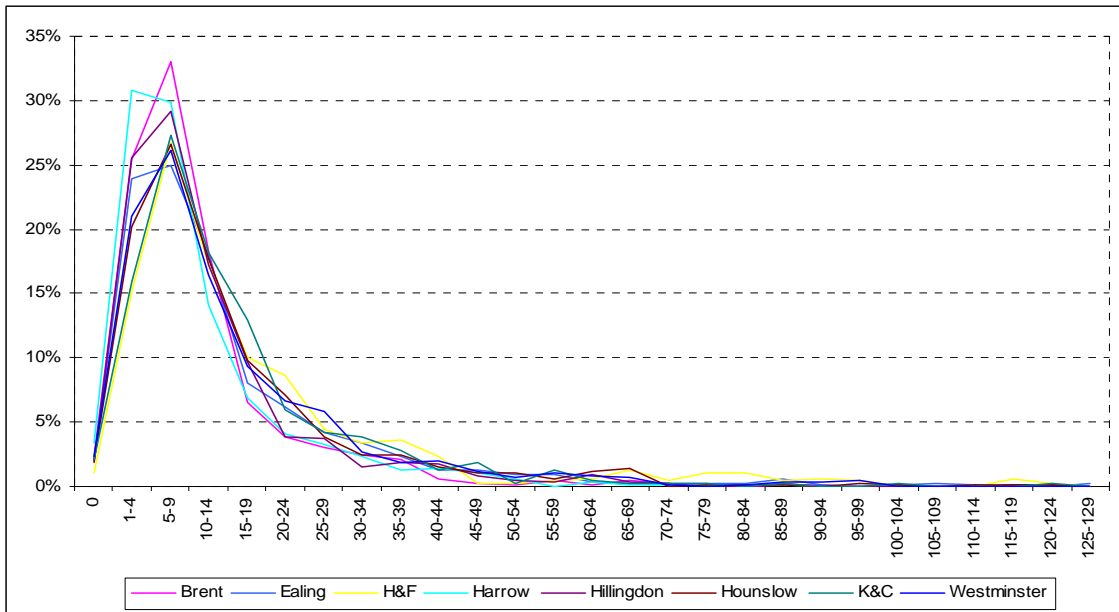
Mean number of bed-days per patient, by age group: 2001/2 - 2003/4



The mean number of bed-days per patient generally increased with age, from 12.3 (age 60-64) to 16.5 (age 85+).

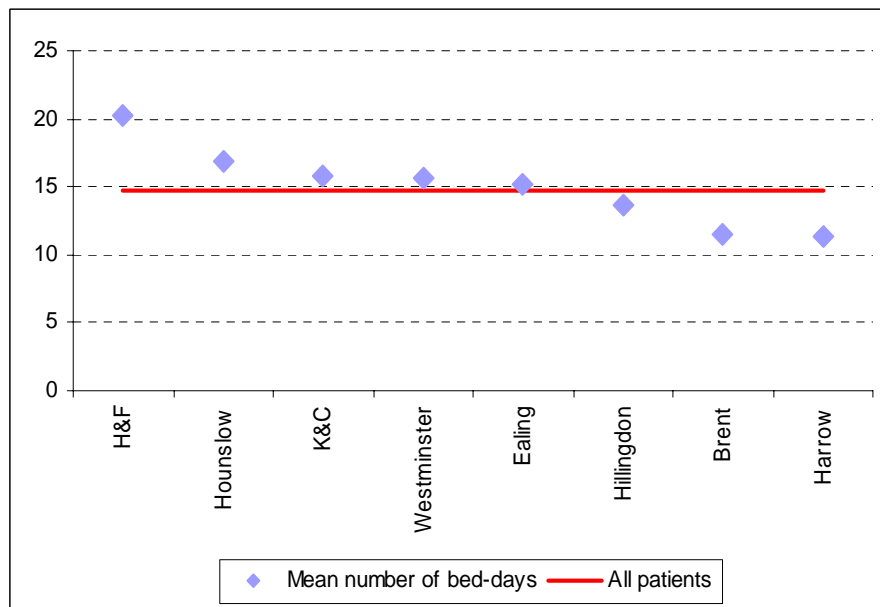
### 3.2 Length of stay by borough of residence

Comparison of the distribution of length of stay, by borough of residence: 2001/2 – 2003/4



There was some variation in the distribution of the length of stay between boroughs, with the main differences being the position and extent of the peak around 1-14 days.

