Baseline Assessment of Lung Cancer
South West London Cancer Network

Dyfed Thomas, Public Health Project Manager, NHS Wandsworth/SWLCN
Amanda Cranston, Consultant in Public Health, NHS Wandsworth
Julia Ozdilli, Service Improvement Lead, SWLCN


Contents

Acknowledgements ........................................................................................................... 3

Executive Summary ......................................................................................................... 4

1.0 Introduction .................................................................................................................. 8

2.0 Risk Factors ................................................................................................................ 9

2.1 Smoking ....................................................................................................................... 9

2.2 Multiple Deprivation .................................................................................................. 10

2.3 Age ............................................................................................................................... 12

2.4 Ethnicity ....................................................................................................................... 12

2.5 Physical (in)activity ..................................................................................................... 14

2.6 Fruit and vegetable consumption .............................................................................. 15

2.7 Alcohol consumption ................................................................................................. 15

3.0 Lung Cancer Incidence .............................................................................................. 17

3.1 Under 75 incidence by PCT 2004-06 ....................................................................... 17

3.2 All age incidence by PCT 2004-06 .......................................................................... 17

3.3 All age incidence by PCT 1993-2006 (3-year rolling average) ............................... 18

4.0 Lung Cancer Prevalence 2006 ................................................................................... 20

4.1 One-year prevalence by Cancer Network .................................................................. 20

5.0 Lung Cancer Staging 2003-07 .................................................................................. 21

5.1 PCT staging .................................................................................................................. 21

5.2 SWLCN staging .......................................................................................................... 22

6.0 Lung Cancer Survival ................................................................................................ 23

6.1 One-year relative survival by PCT and Cancer Network 2002-07 ......................... 23

6.2 Five-year relative survival by PCT and Cancer Network ........................................ 25

7.0 Lung Cancer Mortality ............................................................................................... 27

7.1 Under 75 mortality by PCT 2006-08 ........................................................................ 27

7.2 Under 75 mortality by PCT 1993-2008 (3-year rolling average) ............................ 27

7.3 All age mortality by PCT 2006-08 ............................................................................. 28

8.0 Emergency Admissions ............................................................................................. 30

8.1 All cancer emergency admissions by GP Practice 2008-09 .................................... 30

8.1.1 Croydon ................................................................................................................ 30

8.1.2 Kingston ............................................................................................................... 31

8.1.3 Richmond & Twickenham .................................................................................... 31

8.1.4 Sutton & Merton .................................................................................................. 32
8.1.5 Wandsworth ..........................................................32
8.2 Lung cancer emergency bed days by PCT and Cancer Network 2007-08.......33
9.0 Cancer Referrals ................................................................34
9.1 Urgent two week wait (2WW) referrals for suspected cancer 2009 by GP Practice34
9.1.1 Croydon ........................................................................34
9.1.2 Kingston ........................................................................34
9.1.3 Richmond & Twickenham ..................................................35
9.1.4 Sutton & Merton .............................................................36
9.1.5 Wandsworth ...................................................................36
9.2 Proportion of lung cancer cases diagnosed through non-urgent referral by PCT and Cancer Network 2010.............................................................37
9.3 Urgent 2 week wait referrals resulting in lung cancer diagnosis ('The Hit Rate') by PCT and Cancer Network 2010 .................................................................37
10.0 Primary Care Audit 2010 ......................................................39
10.1 Avoidable delays (all cancers) .............................................39
10.2 Lung cancer summary .......................................................40
11.0 Cancer Awareness Measure (CAM) Survey in South West London 2010........41
12.0 Conclusion ........................................................................43
12.1 GP practice summaries ......................................................43
12.2 PCT summaries ...............................................................44
12.3 South West London Cancer Network specific ..............................48
12.4 Recommendations ..........................................................49
References .............................................................................50
Appendix 1: South West London GLA Projected population by ethnicity, 2010........54

Acknowledgements

NHS Wandsworth and The South West London Cancer Network acknowledges the contribution the following people and organisations in the provision of information for this document: Martin Brealey, SWL Breast Screening Unit; Helena Cooper, Primary Care Support Service; Karen Grey, Public Health NHS Wandsworth; Dee Lychnos, Public Health NHS Wandsworth; Assad Pasha, Public Health NHS Wandsworth; and the Thames Cancer Registry.
Executive Summary

Late diagnosis is a major factor contributing to poor survival rates in this country, and while survival rates in South West London are good in comparison to other networks in England, when benchmarked against counterparts in Europe it is clear that there is much more to be done. Last year the SWL cancer network successfully bid for funding for a range of initiatives to support local preventative work within the National Awareness and Earlier Diagnosis Initiative (NAEDI) to increase awareness and promote earlier diagnosis in communities and primary care. Within this bid was provision for Baseline Assessments to be undertaken. One of these initiatives that was funded was the development of this Baseline Assessment. The key findings are set out below. On pages 6 and 7 two matrices (Figure 1 and Figure 2) outline the figures of each PCT and the overall SWLCN figures.

Croydon

There are more areas of high deprivation in Croydon compared to other PCTs in SWL. Despite this both male and female under 75 years old mortality are significantly lower than the national average. Female under 75 years incidence is also significantly lower than the national average. The male mortality rate has also nearly halved since 1993-95 (3-year rolling average) while female mortality has reduced by 23.0%. Croydon has a relatively high one–year survival rate at 31.9% but it is below the EUROCare-4 study based benchmarks of “Average” (36%) and “Good Practice” (37%). One in ten people are still alive after 5 years after being diagnosed with lung cancer. In terms of service provision Croydon has one of the lowest emergency bed days rate in London at 379 per 100,000 weighted population. The average 2WW crude referral rate for suspected cancer in Croydon for 2009 was 1092.41 per 100,000 population. Over seventy percent (73.6%) of lung cancer cases are diagnosed through non-urgent referrals in Croydon. However the PCT records the highest proportion of urgent lung cancer referrals (34.6%) that result in a cancer diagnosis.

Kingston

Male under 75 years old mortality is one of the highest (after Wandsworth) in SWL but not for females. One and five year survival rates are amongst the highest in SWL and across London. The possible range of the one-year survival rate encompasses the EUROCare-4 based benchmarks at 36 (“Average”) and 37% (“Good Practice”). Under 75 mortality has only decreased 10% for women since 1993-95 (3-year rolling average), but 37% for males. The rate of emergency bed days is high at 477 per 100,000. The PCT urgent 2WW cancer referral rate was 1234.63 per 100,000 population. A high proportion (65.2%) of lung cancer cases are diagnosed through non-urgent referrals. Nearly a quarter of urgent lung cancer referrals result in a cancer diagnosis. This is in the lowest quartile for the country and may need investigation in terms of primary care interpretation of the two week referral NICE Referral Guidelines.

Richmond & Twickenham

This PCT is the healthiest in SWL, characterised by healthier living with high estimates for exercise and fruit and vegetable consumption while having the lowest smoking prevalence estimates and experiencing the lowest deprivation. This is reflected in the fact male under 75 lung cancer incidence and mortality is significantly below the national average. The PCT has the highest one-year survival rate in SWL at 34.1% which is also higher than all cancer network averages across London. The estimate is below the EUROCare-4 benchmarks however the confidence intervals range over them meaning it is possible the true survival rate reaches these benchmarks. The female under 75 mortality rate (3-year rolling average) has increased by 43% between 1993-95 and 2006-08. For the same period the mortality rate for men decreased by 44%. Richmond & Twickenham have the highest emergency bed days rate per 100,000 population in SWL. The 2WW crude cancer referral rate in Richmond & Twickenham for 2009 was 1156.66 per 100,000 population. The PCT records the lowest proportion of lung cancer cases being diagnosed through non-urgent referrals at 51.7%. Richmond &
Twickenham has the lowest proportion of urgent lung cancer referrals (21.6%) that result in a cancer diagnosis in SWL.

