Cardiovascular disease is the second largest cause of death in England causing around 130,190 deaths in 2011 (29% of all deaths). Around 46% of all deaths from CVD are from coronary heart disease (CHD) and almost a fifth from stroke (18%). CHD is the most common single cause of death in England (13% of all deaths in 2011).

This Cardiovascular Disease (CVD) Health Profile brings together a wide range of data on cardiovascular disease in each upper tier local authority in England and in associated Strategic Clinical Networks. Its aim is to provide information to health care professionals, commissioning bodies and other interested parties about CVD issues in their local community, as an aid to planning and development.

Tower Hamlets lies within the boundaries of the London Strategic Clinical Network (as of 1st April 2013, pictured right).

This information is also available for each strategic clinical network, and as an interactive atlas.

Benchmarking

The area is benchmarked against the national value and the average value of the strategic clinical network in which it is either entirely or mostly located.

Tower Hamlets is classified as a member of the London strategic clinical network.

Key messages

Early mortality (under 75 years) rates from cardiovascular disease are significantly higher than the national rate, and have decreased by 61.1% since 1995.

Emergency admission rates for both CHD and stroke are significantly higher than the national rate.

The rates of angiography procedures are significantly higher than the national rate.

For people having myocardial infarction reperfusion in 2011/12, the median time to primary angioplasty treatment from a call for help was 108 minutes in Tower Hamlets, this is lower than in London and England (115 and 111 respectively).

There is a slightly higher proportion of stroke patients under 75 years discharged back to their usual place of residence compared to the national picture.
### Summary Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Local Value</th>
<th>Eng Avg</th>
<th>Eng Low</th>
<th>England Range</th>
<th>Eng High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early cardiovascular mortality (&lt;75 yrs)</td>
<td>81.8</td>
<td>58.8</td>
<td>34.3</td>
<td></td>
<td>107.0</td>
</tr>
<tr>
<td>Stroke mortality</td>
<td>34.7</td>
<td>34.5</td>
<td>23.0</td>
<td></td>
<td>50.8</td>
</tr>
<tr>
<td>Estimated % smokers (16+)</td>
<td>24.5</td>
<td>20.7</td>
<td>14.0</td>
<td></td>
<td>31.0</td>
</tr>
<tr>
<td>Estimated % obese (16+)</td>
<td>19.4</td>
<td>24.2</td>
<td>13.9</td>
<td></td>
<td>30.7</td>
</tr>
<tr>
<td>% of long term conditions who smoke</td>
<td>25.2</td>
<td>17.4</td>
<td>10.0</td>
<td></td>
<td>27.2</td>
</tr>
<tr>
<td>Obs/Exp CHD prevalence</td>
<td>0.4</td>
<td>0.6</td>
<td>0.3</td>
<td></td>
<td>0.8</td>
</tr>
<tr>
<td>Obs/Exp Hypertension prevalence</td>
<td>0.4</td>
<td>0.5</td>
<td>0.3</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>CHD emergency admissions</td>
<td>280.5</td>
<td>198.3</td>
<td>124.4</td>
<td></td>
<td>366.4</td>
</tr>
<tr>
<td>Stroke emergency admissions</td>
<td>133.4</td>
<td>89.5</td>
<td>48.7</td>
<td></td>
<td>160.2</td>
</tr>
<tr>
<td>30 day mortality in STEMI</td>
<td>10.3</td>
<td>8.7</td>
<td>0.0</td>
<td></td>
<td>20.6</td>
</tr>
<tr>
<td>% stroke discharged to usual residence</td>
<td>85.6</td>
<td>77.9</td>
<td>56.7</td>
<td></td>
<td>97.5</td>
</tr>
<tr>
<td>% HF who die at usual place residence</td>
<td>22.1</td>
<td>58.5</td>
<td>19.2</td>
<td></td>
<td>99.0</td>
</tr>
<tr>
<td>Angiography rates</td>
<td>457.4</td>
<td>278.2</td>
<td>122.3</td>
<td></td>
<td>676.0</td>
</tr>
<tr>
<td>Revascularisation rates</td>
<td>196.4</td>
<td>140.5</td>
<td>87.1</td>
<td></td>
<td>249.3</td>
</tr>
</tbody>
</table>