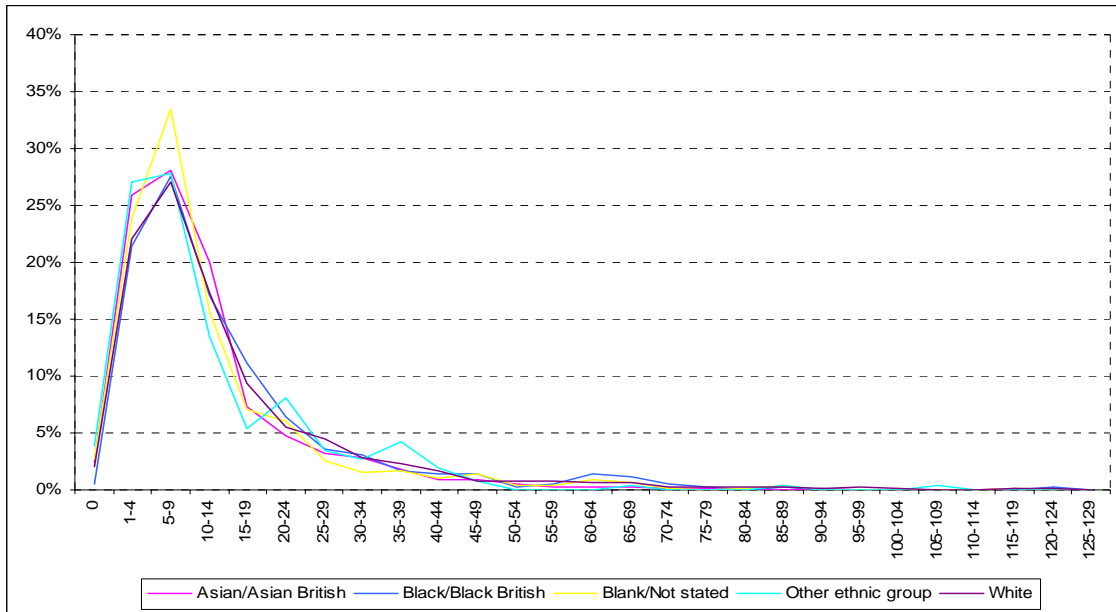
Mean number of bed-days per patient, by borough of residence: 2001/2 - 2003/4



There was quite substantial variation in the mean number of bed-days per patient, ranging from 11.3 in Harrow to 20.3 in Hammersmith and Fulham.

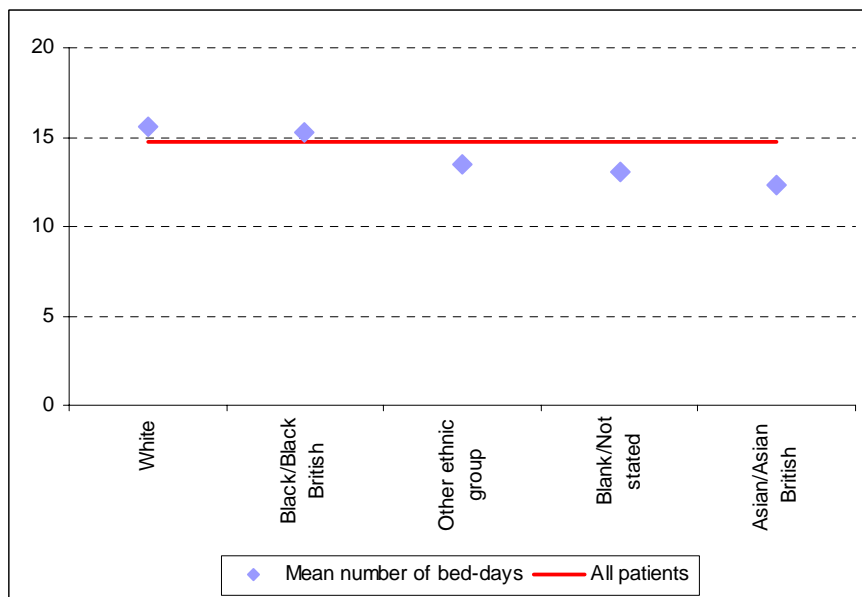
### 3.3 Length of stay by ethnic group

Comparison of the distribution of length of stay, by ethnic group: 2001/2 – 2003/4



There was also some variation in the distribution of the length of stay between ethnic groups, with the main differences being the position and extent of the peak around 1-14 days.