**Sutton & Merton**

Male under 75 mortality is significantly lower than the national average while female mortality is similar to the national average. Furthermore, under 75 mortality (3-year rolling average) has decreased by 46% for men and 23% for women between 1993-95 and 2006-08. Sutton & Merton has low one and five year survival rates in SWL at 31.2% and 8.3% respectively. The one-year survival rate is well below the EUROCare-4 based benchmarks. The emergency bed rate in Sutton & Merton was below the national average at 445 per 100,000 weighted population. The urgent 2WW crude cancer referral rate in Sutton & Merton for 2009 was 1313.64 per 100,000 population. Less than sixty percent (59.4%) of lung cancer cases are diagnosed through non-urgent referrals, however this is higher than the national average at 52.2%. The proportion of urgent 2 week lung cancer referrals resulting in a cancer diagnosis is 31.5% and is comparable to the national average.

**Wandsworth**

Wandsworth has the highest estimated smoking prevalence in SWL reflecting the level of deprivation and young population in the borough. Both male and female under 75 lung cancer incidence and mortality are the highest in SWL and are significantly higher than national averages. The one-year survival rate is less than 30% while the five-year survival rate is the highest in SWL at 11.4%. The one-year survival rate is well below the EUROCare-4 based benchmarks. Male under 75 mortality rates (3-year rolling average) have decreased by 30% between 1993-95 and 2006-08 but is still the lowest decrease amongst SWL PCTs. Female under 75 mortality rates (3-year rolling average) have increased by 6% during the same period. Wandsworth also reveal a high emergency bed days rate at 481 per 100,000 weighted population. The PCT urgent 2WW cancer referral rate was 1267.93 per 100,000 population. Nearly seventy percent (69.4%) of lung cancer cases are diagnosed through non-urgent referrals. The proportion of urgent lung cancer referrals resulting in a cancer diagnosis is low at 21.6%.

**South West London Cancer Network**

Overall the SWLCN performs well against all other networks in London, coming out best 3 out of 5 times on cancer network specific indicators. One indicator though, emergency bed days rate is the highest in London, reflecting the high rates in Wandsworth, Richmond & Twickenham and Kingston. One year survival rates for both males and females are significantly higher than the national average, while the five-year survival rate (persons) is higher than the national average. The one-year survival rate for both males and females is comparable to Norway (EUROCare-4) but not Finland and Sweden. The SWLCN records the highest proportion of lung cancer cases that originate from non-urgent referrals in London at 64.5%. The percentage of urgent 2 week wait referrals resulting in a lung cancer diagnosis is low reflecting the low rates in Kingston, Wandsworth and Richmond & Twickenham. Overall the urgent 2WW referral rate for SWL was 0.40 per 100,000 population.
Figure 1: PCT Matrix of key lung cancer figures for South West London.

<table>
<thead>
<tr>
<th>Smoking prevalence (2003-05)</th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21.0 - 25.7%</td>
<td>18.7-24.9%</td>
<td>16.1 - 23.0%</td>
<td>18.7 - 23.3% (Merton)</td>
<td>21.0 - 27.7%</td>
</tr>
</tbody>
</table>

% of small areas (LSOA) classed as highest deprivation (2007)

<table>
<thead>
<tr>
<th></th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33%</td>
<td>5%</td>
<td>4%</td>
<td>15%</td>
<td>29%</td>
</tr>
</tbody>
</table>

65+ Population as % of PCT population (2010)

<table>
<thead>
<tr>
<th></th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.9%</td>
<td>12.0%</td>
<td>12.1%</td>
<td>8.2%</td>
<td></td>
</tr>
</tbody>
</table>

65+ Population increase (2010-2030)

<table>
<thead>
<tr>
<th></th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.6%</td>
<td>3.0%</td>
<td>1.5%</td>
<td>0.4%</td>
<td></td>
</tr>
</tbody>
</table>

Estimated Moderate intensity sport & active recreation (2003-09)

<table>
<thead>
<tr>
<th></th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22.7%</td>
<td>21.1%</td>
<td>27.0%</td>
<td>31.1%</td>
<td></td>
</tr>
</tbody>
</table>

Estimated fruit & vegetable consumption (2003-05)

<table>
<thead>
<tr>
<th></th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30.4%</td>
<td>31.1%</td>
<td>37.6%</td>
<td>31.1%</td>
<td></td>
</tr>
</tbody>
</table>

Male Under 75 Incidence (2004-06)

<table>
<thead>
<tr>
<th></th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36.47</td>
<td>40.75</td>
<td>31.64</td>
<td>39.8</td>
<td></td>
</tr>
</tbody>
</table>

Female Under 75 Incidence (2004-06)

<table>
<thead>
<tr>
<th></th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20.84</td>
<td>27.91</td>
<td>27.35</td>
<td>27.0%</td>
<td></td>
</tr>
</tbody>
</table>

Male Staging (2003-07)

<table>
<thead>
<tr>
<th></th>
<th>Stage 1: 9.5%</th>
<th>Stage 1: 23.5%</th>
<th>Stage 1: 27.2%</th>
<th>Stage 1: 18.5%</th>
<th>Stage 1: 23.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 4: 28.0%</td>
<td>Stage 4: 33.2%</td>
<td>Stage 4: 32.2%</td>
<td>Stage 4: 32.5%</td>
<td>Stage 4: 38.3%</td>
</tr>
<tr>
<td>NK</td>
<td>58.6%</td>
<td>36.2%</td>
<td>41.8%</td>
<td>36.2%</td>
<td>34.0%</td>
</tr>
</tbody>
</table>

Female Staging (2003-07)

<table>
<thead>
<tr>
<th></th>
<th>Stage 1: 12.0%</th>
<th>Stage 1: 20.0%</th>
<th>Stage 1: 26.2%</th>
<th>Stage 1: 21.3%</th>
<th>Stage 1: 26.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 4: 29.9%</td>
<td>Stage 4: 33.3%</td>
<td>Stage 4: 35.2%</td>
<td>Stage 4: 29.5%</td>
<td>Stage 4: 32.2%</td>
</tr>
<tr>
<td>NK</td>
<td>52.6%</td>
<td>44.0%</td>
<td>34.3%</td>
<td>44.8%</td>
<td>35.3%</td>
</tr>
</tbody>
</table>

One-year survival (2002-07)

|                              | 31.90% | 32.20% | 34.10% | 31.20% | 29.00% |

Five-year survival (1998-02)

|                              | 10.00% | 10.20% | 9.70%  | 8.30%  | 11.40% |

Male Under 75 mortality (2006-08)

|                              | 26.18   | 30.91   | 23.45   | 25.54   | 40.71   |

Female Under 75 mortality (2006-08)

|                              | 16.21   | 18.21   | 22.00   | 18.01   | 28.1    |

Male % Decrease U75 mortality (1993-95-2006-08)

|                              | 45%     | 37%     | 44%     | 30%     |        |

Female % Decrease U75 mortality (1993-95-2006-08)

|                              | 23%     | 10%     | +43%    | 23%     | +6%     |

2WW cancer referral rate per 100,000 (2009)

|                              | 1092.41 | 1234.63 | 1156.66 | 1313.64 | 1267.93 |

% of cases diagnosed through non-urgent referrals (2010)

|                              | 73.6%   | 65.2%   | 51.7%   | 59.4%   | 69.4%   |

% urgent 2 week wait referrals resulting in cancer diagnosis (2010)

|                              | 34.60%  | 23.60%  | 21.60%  | 31.50%  | 21.60%  |

Emergency Bed Days per 100,000 (2007-08)

|                              | 379     | 477     | 507     | 445     | 481     |

Average all cancer emergency admission crude rate per 100,000

|                              | 610.41  | 506.50  | 536.97  | 634.87  | 443.07  |

% of cases diagnosed through non-urgent referrals (2010)

|                              | 73.6%   | 65.2%   | 51.7%   | 59.4%   | 69.4%   |

% urgent 2 week wait referrals resulting in cancer diagnosis (2010)

|                              | 34.60%  | 23.60%  | 21.60%  | 31.50%  | 21.60%  |
Figure 2: Matrix of key lung cancer figures for South West London Cancer Network.