#### Contents

- Page 1: Contents & summary Indicators
- Page 2: Demographic profile
- Page 3: Lifestyle behaviours
- Page 4: Quality and Outcomes Framework - exceptions & prevalence
- Page 5: Quality and Outcomes Framework - performance
- Page 6: NHS Health Checks
- Page 7: Coronary heart disease emergency admission rates
- Page 8: Heart failure emergency admission rates
- Page 9: Stroke emergency admission rates
- Page 10: Myocardial Infarction management
- Page 11: Angiography procedures
- Page 12: Revascularisation procedures
- Page 13: Revascularisation procedures by deprivation & valve surgery
- Page 14: Cardiac procedures & stroke management
- Page 15: CVD mortality rates and contribution of CVD deaths
- Page 16: CVD mortality rates and CVD mortality rates by quintile of relative deprivation
- Page 17: Trends in mortality rates

1. Directly standardised rate per 100,000, 2011 under 75.
2. Directly standardised rate per 100,000, 2011.
3. Percentage estimate of smokers, 16+, 2006-08.
5. Percentage of those registered with long-term conditions who smoke, 2010/11.
6. Ratio of 2011/12 CHD QOF disease registers to estimated prevalence in 2011.
7. Ratio of 2011/12 hypertension QOF disease registers to estimated prevalence in 2011.
8. Directly standardised rate per 100,000, 2011/12.
9. Directly standardised rate per 100,000, 2011/12.
11. % of all patients diagnosed with stroke under 75, 2011/12.
12. Percentage of deaths due to heart failure at their usual place of residence 2007-2011.
13. Directly standardised rate per 100,000, 2011/12.
14. Directly standardised rate per 100,000, 2011/12.
Age profile and population projections in Tower Hamlets

The population estimate of Tower Hamlets in 2011 was 256,000 and is projected to increase to 316,100 in 2021.

Age is a key factor in cardiovascular disease. The prevalence of cardiovascular disease increases significantly after the age of 40 years.

The percentage of the population aged 40 or over in Tower Hamlets is expected to increase from 13.7% to 15.7% for males and from 12.5% to 13.5% for females between 2011 and 2021. The population aged 40 or over in the London Network is expected to increase from 19.0% to 19.8% for males and from 20.8% to 20.9% for females. In England it is expected to increase from 23.5% to 23.9% for males and from 25.7% to 25.8% for females.

National deprivation structure (IMD 2010)

Tower Hamlets has 68.6% of its population in the most deprived national quintile and 1.0% of the population in the least deprived quintile.

Ethnicity recorded from the 2011 census

The proportion of the population in Tower Hamlets which is from black and minority ethnic groups is estimated to be 54.8%. South Asian men are more likely to develop CHD at younger age, and have higher rates of myocardial infarction. Black people have the highest stroke mortality rates.

The definition of BME used here excludes 'White Irish', 'White Gypsy or Irish traveller', and 'White other' ethnic groups.
Lifestyle estimates for adults

<table>
<thead>
<tr>
<th>Smoking</th>
<th>Increasing and high risk drinking (combined)</th>
<th>Obesity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tower Hamlets</td>
<td>24.5%</td>
<td>19.0%</td>
</tr>
<tr>
<td>London</td>
<td>19.9%</td>
<td>20.6%</td>
</tr>
<tr>
<td>England</td>
<td>20.7%</td>
<td>22.3%</td>
</tr>
</tbody>
</table>

Sources: Smoking: Integrated Household Survey, 2010/11  
High Risk drinking: Modelled estimates from the General Lifestyle Survey, 2008-09  
Obesity: Modelled Estimates from Health Survey for England, 2006-08

Smoking

- Using data from the Integrated Household Survey it is estimated that 24.5% of the population in Tower Hamlets smoke. This is higher than the estimated proportion in England (20.7%) and higher than London (19.9%).