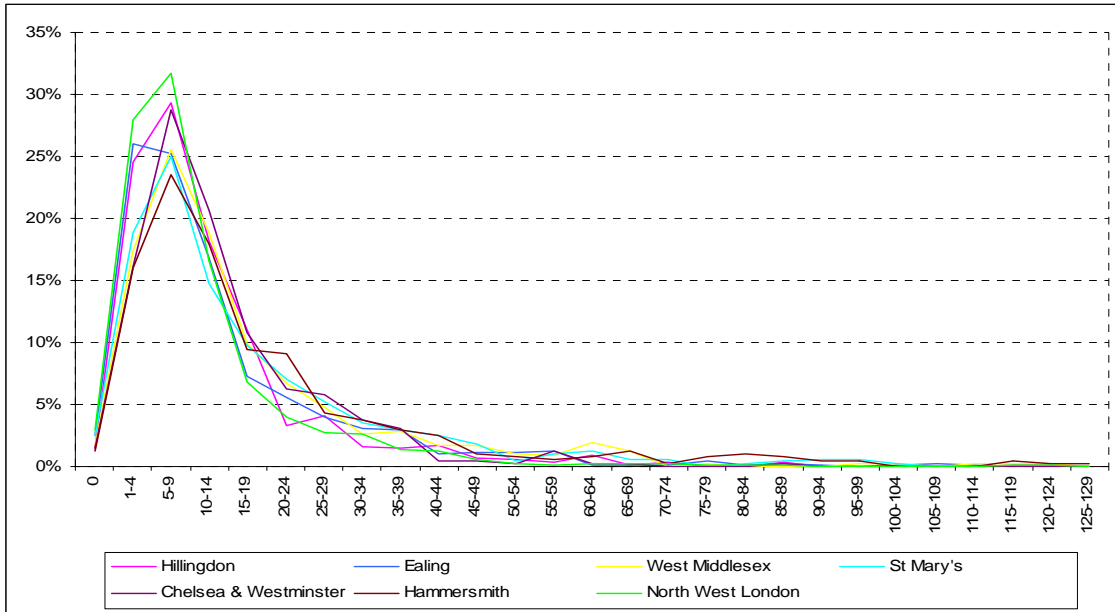
Mean number of bed-days per patient, by ethnic group: 2001/2 - 2003/4



There was some variation in the mean number of bed-days per patient, ranging from 12.3 among Asian/Asian British patients to 15.6 among white patients.

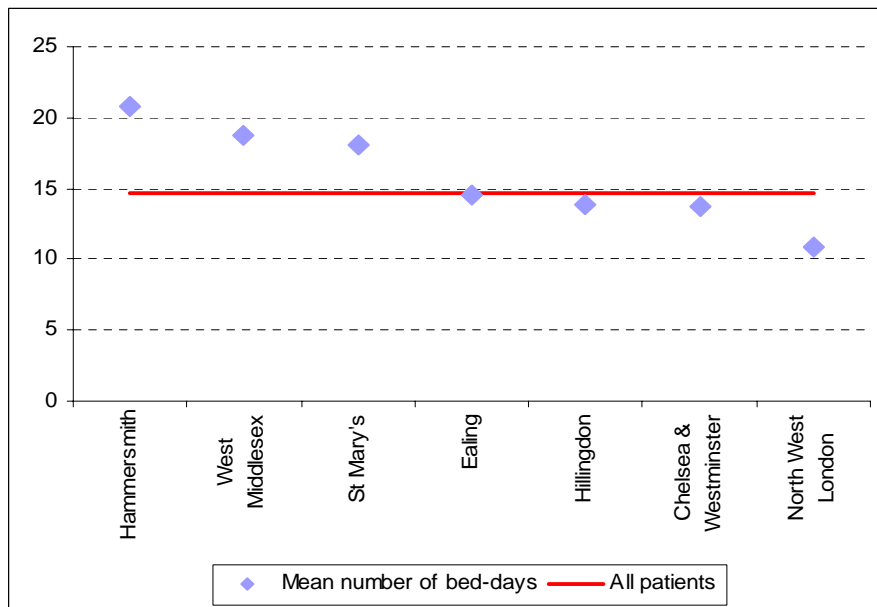
### 3.4 Length of stay by NHS Trust

Comparison of the distribution of length of stay, by NHS Trust: 2001/2 – 2003/4



There was also some variation in the distribution of the length of stay between NHS Trusts, with the main differences being the position and extent of the peak around 1-14 days.