<table>
<thead>
<tr>
<th>SWLCN</th>
<th>NELCN</th>
<th>NLCN</th>
<th>(N)WLCN</th>
<th>SELCN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male Staging (2003-07)</strong></td>
<td>Stage 1: 19.8%</td>
<td>Stage 4: 33.8%</td>
<td>NK: 41.1%</td>
<td></td>
</tr>
<tr>
<td><strong>Female Staging (2003-07)</strong></td>
<td>Stage 1: 21.2%</td>
<td>Stage 4: 31.3%</td>
<td>NK: 41.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Male one-year prevalence per 100,000 (2006)</strong></td>
<td>22.2</td>
<td>25.4</td>
<td>23.8</td>
<td>22.4</td>
</tr>
<tr>
<td><strong>Female one-year prevalence per 100,000 (2006)</strong></td>
<td>17.5</td>
<td>17.3</td>
<td>14.2</td>
<td>13.7</td>
</tr>
<tr>
<td><strong>Male One-year survival (2002-06)</strong></td>
<td>30.10%</td>
<td>26.10%</td>
<td>28.60%</td>
<td>30.10%</td>
</tr>
<tr>
<td><strong>Female One-year survival (2002-07)</strong></td>
<td>33.2%</td>
<td>28.2%</td>
<td>34.1%</td>
<td>33.8%</td>
</tr>
<tr>
<td><strong>Five-year survival (Persons) (2006)</strong></td>
<td>10.4%</td>
<td>7.2%</td>
<td>9.2%</td>
<td>9.5%</td>
</tr>
<tr>
<td><strong>Emergency Bed Days per 100,000 (2007-08)</strong></td>
<td>439</td>
<td>375</td>
<td>436</td>
<td>368</td>
</tr>
<tr>
<td><strong>% of cases diagnosed through non-urgent referrals (2010)</strong></td>
<td>64.5%</td>
<td>59.2%</td>
<td>59.1%</td>
<td>-</td>
</tr>
<tr>
<td><strong>% urgent 2 week wait referrals resulting in cancer diagnosis (2010)</strong></td>
<td>26.7%</td>
<td>31.7%</td>
<td>25.9%</td>
<td>22.6%</td>
</tr>
</tbody>
</table>
1.0 Introduction

Since the Cancer Plan was published in 2000 more people are surviving cancer and the incidence of cancer is increasing as more people live longer. Late diagnosis is a major factor contributing to poor survival rates in this country, and while survival rates in South West London are good in comparison to other networks in England, when benchmarked against counterparts in Europe it is clear that there is much more to be done. Contemporary lifestyles predispose people to cancer and the Cancer Reform Strategy (CRS) (2007) highlighted that with over half of all cancers being potentially preventable services must now begin to think ‘upstream’ and focus on prevention.

The National Awareness and Earlier Diagnosis Initiative (NAEDI) is a collaboration between the National Cancer Action Team and Cancer Research UK and is a key programme emerging from the CRS. Its aim is to make public and healthcare professionals more aware of the signs and symptoms of cancer and encourage those who may have symptoms to seek advice earlier. This workstream offers a good fit with the policy direction of QIPP, NHS Next Stage Review: High Quality for All and World Class Commissioning.

Last year the SWL cancer network successfully bid for funding for a range of initiatives to support local preventative work within NAEDI to increase awareness and promote earlier diagnosis in communities and primary care. These bids included this Baseline Assessment and the Primary Care Audit and Cancer Awareness Measure highlighted within this document.

In order to aid each local early detection initiative a baseline assessment has been undertaken. In collaboration the National Cancer Intelligence Network (NCIN) and the National Cancer Action Team (NCAT) have produced a guide termed: Local Awareness and Early Diagnosis Baseline Assessments: A Guide for Cancer Networks and Primary Care Trusts. This baseline assessment follows these guidelines as a framework (National Cancer Intelligence Network 2009a).

This document provides a summary of currently available information regarding the epidemiology of lung cancer. Comparisons are made with national data and international data where possible.

The International Statistical Classification of Diseases and Related Health Problems (10th Revision 2007) for lung cancer is C33 and C34.
2.0 Risk Factors

2.1 Smoking

The greatest risk factor for developing lung cancer is smoking. Ninety percent of lung cancers in men and 83% of cases in women in the UK (Peto et al. 2006) are attributable to smoking. NHS hospital admissions data for lung cancer show an estimated 82% can be attributed to smoking (The Information Centre 2010a). It has been long established that smoking increases the risk of lung cancer significantly, with some studies reporting a 25-26 fold higher risk compared to lifelong non-smokers (Doll and Hill 1950, Doll et al. 2005).

Results from the Health Survey for England (The Information Centre 2006) showed more variation in smoking rates for BME communities compared with the population as a whole. Following age-standardisation, Bangladeshi and Irish men were more likely to smoke than the general male population, while Indian men were found to be less likely to smoke than the general male population. The picture is very different for women as after age-standardisation none of the female BME groups were more likely to smoke than the general female population. Black African, South Asian and Chinese women were found to be less likely to smoke than the general female population. These results were however based on self-reported smoking behaviour which is likely to underestimate smoking prevalence.

Table 1: Model based estimates (with 95 CIs) of smoking in adults in South West London compared with England, 2003-2005.

<table>
<thead>
<tr>
<th>Local Authority</th>
<th>Model Prevalence (%)</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croydon</td>
<td>23.2</td>
<td>21.0</td>
<td>25.7</td>
</tr>
<tr>
<td>Kingston</td>
<td>21.7</td>
<td>18.7</td>
<td>24.9</td>
</tr>
<tr>
<td>Merton</td>
<td>20.9</td>
<td>18.7</td>
<td>23.3</td>
</tr>
<tr>
<td>Richmond</td>
<td>19.3</td>
<td>16.1</td>
<td>23.0</td>
</tr>
<tr>
<td>Sutton</td>
<td>25.4</td>
<td>22.1</td>
<td>29.1</td>
</tr>
<tr>
<td>Wandsworth</td>
<td>24.2</td>
<td>21.0</td>
<td>27.7</td>
</tr>
<tr>
<td>England</td>
<td>24.1</td>
<td>23.4</td>
<td>24.7</td>
</tr>
</tbody>
</table>

Source: The Information Centre 2010.

Overall, the model estimated smoking prevalence across the 6 boroughs of SWL are similar (Table 1 and Figure 3) ranging from 19.3% (95%CI 16.1% – 23.0%) in Richmond and Twickenham to 25.4% (95%CI 22.1% – 29.1%) in Sutton. These rates are also comparable with the London and national averages. These estimates are model based i.e. they are based on population characteristics extracted from census data for example and are not based on a survey sample. They do not take into consideration local variation, for example the effects of local campaigns. Due to this it is not strictly appropriate to compare between areas and these data should not be used to monitor performance (The Information Centre 2008). Also consideration of the 95% confidence intervals is needed when assessing the data.
Although SW London has followed the national trend with a reduction in the prevalence of smoking this masks significant health inequalities with smoking rates highest in the most deprived populations. In some super output areas in Croydon, Wandsworth and Sutton the prevalence reaches 41% (Map 1).

**Map 1: Estimates of smoking prevalence in adults (16+) in the SWL sector, 2003-05.**

Source: HSIE 2006; map by SWL Public Health Intelligence from Staying Healthy Strategy for South West London 2010-2016

### 2.2 Multiple Deprivation

Lung cancer has been shown to be associated with deprivation (Rowan 2007, National Cancer Intelligence Network 2008, Sidorchuk et al. 2009). Figure 4 shows the age standardised lung cancer incidence across England. The graph shows that there is significant variation between deprivation...
quintiles, as deprivation increases the incidence of lung cancer increases. Also the increase in incidence across deprivation quintiles for males is greater compared to females. However the ratio between incidence in the least and most deprived areas is similar for both women and men. The rate of incidence in the most deprived areas is more than twice that in the least deprived areas, 2.43 for men and 2.67 for women (National Cancer Intelligence Network 2010a).

**Figure 4: Lung cancer incidence by index of multiple deprivation 2000-2004.**


In SWL the main areas of high deprivation are in Wandsworth (Battersea, Roehampton, Tooting), Sutton & Merton (Morden, Carshalton) and Croydon (Croydon centre and surrounding area and New Addington). It can be expected that lung cancer mortality is highest in these areas.

**Map 2: Index of multiple deprivation, South West London, 2007 (SWL Scale).**

2.3 Age

The likelihood of developing lung cancer increases with age. Seventy-five percent of lung cancers in 2007 in the UK were diagnosed among those aged 65 years and older, over half of which are cases diagnosed among those aged 75 years and above (Office of National Statistics 2010). In addition, age may also influence the cancer treatment that individuals receive.