Increasing and high risk drinking (combined)

- Using modelled estimates from the General Lifestyle Survey, it is estimated that 19.0% of the population in Tower Hamlets have increasing or high risk drinking behaviour. This is lower than England (22.3%) and lower than London (20.6%).

Adult obesity

- Using modelled estimates from the Health Survey for England, it is estimated that 19.4% of the adult population in Tower Hamlets are classified as obese. This is lower than England (24.2%) and lower than London (20.7%).

Percentage of patients registered with a GP with any combination of registered long-term conditions who smoke, QOF 2011/12

QOF data shows that the percentage of patients with long-term conditions who smoke in Tower Hamlets was 25.2% in 2011/12. This is significantly higher than the rate in England (17.4%) and significantly higher than the rate in London (17.3%).

Source: Quality and Outcomes Framework 2011/12
Effective exception rate (EER)

<table>
<thead>
<tr>
<th>Area</th>
<th>2011/12 EER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tower Hamlets</td>
<td>4.5%</td>
</tr>
<tr>
<td>London</td>
<td>5.1%</td>
</tr>
<tr>
<td>England</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

GPAs can exclude patients from the calculation of measures in the Quality and Outcomes Framework, to allow practices to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side-effect. However, the number of such exceptions varies substantially between practices. In 2011/12, the exception rate in Tower Hamlets was 4.5%. Within England, the exception rate varied between 3.9% to 8.6% for individual areas.

Number and percentage of practices with high exception reporting rates

<table>
<thead>
<tr>
<th></th>
<th>Atrial fibrillation</th>
<th>Coronary heart disease</th>
<th>Heart failure</th>
<th>Hypertension</th>
<th>Stroke &amp; TIA</th>
<th>CVD Primary Prevention</th>
<th>Practices with any high exception rates</th>
<th>Total number of practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tower Hamlets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tower Hamlets %</td>
<td>2.8%</td>
<td>5.6%</td>
<td>5.6%</td>
<td>0.0%</td>
<td>2.8%</td>
<td>0.0%</td>
<td>6%</td>
<td>36</td>
</tr>
<tr>
<td>London %</td>
<td>3.5%</td>
<td>9.9%</td>
<td>5.6%</td>
<td>1.4%</td>
<td>6.2%</td>
<td>1.5%</td>
<td>28.1%</td>
<td>1472</td>
</tr>
<tr>
<td>England %</td>
<td>2.1%</td>
<td>7.5%</td>
<td>3.6%</td>
<td>2.0%</td>
<td>4.1%</td>
<td>2.1%</td>
<td>21.3%</td>
<td>8124</td>
</tr>
</tbody>
</table>

Quality and Outcomes Framework - prevalence

Observed (GP registered) prevalence in 2011/12 versus estimated prevalence in 2011

Coronary heart disease

The observed prevalence for CHD in Tower Hamlets is 41.6% of the estimated prevalence. This compares to 58.2% for England and 47.0% for London.

Stroke

The observed prevalence for stroke in Tower Hamlets is 42.1% of the estimated prevalence. This compares to 68.4% for England and 52.6% for London.

Hypertension

The observed prevalence for hypertension in Tower Hamlets is 36.8% of the estimated prevalence. This compares to 46.0% for England and 41.5% for London. The gap between recognised and treated hypertension, and actual hypertension levels in the community have been long recognised.

Sources: Quality and Outcomes Framework 2011/12 and modelled estimates of prevalence, Eastern Region Public Health Observatory, December 2011
## 2011/12