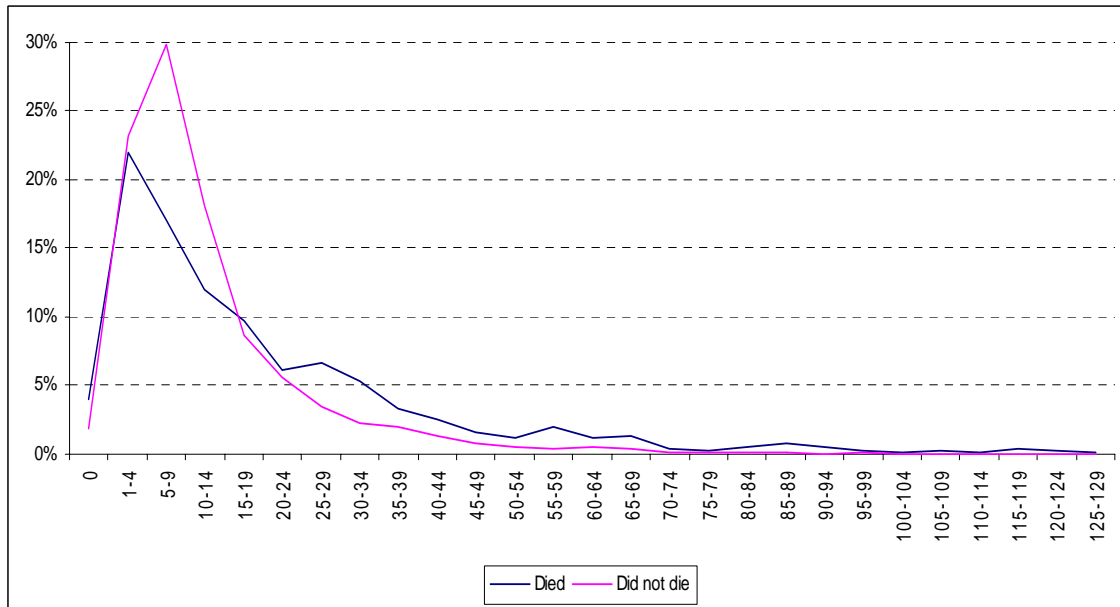
Mean number of bed-days per patient, by NHS Trust: 2001/2 - 2003/4



There was quite substantial variation in the mean number of bed-days per patient, ranging from 10.8 among patients in North West London Hospitals to 20.8 among patients in Hammersmith Hospitals.

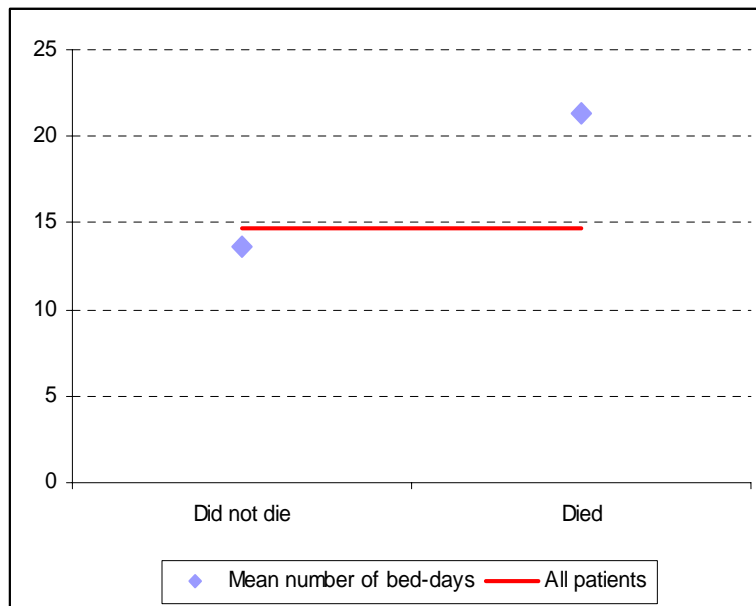
### 3.5 Length of stay, by in-hospital mortality

Comparison of the distribution of length of stay, by in-hospital mortality: 2001/2 – 2003/4



The distributions of the lengths of stay of patients that died in hospital and patients that did not die were quite different. Among patients that died, the peak at 1-4 days was relatively low, and fell off quite gradually. Among patients that did not die, the peak at 5-9 days was relatively high, and fell off steeply.

Mean number of bed-days per patient, by in-hospital mortality: 2001/2 - 2003/4



The mean number of bed-days per patient was much higher among patients that died, at 21.3 compared to 13.6.

## **4. HEART FAILURE DEATHS**

In order to identify deaths from heart failure, the underlying cause of death field in the ONS 2004 annual district deaths extract was searched using the ICD10 code for heart failure (I50).

It is important to note that heart failure is commonly underreported as the underlying cause of death, as guidance on death certification states that heart failure is a mode of death, not a cause. Other causes of death, such as CHD, are therefore more often stated as the cause of death of people with heart failure. The British Heart Foundation estimates that the true number of heart failure deaths is just over double the recorded number. Around 40% of people die within 1 year of their initial diagnosis of heart failure. Therefore, although the people that died from heart failure in North West London in 2004 had not necessarily been admitted for heart failure during 2001/2 – 2003/4, it is likely that at least some had.

(Source of information: *Mortality from heart failure*  
<http://www.heartstats.org/datapage.asp?id=752>)

There were 250 heart failure deaths recorded in North West London during 2004.