Figure 5: Projected increase in the proportion (Percent of total population) of 65+ population in South West London, 2010-2030.

Figure 5 shows that there is a steady projected increase in the 65 and older population across each borough in SWL except Wandsworth which has a predominantly younger population. However Wandsworth still experiences the highest cancer mortality in SWL. The highest proportion of total population that is 65 and over is found in Sutton, accounting for 13.5% of the projected population in 2010. The lowest proportion is in Wandsworth at 8.2% of the population. The highest increase, from 2010, to 2030, in the 65 and over population is projected to occur in Sutton with an increase of 3.9% followed by Croydon (3.6%) and Kingston (3.0%). By 2030 it is projected that nearly one in five (18.8%) women in Sutton will be 65 or older. Overall, males that are 65 and over account for 10.3% of the projected male population in SWL in 2010, while women account for 12.9%. These proportions are projected to increase to 11.2% and 13.5% respectively by 2020 and to 12.8% and 15.2% by 2030.

2.4 Ethnicity

Ethnicity has an effect on the health and well being of individuals, to a lesser or greater extent depending on the type of cancer. As part of the Cancer Reform Strategy the National Cancer Inequalities Initiative (NCEI) was launched with the aim to reduce inequalities in cancer incidence and survival for several different groups where inequality exists; one such grouping is Black and Minority Ethnic (BME) populations. Historically though the recording of ethnicity for routinely collected cancer data has been incomplete and of poor quality (Department of Health 2007). As a result work on cancer and ethnicity has been limited in the UK, with mortality studies using place of birth information (Grulich et al. 1992, Swerdlow et al. 1995, Wild et al. 2006) while incidence work has only been carried out on the south Asian ethnic population (Winter et al. 1999, dos Santos Silva et al. 2003, Farooq and Coleman 2005).
However as part of the National Cancer Inequalities Initiative, the National Cancer Intelligence Network (NCIN) and Cancer Research UK produced analysis on incidence and survival by major ethnic group for the period 2002-2006, in 2009 (National Cancer Intelligence Network 2009b). It found Asian and Black ethnicities were at a significantly lower risk of getting lung cancer compared with White ethnicity. The study finding that Asian males had a 40% to 62% less chance of getting lung cancer while females were estimated to have a 66% to 79% less chance. For Black with White ethnicity, Black males had a 21% to 50% less chance of getting lung cancer while females were estimated to have a 59% to 74% less chance (National Cancer Intelligence Network 2010b). Both the Chinese and Mixed ethnic groups tended to have significantly lower incidence rates of lung cancer compared to Whites.

Asians also had significantly improved outcomes for lung cancer at both one and three years compared to Whites for all ages (for example, 20% vs 11% for three year age-standardised survival in males). Males with lung cancer from the Black ethnic group aged over 65-99 had much better survival than White males at both one and three years (13% compared with 8% at three years). Furthermore in the 15-64 year age group Asian men have significantly higher survival rates than Black and White men. For 65-99 year olds however there was very little difference between mortality rates in Asian and Black males, but white males have significantly lower survival rates than both groups. For all ages, white men have the lowest survival rates, however this is not significantly different to Black males but Asian males have significantly higher survival than White and Black males.

Figure 6: Projected (2010) resident ethnic composition of SWL PCTs, for Males and Females of all ages.


Croydon has the largest non-white resident ethnicity at 40.9% of the total population of the PCT followed by Sutton & Merton with 23.3% (Figure 6). Richmond has the lowest at 11.7%. The largest resident BME group across all PCTs is Asian, which comprises of Pakistani, Indian, Bangladeshi and other Asian. Croydon has the largest Black population accounting for 21.2% or one in five of the PCT population. For exact figures see Appendix 1.
2.5 Physical (in)activity

A number of studies have found an inverse relationship between physical activity (self-reported) and lung cancer (Lee et al. 1999, Colbert et al. 2002, Bak et al. 2005, Leitzmann et al. 2009, Sui et al. 2010). However a number also have not found an association (Davey et al. 2000, Batty et al. 2001, Schnodr 2005). These inconsistent findings may be due partly to the measurement errors inherent in self-reported physical activity. A number of studies have found a greater association between a lack of physical activity and increased lung cancer risk in former and current smokers as opposed to never smokers (Thune and Lund 1997, Leitzmann et al. 2009, Sui et al. 2010), other studies have not made this distinction between smokers. The lack of association in never smokers in the study may be explained partly by the small number of lung cancer deaths. Another possible explanation might be the potential different etiology of lung cancer between never smokers and smokers (Subramanian and Govindan 2007, Wakelee 2007) as it is known that smoking is more strongly related to squamous cell than adenocarcinomas (Kabat 1996). From this brief review there are important public health implications if the largest reduction in risk is in former smokers as well as the knowledge that there is something more than avoiding tobacco that can be done to reduce the risk of lung cancer.

The latest estimated figures (Figure 7) from the Active People 2008-09 Survey by Sport England shows that more people (aged 16+) in the borough of Richmond partake in moderate intensity sport than other boroughs in SWL. The exact definition is to partake in at least 30 minutes of sport at moderate intensity at least three times a week (Further details on this survey can be found at http://www.sportengland.org/research/active_people_survey.aspx). Croydon is estimated to be the least active population at 17.8%. All other boroughs record that over one in five are engaged in this level of activity. A high proportion seen in Wandsworth, possibly higher than expected given the level of deprivation in the borough, will partly be due to the borough having a young population as it is likely that a greater proportion of younger people undertake levels of physical activity at the recommended levels than older people.

Figure 7: Estimated proportion of population (aged 16+) to be taking part in moderate intensity sport and active recreation on at least 3 days a week.

Source: Active People Survey 2008-09, Sport England.

The figures are not age standardised and the indicator does not include active recreation such as housework, DIY, activity in ones job or active transport. Also the figures may be prone to respondent bias as the level of physical activity is self-reported.


2.6 Fruit and vegetable consumption

In line with World Health Organization (WHO) recommendations, current government advice stipulates that adults and children aged over five years should consume at least five 80g portions of fruit and vegetables a day. Males and females in Britain however consume on average less than three portions of fruit and vegetables a day and just 14% consume the recommended amount (Office of National Statistics 2002). In terms of lung cancer there is evidence that high fruit and vegetable consumption can be protective against lung cancer (Vainio and Weiderpass 2006, Linseisen et al. 2007, Wright 2008) however the evidence is not extensive and conclusive with possible effects down to residual confounding by smoking or chance. Some studies state similarly with physical activity that a greater protective effect is seen for current smokers (Büchner et al. 2010). Furthermore, some work indicates that an inverse relationship exists only between a lower risk of lung cancer and fruit intake (Gonzalez and Riboli 2006).

Figure 8: Model based estimates of fruit and vegetable consumption in adults in South West London, 2003-2005 (Percentage)

Source: The Information Centre.

Variation in fruit and vegetable consumption has also been linked to deprivation (Cummins et al. 2009) due to a variety of reasons including but not limited, to cost, choice, access and quality. The model based estimates in Figure 8 follow this pattern whereby Richmond & Twickenham has the highest estimated intake at 37.1% (95%CI 33.7% - 40.6%) of adults in the PCT and Croydon the lowest at 27.8% (95%CI 25.7% - 30.1%). The PCTs of Sutton & Merton (30.4% - 95%CI 28.4% - 32.5%), Kingston (33.4% - 95%CI 30.3% - 36.7%) and Wandsworth (31.1% - 95%CI 27.7% - 34.6%) have similar estimated consumption rates. These estimates are model based i.e. they are based on population characteristics extracted from census data for example and are not based on a survey sample. They do not take into consideration local variation, for example the effects of local campaigns. Due to this it is not strictly appropriate to compare between areas and these data should not be used to monitor performance (The Information Centre 2008). Also consideration of the 95% confidence intervals is needed when assessing the data.