<table>
<thead>
<tr>
<th></th>
<th>Tower Hamlets</th>
<th>London</th>
<th>England</th>
<th>Tower Hamlets</th>
<th>London</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coronary heart disease</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% newly diagnosed angina patients referred for exercise testing or assessment</td>
<td>94.1</td>
<td>98.0</td>
<td>98.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% CHD patients in whom last blood pressure reading was 150/90 or less</td>
<td>92.2</td>
<td>89.3</td>
<td>90.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% CHD patients in whom last cholesterol measurement was 5mmol/l or less</td>
<td>84.6</td>
<td>78.5</td>
<td>80.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% CHD patients taking aspirin, an alternative anti-platelet therapy or an anti-coagulant in last 15 months</td>
<td>95.1</td>
<td>93.4</td>
<td>93.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% CHD patients currently treated with beta blocker</td>
<td>77.3</td>
<td>73.1</td>
<td>74.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% patients with history of myocardial infarction currently treated with ACE inhibitor or angiotensin II antagonist</td>
<td>92.6</td>
<td>92.3</td>
<td>91.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% CHD patients immunised against influenza in Sept-March 05</td>
<td>93.2</td>
<td>91.6</td>
<td>92.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Atrial fibrillation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% atrial fibrillation patients currently treated with anti-coagulation drug therapy or an anti-platelet therapy</td>
<td>93.8</td>
<td>93.4</td>
<td>93.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stroke</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% stroke patients whose blood pressure was 150/90 or less</td>
<td>90.4</td>
<td>87.9</td>
<td>88.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% stroke patients with record of cholesterol in last 15 months</td>
<td>92.7</td>
<td>90.2</td>
<td>91.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% stroke patients whose cholesterol was 5mmol/l or less</td>
<td>81.4</td>
<td>75.5</td>
<td>77.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% stroke patients immunised preceding Sept-March</td>
<td>91.4</td>
<td>89.3</td>
<td>90.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% non-haemorrhagic/with history of TIA stroke patients taking anti-platelet agent/anti-coagulant</td>
<td>94.4</td>
<td>93.8</td>
<td>93.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% new patients with a stroke referred for further investigation</td>
<td>84.3</td>
<td>88.5</td>
<td>89.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hypertension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% hypertension patients with record of blood pressure in last 9 months</td>
<td>92.5</td>
<td>90.1</td>
<td>91.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% hypertension patients (with record in last 9 months) in whom last blood pressure was 150/90 or less</td>
<td>82.7</td>
<td>78.5</td>
<td>79.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Heart failure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% heart failure patients diagnosed after 1st April 2006 with diagnosis confirmed by an echocardiogram or specialist assessment</td>
<td>93.9</td>
<td>95.9</td>
<td>95.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% patients with a current diagnosis of heart failure due to LVD currently treated with an ACE inhibitor or angiotensin receptor blocker</td>
<td>92.4</td>
<td>90.9</td>
<td>89.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Primary prevention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% hypertension patients aged 30 to 74 who have had a cardiovascular risk assessment at the outset of diagnosis</td>
<td>87.4</td>
<td>79.1</td>
<td>80.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% hypertension patients who are given lifestyle advice in the for physical activity, smoking cessation, alcohol consumption and diet</td>
<td>83.5</td>
<td>81.2</td>
<td>81.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Quality and Outcomes Framework 2011/12
The NHS Health Check programme was formally introduced in April 2009 as a key policy to reduce health inequalities and increase life expectancy from preventable CVD conditions.

Based on PCT performance data submitted in 2011-2012, there were 45,969 local authority residents in Tower Hamlets who were eligible to be invited for an NHS Health Check. Local authorities are mandated to offer the programme to 100% of their eligible population over a five year period, from April 2013. During 2011-2012, 30.1% of eligible residents were invited to attend the programme with an uptake rate of 77.4%.

Local authorities can access a 'Ready Reckoner' that allows them to identify the potential service implications, benefits and cost savings resulting from implementing NHS Health Checks: http://www.healthcheck.nhs.uk/national_resources/ready_reckoner_tools

Coronary heart disease emergency admission rates

**CHD emergency admission rates (DSRs), for all ages, 2011/14**

In 2011/12 the emergency admission rate for CHD, all persons, in Tower Hamlets was 280.5 per 100,000 (412 admissions). This is significantly higher than England (198.3 per 100,000) and London (205.5 per 100,000).

Male CHD emergency admission rates are significantly higher than female CHD emergency admission rates.

The emergency admission rate for CHD in 2011/12 for persons living in the most deprived areas of Tower Hamlets was 422.8. This is 3.3 times greater than emergency admission rates for persons living in the least deprived areas of Tower Hamlets (128.2).