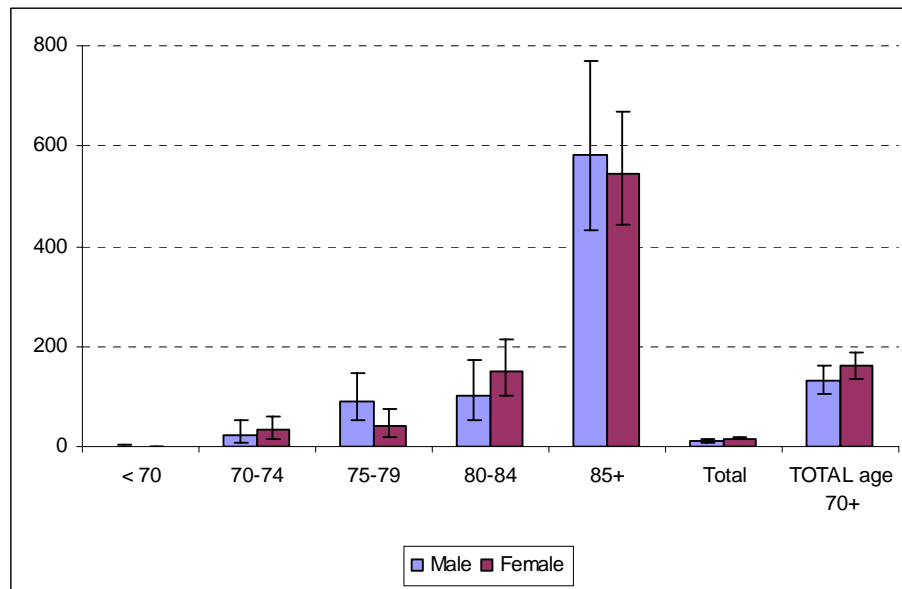
### **4.1 Deaths by age & sex**

Number of heart failure deaths per year, and mortality rate (per 100,000), by age & sex: 2001/2 – 2003/4

Age group	Number		Mortality rate	
	Males	Females	Males	Females
< 70	15	7	1.8	0.8
70-74	6	9	24.1	32.0
75-79	16	10	89.4	41.8
80-84	13	30	100.0	149.3
85+	49	95	583.3	546.0
<b>TOTAL</b>	<b>99</b>	<b>151</b>	<b>10.8</b>	<b>16.4</b>
<b>TOTAL 70+</b>	<b>84</b>	<b>144</b>	<b>130.8</b>	<b>160.9</b>

Over 90% of deaths occurred among those aged 70+, and over half of all deaths occurred among those aged 85+. The number of deaths was higher among females than males in those aged over 80. Numbers in the younger age groups were relatively small.

Heart failure mortality rates (per 100,000), by age & sex: 2004



The heart failure mortality rate generally increased with age, with a much higher rate among those aged 85+.

Overall, female mortality rates were slightly higher than male mortality rates.

## 4.2 Deaths by borough of residence

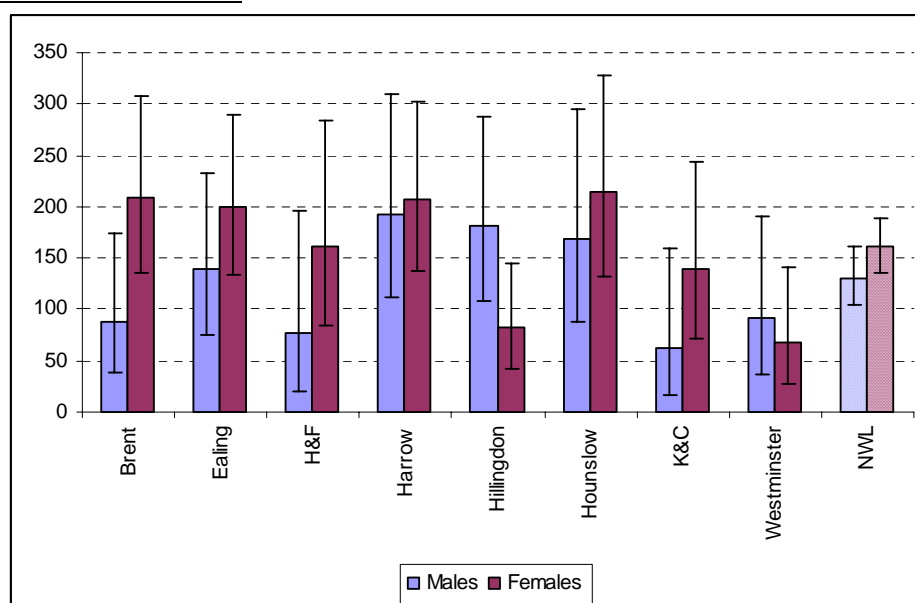
The number of heart failure deaths, and mortality rate (per 100,000), by borough of residence: 2004

Borough	Number of deaths	Mortality rate	Mortality rate: Age 70+	Age-standardised mortality rate
Brent	39	14.57	155.7	12.7
Ealing	47	15.50	174.3	12.6
H&F	16	9.05	129.0	7.9
Harrow	45	21.24	202.8	12.2
Hillingdon	33	13.27	123.5	8.4
Hounslow	35	16.49	196.4	13.5
K&C	20	10.86	106.7	8.2
Westminster	15	6.52	78.2	5.6
<b>NWL SHA</b>	<b>250</b>	<b>13.63</b>	<b>148.6</b>	<b>10.4</b>

Heart failure mortality rates were highest in Harrow (21.24 per 100,000) and lowest in Westminster (6.52 per 100,000).