2.7 Alcohol consumption

There have been a number of studies looking at the link between alcohol consumption and lung cancer risk but results have proved inconsistent (Chow et al. 1992, Potter et al. 1992, Djousse et al. 2002). Some studies have identified heavy alcohol consumption a risk factor for lung cancer but it is difficult to interpret due to the potential for residual confounding (Thun et al. 2009). Others have
attributed the higher risk to those who also smoke (Bagnardi et al. 2010), thus reflecting the interplay between alcohol and smoking, emphasizing the need for joint preventive measures. A meta-analysis by Chao (2007) suggests that there is a dose-response relationship whereby high consumption of beer and liquors may be associated with increased lung cancer risk, whereas modest wine consumption may be inversely associated with risk.

National Statistics from 2008 show that 31% of men in Britain drink more than the recommended 21 units per week, and 8% drink more than 50 units per week, while 20% of women drink more than recommended 14 units per week, and 5% more than 35 units per week (The Information Centre 2010b).

Figure 9: Model based estimates of binge drinking in Adults in South West London, 2003-2005.

Source: The Information Centre.

Estimated binge drinking in South West London (Figure 9) is below the national average (18.0% - 95%CI 17.4% - 18.6%) but comparable to the London average (12.7% - 95%CI 11.4% - 14.0%). Estimates are again based on population characteristics. Wandsworth has the highest model estimated binge drinking prevalence amongst adults in SWL at 13.9% (95%CI 12.0% - 16.2%), while the lowest is in Croydon at 11.0% (9.6% - 12.6%), however all estimates for SWL do not show much variance. These estimates are model based i.e. they are based on population characteristics extracted from census data for example and are not based on a survey sample. They do not take into consideration local variation, for example the effects of local campaigns. Due to this it is not strictly appropriate to compare between areas and these data should not be used to monitor performance (The Information Centre 2008). Also consideration of the 95% confidence intervals is needed when assessing the data.
3.0 Lung Cancer Incidence

3.1 Under 75 incidence by PCT 2004-06

Figure 10 shows the under 75 age standardised lung cancer incidence in SWL for 2004-06. Incidence rates are highest in Wandsworth for both male (51.79 per 100,000 95%CI 42.85 – 60.74) and female (37.65 95%CI 30.50 – 44.80) They are significantly higher than the London and England averages as well as Richmond & Twickenham (31.64 95%CI 24.20 – 39.07) and Croydon (36.47 95%CI 30.77 – 42.16) for males and Croydon (20.84 95%CI 16.70 – 24.99) and Sutton & Merton (24.15 95%CI 19.91 – 28.39) for females. Richmond and Twickenham has significantly lower lung cancer incidence for males compared to the London (42.20 95%CI 40.83 – 43.58) and national (40.87 95%CI 40.42 – 41.32) averages, while Croydon has a significantly lower incidence for females compared to the national (26.21 95%CI 25.85 – 26.56) average only. All other boroughs have comparable incidence rates as the national and London figures.

Figure 10: Directly age standardised (DSR) under 75 years lung cancer incidence, 2004-06.

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD).

3.2 All age incidence by PCT 2004-06

The all age directly standardised incidence follows the same pattern as the under 75 incidence (Figure 11). Wandsworth PCT has significantly higher male (77.81 per 100,000 95%CI 67.65 – 87.97) and female (48.12 95%CI 40.67 – 55.57) rates compared to the national and London averages.

Figure 11: Directly age standardised (DSR) all ages years lung cancer incidence, 2004-06.

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD).
Male incidence in Wandsworth is also significantly higher than all other PCTs in SWL; Richmond & Twickenham (46.87 95%CI 38.48 – 55.25), Croydon (50.01 95%CI 43.73 – 56.29), Kingston (52.50 95%CI 42.64 – 62.36) and Sutton & Merton (56.55 95%CI 50.12 – 62.98). Wandsworth female incidence is only significantly higher than Croydon (28.78 95%CI 24.34 – 33.22) and Sutton & Merton (32.40 95%CI 27.96 – 36.84). Male incidence rates in Richmond & Twickenham and Croydon are also significantly lower than the national (60.01 95%CI 59.50 – 60.52) and London (61.02 95%CI 59.48 – 62.57) averages. Only Croydon has a female incidence rate significantly below the national (35.01 95%CI 34.64 – 35.38) and London (34.92 – 33.84 – 36.00) averages.

3.3 All age incidence by PCT 1993-2006 (3-year rolling average)

The most striking observation from these two figures (Figure 12 and Figure 13) is that male incidence has overall been decreasing (with the recent exception of Wandsworth) but female incidence has been near constant or increasing since 1993-95 in each SWL PCT. In particular female incidence in Kingston and Wandsworth has increased sharply between 2003 and 2006 while female incidence in Richmond & Twickenham has been increasing since at least 1993-95. The national average for female incidence has remained constant since 1993-95 (Figure 13) and the rate in Wandsworth PCT has been constantly higher over this period. Both Richmond & Twickenham and Kingston have experienced recent female incidence increases and now have rates which are higher than the national as well as the London average.

Figure 12: Male directly age standardised (DSR) all ages lung cancer incidence, 1993 to 2006 3-year rolling average.

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD).

Male incidence is higher than female but due to the increasing trend amongst female incidence some PCTs are approaching the lung cancer incidence levels of men. These PCTs include Wandsworth and Richmond & Twickenham if the current trend is prolonged (Figure 13). Other points of note include a possible continuation in the increase of male and female incidence in Kingston and the current decreasing trend of male incidence in Richmond & Twickenham after an increase from 2001 to 2004. Overall latest figures show (2006), only Wandsworth has a male incidence higher than the London average, while all PCTs have rate higher than the national average.
Figure 13: Female directly age standardised (DSR) all ages lung cancer incidence, 1993-2006 3-year rolling average.

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD).
4.0 Lung Cancer Prevalence 2006

Cancer prevalence refers to the number of people who have previously received a diagnosis of cancer and who are still alive at a given time point. Some of these patients will have been cured and others will not. Therefore prevalence reflects both the incidence of cancer and its associated survival pattern.

4.1 One-year prevalence by Cancer Network

In 2006 the SWLCN had the lowest male age standardised prevalence of lung cancer in London (Table 2). All cancer networks in London have similar male prevalence rates to the national rate. Contrastingly, SWLCN had the highest female lung cancer prevalence in 2006 (Table 3). Again, all London networks have similar prevalence to the national rate.

Table 2: Male age standardised lung cancer prevalence, 2006.

<table>
<thead>
<tr>
<th>Cancer Network</th>
<th>No. of patients</th>
<th>Crude Prevalence</th>
<th>ASP*</th>
<th>95% Lower CI</th>
<th>95% Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWLCN</td>
<td>167</td>
<td>21.8</td>
<td>22.2</td>
<td>18.8</td>
<td>25.7</td>
</tr>
<tr>
<td>WLCN</td>
<td>186</td>
<td>20.3</td>
<td>22.4</td>
<td>19.2</td>
<td>25.7</td>
</tr>
<tr>
<td>NLCN</td>
<td>163</td>
<td>21.7</td>
<td>23.8</td>
<td>20.1</td>
<td>27.5</td>
</tr>
<tr>
<td>NELCN</td>
<td>170</td>
<td>22.2</td>
<td>25.4</td>
<td>21.5</td>
<td>29.3</td>
</tr>
<tr>
<td>SELCN</td>
<td>224</td>
<td>29.4</td>
<td>32.3</td>
<td>27.9</td>
<td>36.6</td>
</tr>
<tr>
<td>England</td>
<td>7174</td>
<td>28.8</td>
<td>33.9</td>
<td>23.3</td>
<td>44.5</td>
</tr>
</tbody>
</table>

*Age standardised prevalence
Source: National Cancer Intelligence Network (2010c).

Table 3: Female age standardised lung cancer prevalence, 2006.