**Trend in CHD rates (DSRs), 2004/05 to 2011/12**

The emergency admission rate for CHD in Tower Hamlets has decreased by 52.7% between 2004/05 and 2011/12.

In England it has decreased by 23.1% and in London it has decreased by 23.4%.

**CHD emergency admission rates (DSRs) for all ages, by quintile of relative deprivation, 2011/12**

Male CHD emergency admission rates are significantly higher than female CHD emergency admission rates.

The emergency admission rates for persons who live in the most deprived areas of England are 2.2 times greater compared to persons who live in the least deprived areas and 1.9 times greater in London.

Source: Hospital Episode Statistics (HES), Health and Social Care Information Centre, ONS

Source: HES, Health and Social Care Information Centre, ONS, Department of Communities and Local Government (DCLG)

Source: HES, Health and Social Care Information Centre, ONS
Heart failure emergency admission rates

In 2011/12 the emergency admission rate for heart failure, all persons, in Tower Hamlets was 108.6 per 100,000 (175 admissions). This is significantly higher than England (60.7 per 100,000) and London (80.3 per 100,000).

Male heart failure emergency admission rates are higher than female heart failure emergency admission rates.

In England, the emergency admission rates for persons who live in the most deprived areas are 2.3 times greater respectively compared to persons who live in the least deprived areas and 2.4 times greater in London.

The emergency admission rate for heart failure in Tower Hamlets has decreased by 22.5% between 2004/05 and 2011/12.

In England it has decreased by 18% and in London it has decreased by 5.8%.

22.1% of deaths from heart failure occurred in the usual place of residence in Tower Hamlets which is a lower proportion than London (51.3%) and England (58.5%).
Stroke emergency admission rates (DSRs) for all ages, 2011/12

In 2011/12 the emergency admission rate for stroke, all persons, in Tower Hamlets was 133.4 per 100,000 (207 admissions). This is significantly higher than England (89.5 per 100,000) and London (100.3 per 100,000).

Male stroke emergency admission rates are lower than female stroke emergency admission rates.

Trend in stroke rates (DSRs), 2004/05 to 2011/12

The emergency admission rate for stroke in Tower Hamlets has decreased by 13.7% between 2004/05 and 2011/12. In England it has increased by 3% and in London it has increased by 10.6%.

The rate of emergency readmissions within 30 days for Tower Hamlets is 4.5%, this is higher than England and lower than London (2.9% and 6.8% respectively).
Primary angioplasty for Tower Hamlets residents was 98.4% of all reperfusion for patients diagnosed as STEMI, compared to 95% in England.

The median time to primary angioplasty treatment from a call for help was 108 minutes for Tower Hamlets residents, this is lower than in London and England (115 and 111 respectively).

*STEMIs are ST elevated myocardial infarctions (as seen in an ECG) and best treated by thrombolysis or primary angioplasty.

Non-STEMI patients can be treated less invasively, but still need specialist management. The proportion of non-STEMIs seen by a member of the cardiology team for Tower Hamlets residents is 100%, this is higher than London and England (96.4% and 93.7% respectively).

The 30 day mortality rate for STEMI patients admitted to hospital was recorded as 10.3% for Tower Hamlets residents during 2011/12, this is higher than London and England (8% and 8.7% respectively).
Angiography procedure rates (DSRs) for all ages, 2011/12

In 2011/12 the angiography procedure rate in Tower Hamlets was 457.4 per 100,000 (639 procedures). This is significantly higher than England (278.2 per 100,000) and London (331.8 per 100,000).

Male angiography rates are 1.8 times greater than female angiography rates in Tower Hamlets.

Angiography procedure rates for persons who live in the most deprived areas of Tower Hamlets are 2.1 times greater than those who live in the least deprived areas. In England and London they are 1.5 and 1.6 times greater respectively.