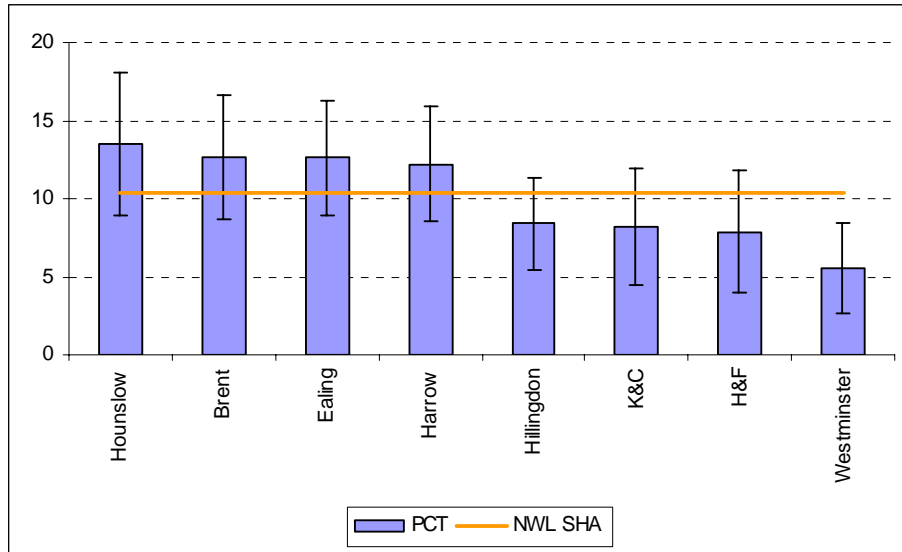
Over 90% of deaths were among those aged 70+. Mortality rates among those aged 70+ were highest in Harrow (202.8 per 100,000) and lowest in Westminster (78.2 per 100,000).

Heart failure mortality rates (per 100,000) among those aged 70+, by borough of residence and sex: 2004



Heart failure mortality rates were much higher among females than males in all boroughs, except Hillingdon and Westminster. Numbers of deaths are too small to effectively compare age- and sex-specific rates between boroughs.

Age-standardised heart failure mortality rates (per 100,000), by borough of residence: 2004



Using age-standardisation, heart failure mortality rates were reduced in all boroughs. The reduction was largest in Harrow.

Age-standardised rates were highest in Hounslow (13.53 per 100,000) and lowest in Westminster (5.58 per 100,000).

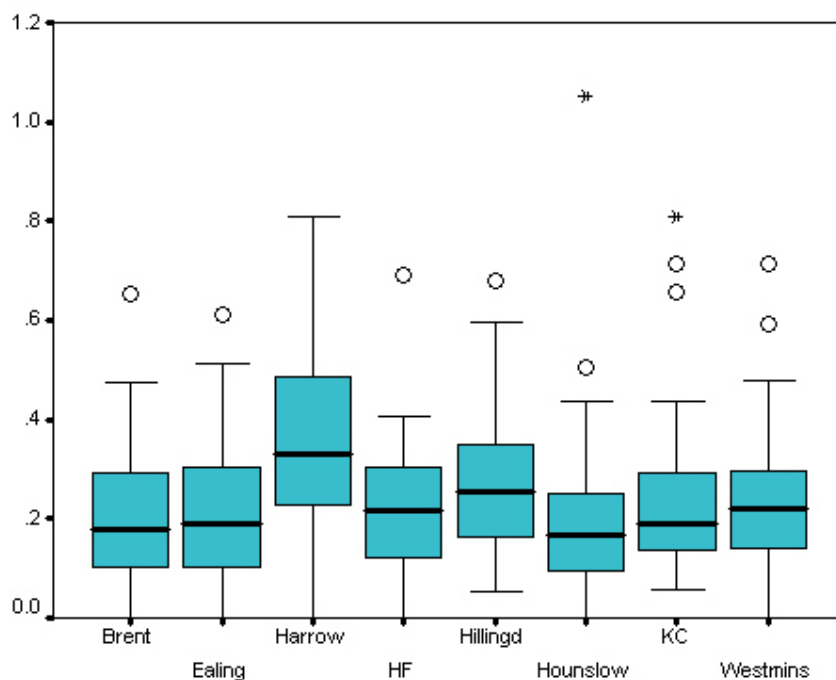
## 5. LVD PREVALENCE & PRIMARY CARE MANAGEMENT

Left Ventricular Dysfunction (LVD) is included in the Quality & Outcomes Framework (QOF), which is a set of optional quality standards within the new GMS contract. Only those patients with both CHD and LVD are included on the register.