<table>
<thead>
<tr>
<th>Cancer Network</th>
<th>No. of patients</th>
<th>Crude Prevalence</th>
<th>ASP*</th>
<th>95% Lower CI</th>
<th>95% Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLCN</td>
<td>137</td>
<td>14.8</td>
<td>13.7</td>
<td>11.3</td>
<td>16.1</td>
</tr>
<tr>
<td>NLCN</td>
<td>119</td>
<td>15.3</td>
<td>14.2</td>
<td>11.6</td>
<td>16.9</td>
</tr>
<tr>
<td>SELCN</td>
<td>145</td>
<td>18.6</td>
<td>19.9</td>
<td>16.9</td>
<td>21.3</td>
</tr>
<tr>
<td>NELCN</td>
<td>132</td>
<td>17.0</td>
<td>17.3</td>
<td>14.2</td>
<td>20.4</td>
</tr>
<tr>
<td>SWLCN</td>
<td>159</td>
<td>19.8</td>
<td>17.5</td>
<td>14.7</td>
<td>20.4</td>
</tr>
<tr>
<td>England</td>
<td>5334</td>
<td>20.6</td>
<td>15.4</td>
<td>14.9</td>
<td>15.8</td>
</tr>
</tbody>
</table>

*Age standardised prevalence
Source: National Cancer Intelligence Network (2010c).
5.0 Lung Cancer Staging 2003-07

The staging data presented reveals that the availability of information on staging, for a cancer at registration is not always present for analysis. Note that this point refers to the availability of information to the Thames Cancer Registry (TCR) for analysis and differs from stating that staging of tumours is not occurring and that medical notes are insufficient. Specifically where the proportion of cases staged by the TCR is low (e.g. SWLCN at 55%), it will be due to the low ascertainment of information used to construct the TCR stage. This is due to the information not being available at the time of registration. It is possible that further information may be added at a later date. This may come from the initial hospital visited or another hospital subsequently visited, for example, in the process of treatment. The sources of information for the TCR are:

- Medical notes
- Pathology
- Electronic data sent by trust (only occurs at some trusts)

Ultimately if the information (listed above) is not available or it is not immediately apparent in the medical notes, then constructing a TCR stage at diagnosis is not possible. Given the extent of paper medical notes possible for each patient, the TCR cannot invest inordinate amounts of time examining every piece of medical notes for each patient. It must be emphasised that the lack of staging data (as reflected in the SWLCN 2007 proportion – 55%) is due to processes in the ascertainment of the data. It does not mean that the patients did not have their disease staged by their clinician(s) (Thames Cancer Registry 2010a).

The Thames Cancer Registry staging system is as follows:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Local (tumour confined to organ of origin).</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Direct extension (tumour has extended into surrounding tissues and organs).</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Nodal involvement (local nodes are involved).</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Metastases (distant metastases are present).</td>
<td></td>
</tr>
</tbody>
</table>


5.1 PCT staging

In terms of late diagnosis, stage 4, there is no clear distinction between 3 of the PCTs, Kingston, Sutton and Merton and Richmond & Twickenham (Figure 14). These 3 PCTs diagnose around a third of their male and female cases at stage 4. However Wandsworth show elevated levels for male lung cancer compared to the other PCTs in the region, staging 38.3% of their male lung cancer cases to stage 4. Croydon record 28.8% of their lung cancer cases to stage 4. However this lower figure (compared to other PCTs) is probably not the true proportion for stage 4 lung cancers in Croydon since over a half are not staged. This is also true for stage one diagnosed lung cancers in Croydon where a low proportion are staged at level 1, less than ten percent for males (9.5%) and only 12.0% for females, much lower than other PCTs in the SWLCN region. Due to the high proportion of cancer classed as stage ‘Not Known’, it is not appropriate to draw any conclusions from the staging data.
5.2 SWLCN staging

As a cancer network, 41.3% of its lung cancer cases have not been staged by the TCR. The majority of these non-staged tumours appear in Croydon and Sutton and Merton (Figure 15). Of those cancers staged a third are staged at stage 4 for the SWLCN while overall for London 36% of cancer are at stage 4. One in five lung cancers are diagnosed at stage 1 in the SWLCN while the London average again is slightly higher at 21.5%. Not many cancers are staged at stage 2 or 3.
6.0 Lung Cancer Survival

The Cancer Reform Strategy (Department of Health 2007) emphasizes the importance of diagnosing cancer early by screening, raising public awareness of signs and symptoms of cancer and minimising delays in investigation and referral. The overarching goal of NAEDI is to promote earlier diagnosis of cancer and thereby improve survival rates and reduce cancer mortality. Survival data is provided by the Thames Cancer Registry, which was obtained from the NCIS.

6.1 One-year relative survival by PCT and Cancer Network 2002-07

The Cancer Reform Strategy (Department of Health 2007) acknowledges the lack of data concerning the staging of cancers and suggests that one-year cancer survival rates are a good proxy for late presentation of cases. The survival analysis was based on a cohort of cancer patients aged between 0 and 99 years, diagnosed between 2002 and 2006, and follow-up was to the end of 2007. The cohort approach was used to estimate the relative survival.

Broken down by PCT, Wandsworth PCT (29.0% 95%CI 25.3 – 32.7) has the lowest lung cancer one-year (persons) survival rate (Figure 16 & Table 5) and Richmond & Twickenham the highest at 34.1% (95%CI 29.5 – 38.8). The NCIN have developed benchmarks of good performance on cancer one-year survival rates. They are based on data from the EUROCARE-4 study where “Average” is based on the average one-year survival rate for those diagnosed between 1995 and 1999. “Good practice” is based on the average achieved across a whole country by the best performing countries (Department of Health 2009). All PCTs record a survival rate below the benchmarks (36.0% and 37.0%), however it is possible Kingston and Richmond & Twickenham reach this level since their 95% confidence intervals range over these values.

<table>
<thead>
<tr>
<th>Primary Care Trust</th>
<th>Survival Rate (%)</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croydon</td>
<td>31.9</td>
<td>28.3</td>
<td>35.5</td>
</tr>
<tr>
<td>Kingston</td>
<td>32.2</td>
<td>26.9</td>
<td>37.5</td>
</tr>
<tr>
<td>Richmond &amp; Twickenham</td>
<td>34.1</td>
<td>29.5</td>
<td>38.8</td>
</tr>
<tr>
<td>Sutton &amp; Merton</td>
<td>31.2</td>
<td>27.9</td>
<td>34.4</td>
</tr>
<tr>
<td>Wandsworth</td>
<td>29.0</td>
<td>25.3</td>
<td>32.7</td>
</tr>
<tr>
<td>EUROCARE “Average”</td>
<td>36.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EUROCARE “Good Practice”</td>
<td>37.0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


Figure 16: Persons one-year (2002-07) estimated relative survival rates for lung cancer by PCT with NCIN developed benchmark from the Eurocare 4 study.

Benchmarks to compare against are not available by gender; however the Thames Cancer Registry follows NCIN advice and compares against similar countries to the UK in the absence of a benchmark. Finland, Norway and Sweden were selected as these countries have similar cancer registration features and access to death certification data as the United Kingdom (Thames Cancer Registry 2010b). The column identified as ‘UK England’ is taken from the Eurocare study which looked at data from 1995 to 1999. The column marked ‘England’ is taken from the NCIS and is included in the TCR 2007 annual report and is calculated from data between 2002 and 2007. Although caution must be employed as these figures have been estimated from two different sources and time periods, it does allow comparison with European countries. It also shows the improvement in survival at the England level.

Figure 17 shows that 30.1% (95%CI 28.0 – 32.3) of males diagnosed with lung cancer between 2002 and 2007 were still alive a year later in the SWLCN area. This is the highest survival rate of all cancer networks in London and the South-east however the confidence intervals overlap meaning that the SWLCN figure is comparable with the other networks in London. The relative survival rate in the SWLCN is significantly higher than the England average as well as Kent and Medway and Sussex. Despite this the SWLCN one-year survival rate compares poorly against similar countries from EUROCARE-4 study except Norway. Finland, Norway and Sweden were selected as these countries have similar cancer registration features and access to death certification data as the United Kingdom. (Thames Cancer Registry 2010b).

Figure 17: Male one-year (2002-07) estimated relative survival rates for lung cancer by cancer network with comparable countries from the Eurocare 4 study.


The SWLCN female relative survival rate is significantly higher than the England average as well as the networks of Sussex and Kent and Medway (Figure 18) at 33.2% (95%CI 30.7 – 35.6). The survival rate in SWLCN compares favourably to Norway (32.6% 95%CI 31.7 – 33.5) but is much less than the rates of Finland (38.2% 95%CI 37.1 – 39.3) and Sweden (40.3% 95%CI 39.6 – 41.0).
Figure 18: Female one-year (2002-07) estimated relative survival rates for lung cancer by cancer network with NCIN developed benchmark from the Eurocare 4 study.