Trend in angiography rates (DSRs), 2004/05 to 2011/12

Angiography rates in Tower Hamlets have decreased by 28.8% between 2004/05 and 2011/12. In England and London they have increased by 8.4% and decreased by 0.7% respectively.
Non-elective angioplasty rates in Tower Hamlets have decreased by 36.1% between 2004/05 and 2011/12. Elective procedure rates have decreased by 41.4%. In England and London non-elective procedure rates have increased by 74.8% and 19.1% respectively. Elective procedure rates have decreased by 15.7% and 18.4% respectively.

CABG procedure rates in Tower Hamlets have decreased by 48.6% between 2004/05 and 2011/12. In England and London CABG procedure rates have decreased by 25.4% and 18.1% respectively.

Male angioplasty procedure rates are 3.9 times greater than female angioplasty rates in Tower Hamlets.

In 2011/12 the all persons angioplasty procedure rate in Tower Hamlets was 160.5 per 100,000 (229 procedures), 57 per 100,000 elective and 103.4 per 100,000 non-elective. This is significantly higher than England (111 per 100,000) and London (126.9 per 100,000).

Male angioplasty procedure rates are 3.9 times greater than female angioplasty rates in Tower Hamlets.

In 2011/12 the CABG procedure rate, all persons, in Tower Hamlets was 35.9 per 100,000 (52 procedures). This is higher than England (29.5 per 100,000) and London (34.9 per 100,000).

In 2011/12 the all persons angioplasty procedure rate in Tower Hamlets was 160.5 per 100,000 (229 procedures), 57 per 100,000 elective and 103.4 per 100,000 non-elective. This is significantly higher than England (111 per 100,000) and London (126.9 per 100,000).

Male angioplasty procedure rates are 3.9 times greater than female angioplasty rates in Tower Hamlets.

In 2011/12 the CABG procedure rate, all persons, in Tower Hamlets was 35.9 per 100,000 (52 procedures). This is higher than England (29.5 per 100,000) and London (34.9 per 100,000).

Trend in Angioplasty rates (DSRs), 2004/05 to 2011/12

Trend in CABG rates (DSRs), 2004/05 to 2011/12

Source: HES, Health and Social Care Information Centre, ONS

Non-elective angioplasty rates in Tower Hamlets have decreased by 36.1% between 2004/05 and 2011/12. Elective procedure rates have decreased by 41.4%. In England and London non-elective procedure rates have increased by 74.8% and 19.1% respectively. Elective procedure rates have decreased by 15.7% and 18.4% respectively.

CABG procedure rates in Tower Hamlets have decreased by 48.6% between 2004/05 and 2011/12. In England and London CABG procedure rates have decreased by 25.4% and 18.1% respectively.
Cardiovascular disease health profile - Tower Hamlets

Revascularisation rates (DSRs) for all ages, by quintile of relative deprivation, 2011/12

Revascularisation rates for persons who live in the most deprived areas of Tower Hamlets are 2.6 times greater than those who live in the least deprived areas. In England and London they are 1.6 and 1.5 times greater respectively.

Cardiac procedures

Valve procedure rates (DSRs), 2010/11-2011/12

Valve procedure rates in Tower Hamlets were 16.3 per 100,000 in 2010/11-2011/12, lower than the network average (16.5) and higher than England (14.8).
Heart Transplants by SHA, 2011/12

<table>
<thead>
<tr>
<th>Strategic Health Authority</th>
<th>Rate per million population</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Midlands</td>
<td>3.8</td>
</tr>
<tr>
<td>North East</td>
<td>3.4</td>
</tr>
<tr>
<td>East Midlands</td>
<td>2.7</td>
</tr>
<tr>
<td>North West</td>
<td>2.7</td>
</tr>
<tr>
<td>East Of England</td>
<td>2.2</td>
</tr>
<tr>
<td>South West</td>
<td>1.9</td>
</tr>
<tr>
<td>South Central</td>
<td>1.7</td>
</tr>
<tr>
<td>South East Coast</td>
<td>1.6</td>
</tr>
<tr>
<td>Yorkshire and The Humber</td>
<td>1.1</td>
</tr>
<tr>
<td>London</td>
<td>1.1</td>
</tr>
</tbody>
</table>

The rate of heart transplantation varies from 1.1 per million in London to 3.8 per million in the West Midlands. This data is not available at a geography lower than strategic health authority.