The number of patients diagnosed with CHD and LVD and the prevalence, by PCT: March 2005

Borough	Number of patients on CHD & LVD disease register	Prevalence of LVD
Brent	745	0.21%
Ealing	822	0.23%
H&F	485	0.26%
Harrow	809	0.36%
Hillingdon	719	0.28%
Hounslow	506	0.20%
K&C	448	0.24%
Westminster	619	0.25%
<b>NWL SHA</b>	<b>5153</b>	<b>0.25%</b>

The distribution of recorded LVD prevalence (%), by GP practices and PCT: March 2005

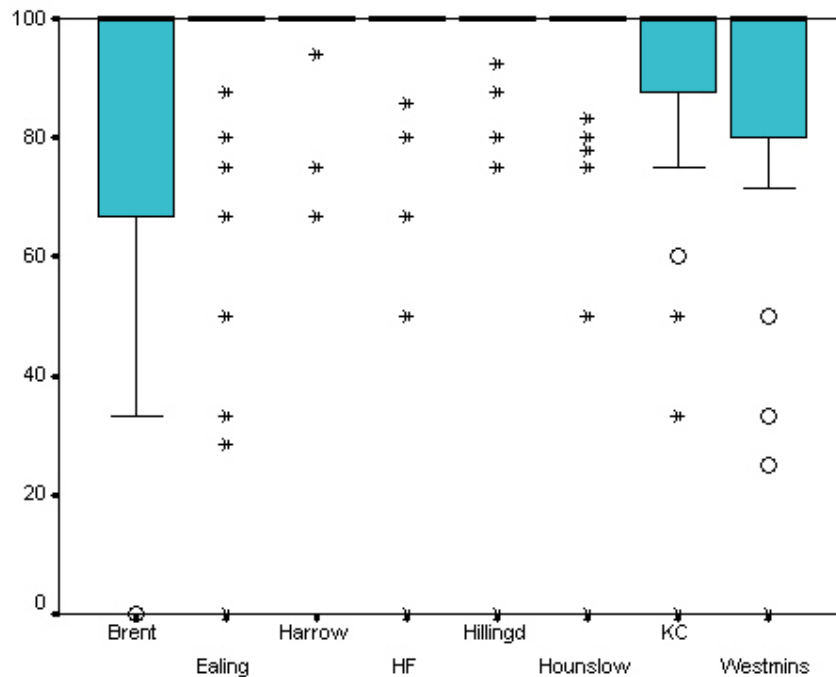


The prevalence of LVD as recorded by GPs ranges from 0% to 1.05%. The number of LVD patients in a practice ranges from 0 to 83. There are 7 practices with no LVD disease register, a further 4 practices with no patients on their register, and 106 practices with fewer than 5 LVD patients.

The number of patients diagnosed with CHD and LVD that have had their diagnosis confirmed by an echocardiogram, by PCT: March 2005

Borough	% with diagnosis confirmed
Brent	80.66%
Ealing	85.79%
H&F	92.24%
Harrow	95.30%
Hillingdon	95.60%
Hounslow	91.30%
K&C	84.40%
Westminster	86.76%
<b>NWL SHA</b>	<b>88.74%</b>

The distribution of the percentage of LVD patients with confirmed diagnosis, by GP practices and PCT: March 2005