Providing comparisons and a benchmark to aim for is valid. The difference in survival rates between the UK and European rates may not only be due to later presentation in the UK but also additional factors such as data quality, tumour-related factors, host factors and healthcare-related factors (Thomson and Forman 2009, Brewster 2010). However comment and research does state that poor survival in the UK compared to other European countries is associated with more advanced stage at presentation (Imperatori et al. 2006, Richards 2009, Brewster 2010, Crawford 2010).

6.2 Five-year relative survival by PCT and Cancer Network

Five year cohort relative survival estimates for persons have been extracted from the Cancer Information Service (CIS) database by rolling 3 year cohorts (1990-1992, 1991-1993... 1999-2001) for cancer networks (CNs). The survival estimates from CIS relates to the June 2008 data submission by Registries to CIS, which contains follow up on death information to the end of 2006.

Wandsworth PCT has the highest 5-year relative survival rate at 11.4%, and is significantly higher than the national average (Figure 19). Sutton & Merton has the lowest survival rate at 8.3%. Due to small numbers of lung cancer incidence occurring at a PCT level, survival rates at PCT level are calculated on a 5-year rolling average as opposed to 3 years at sector level. Also PCT data shown is for a different time period to the sector data above.

Figure 19: All persons five-year (1998-2002) estimated relative survival rates for lung cancer by PCT.

The SWLCN has the highest 5-year lung cancer relative survival in the Thames Cancer Registry region at 10.4% (Figure 20). It is also higher than the national average at 7.7%. Confidence intervals were not available. The next highest estimated survival rate is in the (N)WLCN area at 9.5% while the lowest is at Sussex at 5.1%.

Figure 20: All persons five-year estimated relative survival rates for lung cancer by cancer network.

7.0 Lung Cancer Mortality

7.1 Under 75 mortality by PCT 2006-08

Figure 21 reveals similar patterns to the pattern of lung cancer incidence. NHS Wandsworth records the highest male lung cancer mortality in SWL at 40.71 per 100,000 population (95%CI 32.76 – 48.65). This rate is significantly higher than the male national average (31.93 95%CI 31.53 – 32.32), Croydon (26.18 95%CI 21.40 – 30.96), Sutton & Merton (25.54 95%CI 20.94 – 30.14) and Richmond & Twickenham (23.45 95%CI 17.17 – 29.73). The male mortality rate in Richmond & Twickenham, Sutton & Merton and Croydon are significantly lower than the national and London averages.

Figure 21: Directly age standardised (DSR) under 75 years lung cancer mortality, 2006-08.

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD).

Female mortality in Wandsworth at 28.10 per 100,000 (95%CI 21.92 – 34.28) is significantly higher than the national (21.14 95%CI 20.83 – 21.45) and London (19.46 95%CI 18.58 – 20.35) averages as well as Sutton & Merton (18.01 95%CI 14.36 - 21.65) and Croydon (16.21 95%CI 12.58 – 19.84). The female mortality rate in Croydon is also significantly below the national rate.

7.2 Under 75 mortality by PCT 1993-2008 (3-year rolling average)

Figure 22 and Figure 23 shows under 75 lung cancer mortality for males and females over time. The male trend follows the same pattern as male incidence with an overall decreasing trend except for Wandsworth which is experiencing a slight upward trend since 2003. Kingston PCT’s male mortality seems to be evening out and may show an increase in the future as incidence is currently on an upward trend (Figure 12).

Female mortality trends (Figure 23) are erratic due to a small number of deaths; however the overall trend is more constant rather than declining. Wandsworth PCT is showing a rapid increase, while Richmond & Twickenham and Sutton & Merton are also recording increases for most recent years. Care must be taken in interpreting these increases in the female mortality since we are dealing with small numbers; for example the increase in Richmond & Twickenham is 43% but accounts for only an increase of 8 cases.
Figure 22: Male directly age standardised (DSR) under 75 years lung cancer mortality, 1993-2008 3-year rolling average.

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD).

Figure 23: Female directly age standardised (DSR) under 75 years lung cancer mortality, 1993-2008 3-year rolling average.

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD).

All age mortality trend data has not been included as the same trends seen above is revealed.

### 7.3 All age mortality by PCT 2006-08

As with incidence, all age lung cancer mortality follows the same pattern as the under 75 mortality. The male mortality rate in Wandsworth is the highest at 60.91 per 100,000 (95%CI 51.93 – 69.89) and is significantly higher than the national average at 49.68 (95%CI 48.48 – 51.23) and the London average at (49.86 95%CI 48.48 -51.23) (Figure 24). The male mortality rates in Richmond & Twickenham (39.09 95%CI 31.62 – 46.56), Sutton & Merton (42.01 95%CI 36.63 – 47.40) and Croydon (42.22 95%CI 36.60 – 47.85) are significantly lower than the national and London averages.

Similar pattern is seen for all age female lung cancer mortality in SWL.
Figure 24: Directly age standardised (DSR) all ages years lung cancer mortality, 2006-08.

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD).
8.0 Emergency Admissions

Emergency admissions are a reflection that patients may not be getting diagnosed or treated at an early stage of their cancer, thus it may be an indicator of late presentation, late diagnosis and entry to treatment not through primary care (National Cancer Intelligence Network 2009a). Over the past eight years, although elective day case episodes (usually for chemotherapy) have risen, inpatient admissions for cancer have also risen by 25% (nationally). Most of this increase relates to emergency cancer inpatient episodes and emergency bed days are rising by 2.5% each year. A number of emergency admissions are due to the side effects of treatment, for example chemotherapy, or radiotherapy, or due to progressive disease (NHS Cancer Commissioning Toolkit 2010).

8.1 All cancer emergency admissions by GP Practice 2008-09

Data in this section include all emergency admissions with an invasive cancer code (ICD-10 C00-C97, excluding C44) present in any diagnostic field and were originally extracted from the national HES database. Data by cancer site was not available. The figures are crude rates expressed per 100,000 persons of emergency in-patient or day-case admissions. As these are crude rates it is not suitable to compare between PCTs. Emergency admissions may occur at any stage of the cancer pathway and will include persons diagnosed with cancer in prior years. This indicator may be expected to be higher in practices with an unusually high fraction of persons of 65+ years of age, due to the higher incidence of cancer at these ages. This must be considered when/if GP practices with high rates are investigated. Where the number of referrals for a GP practice was less than 5, no rate has been released nor has the GP practice been identified.

8.1.1 Croydon

Figure 25 shows the variation in emergency admissions by GP practice across Croydon PCT. The highest admission rate is 1349.21 per 100,000 population (95%CI 1004.49 – 1774.00) at practice H83029 and is significantly higher than the PCT average (610.41 95%CI 585.49 – 636.12). Six other GP practices record admission rates significantly higher than the PCT average. They are practices H83619, H83031, H83033, H83019, H83050 and H83015.

Figure 25: Croydon all cancer emergency admissions crude rate per 100,000 population.

Source: Practice Profiles, NHS Cancer Commissioning Toolkit.

The lowest admission rate is 146.88 per 100,000 population (95%CI 53.63 – 319.70) at practice H83041. This rate is also significantly lower than the PCT average. A further three GP practices record cancer admission rates significantly below the PCT average; they are H83051, H83625 and H83025. One GP practice records less than five admissions over 2008-09.
8.1.2 Kingston

Five GP practices, H84015, H84049, H84607, H84053 and H84033 record an all cancer emergency admission rate that is significantly higher than the PCT average which is calculated at 506.50 per 100,000 population (95%CI 472.50 – 542.27). The highest rate is 1359.91 per 100,000 (95%CI 1090.65 – 1675.48) at practice H84015 (Figure 26).

Figure 26: Kingston all cancer emergency admissions crude rate per 100,000 population.

Source: Practice Profiles, NHS Cancer Commissioning Toolkit.

The lowest admission rate is 200.32 per 100,000 population (95%CI 64.56 – 467.48) at practice Y02379. This rate is also significantly lower than the PCT average. A further three GP practices record cancer admission rates significantly below the PCT average; they are H84020, H84025 and H84619. One GP practice records less than five admissions in 2008-09.