Source: UK Blood & Transplant

Stroke management

Percentage of hospital stroke patients discharged to home or usual place of residence, 2011/12

- Tower Hamlets: 85.6% (No border = aged under 75), 56.1% (Dotted border = aged 75 and over)
- London: 66.3%, 54.8%
- England: 77.9%, 70.1%

Rate of carotid endarterectomy procedures (DSR’s), 2010/11-2011/12

- Tower Hamlets: 8.51
- London: 7.32
- England: 8.72

The proportion of patients under the age of 75 discharged to home or usual place of residence in Tower Hamlets is 85.6%, which is significantly higher than London (66.3%) and higher than England (77.9%). 56.1% of patients aged 75 or over are discharged to home, which is higher than London (54.8%) but lower than England (70.1%).

The rate of carotid endarterectomies performed per 100,000 for Tower Hamlets is 8.5, which is higher than London (7.3) and significantly lower than England (8.7). London is significantly lower than England.

Source: HES, Health and Social Care Information Centre, ONS
The Public Health Outcomes Framework has an objective of reducing the numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities. One of the key indicators for this objective is early mortality from CVD. In 2014 the early CVD mortality rate in Tower Hamlets for persons under 75 yrs is predicted to be 79.4, which would be a 10 year decrease of 45.1% (from 2004). The early CVD mortality rate for England is predicted to be 50.1, a 10 year decrease of 44.2% and the London rate is predicted to be 51.2, a 10 year decrease of 46.6%.

In Tower Hamlets the percentage of cardiovascular deaths as a proportion of all deaths was 23.8% for people aged under 75 years and 34.3% for people aged 75 and above. This is similar to England for under 75s (23.8%) and lower than England for those aged 75 and over (34.7%).

CHD makes up the biggest proportion of total deaths (within CVD) for both males and females, 16.6% (6.3% AMI and 10.3% non AMI) and 11.7% (4.4% AMI and 7.3 % non AMI ) respectively in Tower Hamlets. For males, 6.1% of deaths are due to stroke and 1% are due to heart failure. For females, 6.4% of deaths are due to stroke and 1.6% are due to heart failure.
CVD by deprivation

All CVD mortality rates (DSRs) for all persons, by quintile of relative deprivation, 2009-11

The mortality rate in 2009-11 for persons who live in the most deprived areas of Tower Hamlets was 219.9 per 100,000. This is 1.2 times greater than the overall mortality rate for Tower Hamlets and 1.8 times greater than the mortality rate for persons who live in the least deprived areas of Tower Hamlets.

In England the mortality rate for persons who live in the most deprived areas was 213.1, 1.4 times greater than the overall mortality rate for England and 1.8 times greater than the mortality rate for persons who are in the least deprived areas. In London the mortality rate for persons who live in the most deprived areas was 189.2, 1.3 times greater than the overall mortality rate and 1.6 times greater than the mortality rate for persons who live in the least deprived areas.
In 2014, the mortality rate for cerebrovascular disease in Tower Hamlets is predicted to be 38.4 for males and 28.4 for females, this is a 10 year decrease of 47.6% for males and 44.3% for females. In England, the mortality rate is predicted to decrease by 44.4% to 33.1 for males over the same 10 years and by 41.7% to 31.9 for females. The rates in London are predicted to decrease by 48.8% for males to 28.8 and by 50.5% to 24.4 for females.

Note that due to mortality recording changes introduced for 2011 data, there will be some decreases in CVD numbers, particularly cerebrovascular disease between 2011 and previous years that are not accounted for in population outcomes, but coding rules.
This report has been compiled by

- Kevin Watson
- Andrew Hughes

With acknowledgements

- Heather White
- Jamie Waterall
- John Birkhead
- Rachel Johnson

With special thanks to Yorkshire and Humber Public Health Observatory whose original work formed the basis for these reports.