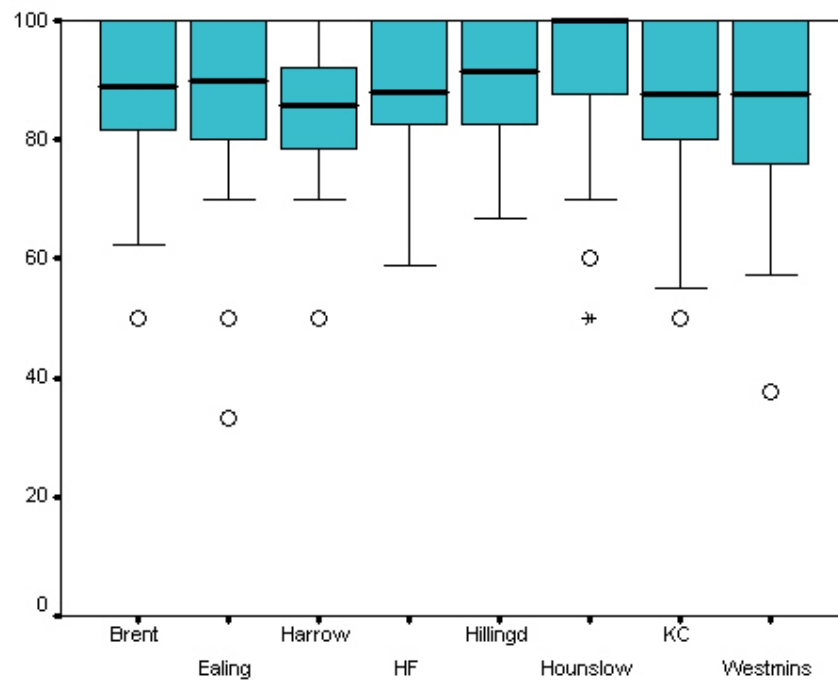


The majority of practices in most PCTs have 100% achievement of this QOF indicator. However, there are numerous practices with outlying or extreme values. The very low number of LVD patients in many practices has to be considered, however, and the achievement of this indicator for only 1 patient is recorded as 100% achievement.

The number of patients diagnosed with CHD and LVD that are currently treated with ACE inhibitors or A2 antagonists, by PCT: March 2005

<b>Borough</b>	<b>% treated</b>
Brent	85.65%
Ealing	85.75%
H&F	86.01%
Harrow	85.57%
Hillingdon	86.88%
Hounslow	88.49%
K&C	83.94%
Westminster	83.01%
<b>NWL SHA</b>	<b>85.69%</b>

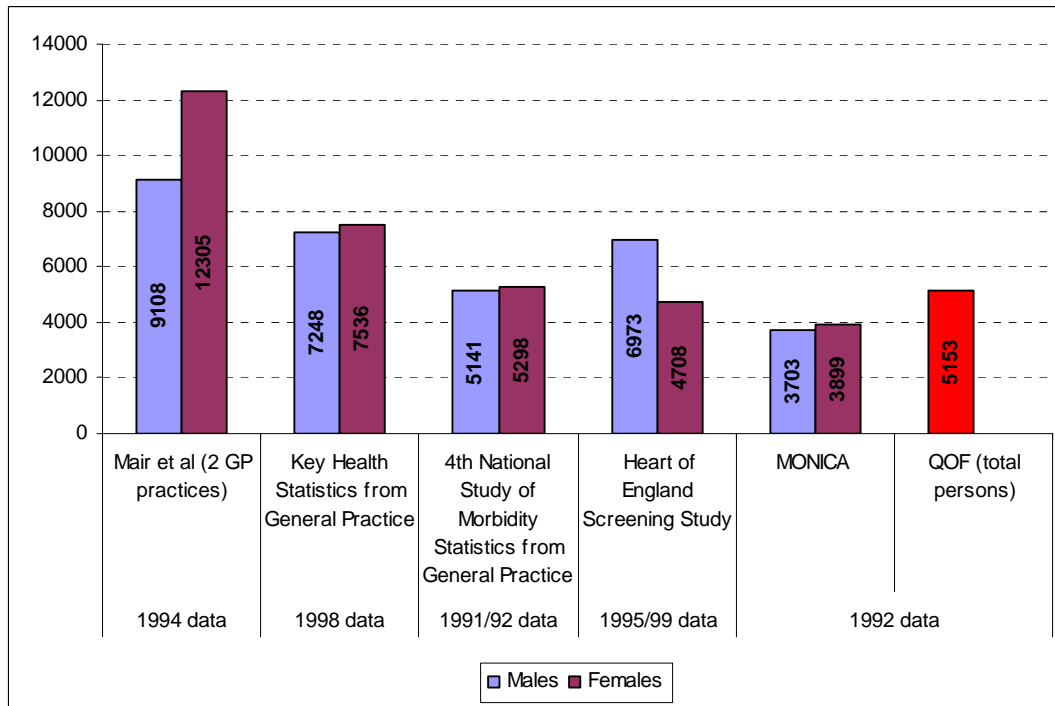
The distribution of the percentage of LVD patients that are currently treated with ACE inhibitors or A2 antagonists, by GP practices and PCT: March 2005



The majority of practices are achieving close to 100% of patients for this indicator. Over three-quarters of practices are achieving over 80% of patients for this indicator. All except 2 practices are achieving at least 50%. Again, however, the very low number of LVD patients in many practices has to be taken into account.



Estimates of the number of people suffering from heart failure in North West London, using mid-2004 population estimate



The estimated number of people with heart failure in North West London ranges from 7,602 (MONICA) to 21,413 (Mair et al). These estimates are higher than the number of people on the LVD disease registers (5,153).

The estimated number of males with heart failure in North West London ranges from 3,703 to 9,108. The estimated number of females with heart failure ranges from 3,899 to 12,305.