8.1.3 Richmond & Twickenham

Richmond & Twickenham has an average cancer admission rate of 536.97 per 100,000 population (95%CI 505.10 – 570.33) (Figure 27). Four GP practices record admission rates significantly higher than the PCT average. These practices include; H84060, H84018, H84031 and H84032. The highest admissions rate was 1272.17 per 100,000 population (95%CI 993.53 – 1604.70) at practice H84060.

Figure 27: Richmond & Twickenham all cancer emergency admissions crude rate per 100,000 population.

Source: Practice Profiles, NHS Cancer Commissioning Toolkit.

The lowest admission rate was 246.36 per 100,000 population (95%CI 127.15 – 430.36) at practice H84625. This rate was significantly lower than the PCT average. Two other GP practices also record an admission rate significantly below the PCT average; they are H84005 and Y01206. Two GP practices recorded less than five admissions.
8.1.4 Sutton & Merton

Figure 28 shows the variation in cancer emergency admissions by GP practice across Sutton & Merton PCT. The highest admission rate was 1858.19 per 100,000 population (95%CI 1314.79 – 2550.60) at practice H85108 and is significantly higher than the PCT average (634.87 95%CI 609.88 – 660.63). A further seven GP practices record admission rates significantly higher than the PCT average. They are practices H85110, H85683, H85032, H85653, H85038, H85030, and H85037.

Figure 28: Sutton & Merton all cancer emergency admissions crude rate per 100,000 population.

Source: Practice Profiles, NHS Cancer Commissioning Toolkit.

The lowest admission rate is 88.42 per 100,000 population (95%CI 28.49 – 206.34) at practice H85112. This rate is also significantly lower than the PCT average. Six other GP practices record cancer admission rates significantly below the PCT average; they are, H85022, H85649, H85634, H85027, H85028 and H85686. One GP practice records less than 5 emergency admissions in 2008-09.

8.1.5 Wandsworth

Wandsworth has an average cancer admission rate of 443.07 per 100,000 population (95%CI 420.53 – 466.51). Six GP practices record admission rates significantly higher than the PCT average (Figure 29). These practices include; H85006, H85643, H85005, H85067, H85008 and H85045. The highest admissions rate was 840.49 per 100,000 population (95%CI 615.29 – 1121.13) at practice H85006.

Figure 29: Wandsworth all cancer emergency admissions crude rate per 100,000 population.

Source: Practice Profiles, NHS Cancer Commissioning Toolkit.
Two GP practices recorded no emergency admissions for 2008-09. The lowest rate was 171.56 per 100,000 population (95% CI 98.00 – 278.63) at practice Y01132. This rate was significantly below the PCT average. Four other practices, H85012, H85049, H85680 and H85048 also recorded an emergency admission rate below the PCT average.

8.2 Lung cancer emergency bed days by PCT and Cancer Network 2007-08

PCTs, supported by cancer networks, should ensure that emergency bed usage is minimised by the provision of individualised patient care, including a specialist out of hours service and effective community support. This indicator, which measures the number of emergency bed days for cancer per head of unified weighted population, is an indicator for local action in the “Vital Signs”.

Compared to all the cancer networks in London the SWLCN records the highest number of emergency bed days per 100,000 weighted population at 439 per 100,000, however it is less than the national average at 473 per 100,000 (Figure 30). The SWLCN sector also records the highest emergency bed days for colorectal and breast cancer. By PCT, there is wide variation across the SWLCN with Richmond & Twickenham recording the highest, above the national average at 507 per 100,000 and Croydon the lowest at 379 per 100,000.

Figure 30: Lung cancer emergency bed days per 100,000 weighted population, 2007-08.

Source: National Cancer Services Analysis Team (NatCanSAT) from Hospital Episode Statistics (HES).
9.0 Cancer Referrals

9.1 Urgent two week wait (2WW) referrals for suspected cancer 2009 by GP Practice

Lung cancer specific referral data was available by GP practice from the practice profile dataset on the Cancer Commissioning Toolkit. However there was not sufficient data to generate rates (only year of data 2009). All 62 listed GP practices recorded zero or less than five referrals in the year. As a result all cancer referral rates have been included as a substitute. Patient level Cancer Waiting Times data (including patient identifiers) was sourced from the Department of Health Cancer Waiting Times Database by the Trent Cancer Registry. Each patient was traced to a GP Practice using the Open Exeter Batch Tracing Service Two Week Wait Referrals were identified for patients with a date first seen on the CWT database in 2009. All records with a ‘Referral Priority Type’ of 3 (Two Week Wait) were counted, excluding patients referred for non-cancer breast symptoms. The data included the number of Two Week Wait referrals with a suspicion of cancer, whether or not cancer was subsequently diagnosed. This indicator may be expected to be higher in practices with an unusually high proportion of persons of 65+ years of age, due to the higher incidence of cancer at these ages. In many cases the number of referrals will be small resulting in large confidence intervals. Where the number of referrals for a GP practice was less than 5, no rate has been released nor has the GP practice been identified.

9.1.1 Croydon

The average 2WW crude referral rate for suspected cancer in Croydon for 2009 was 1092.41 per 100,000 population (95%CI 1058.99 – 1126.63) (Figure 31). Thirteen GP practices record a referral rate that is significantly higher than the PCT average. They are: H83035, H83048, H83009, H83013, H83016, H83014, H83052, H83015, H83004, H83029, H83018, H83001 and H83024. The highest referral rate is 2990.30 per 100,000 population (95%CI 2459.89 – 3601.14) at practice H83035.

Figure 31: Croydon urgent 2WW referrals for suspected cancer, crude rate per 100,000 population.

Source: Practice Profiles, NHS Cancer Commissioning Toolkit.

Twenty-four GP practices record an all cancer crude urgent 2WW referral rate that is significantly lower than the PCT average. The five lowest practices are: H83030, H83623, H83625, H83023 and H83634. The lowest referral rate was 296.34 per 100,000 population (95%CI 147.73 – 530.26) at practice H83030.

9.1.2 Kingston

Four GP practices in Kingston record a suspected cancer referral rate that was significantly higher than the PCT average. These four GP practices were: H84008, H84637, H84025 and H84034. The
PCT average rate was 1234.63 per 100,000 population (95%CI 1181.25 – 1289.80) (Figure 32). GP practice H84008 records a much higher referral rate compared to all other GPs in Kingston at 3807.11 per 100,000 population (95%CI 3291.45 – 4380.62).

Figure 32: Kingston urgent 2WW referrals for suspected cancer, crude rate per 100,000 population.

The lowest referral rate was 426.48 per 100,000 population (95%CI 263.90 – 651.96) at practice H84629. Seven GP practices in Kingston record an urgent cancer referral rate significantly below the PCT average; they were H84629, H84054, H84033, H84619, H84607, H84020 and H84635. One GP practice records less than 5 cancer referrals for the whole of 2009.

9.1.3 Richmond & Twickenham

The average 2WW crude cancer referral rate in Richmond & Twickenham for 2009 was 1156.66 per 100,000 population (95%CI 1109.66 – 1205.15) (Figure 33). Seven GP practices, H84623, H84060, H84006, H84031, H84007, H84615, and H84012, record a referral rate that was significantly higher than the PCT average. The highest referral rate was 2246.73 per 100,000 population (95%CI 1916.97 – 2616.93) at practice H84623.

Figure 33: Richmond & Twickenham urgent 2WW referrals for suspected cancer, crude rate per 100,000 population.

The lowest referral rate was 163.13 per 100,000 population (95%CI 59.57 – 355.08) at practice H84041, a rate significantly below the PCT average. Eleven other GP practices record urgent suspected cancer referral rates significantly below the PCT average. The practice codes were: H84632, H84608, H84625, H84630, H84005, H84036, H84014, H84039, H84055, H84023 and H84017.
9.1.4 Sutton & Merton

The average 2WW crude cancer referral rate in Sutton & Merton for 2009 was 1313.64 per 100,000 population (95%CI 1277.57 – 1350.46) (Figure 34). Fifteen GP practices record a referral rate that is significantly higher than the PCT average. The five highest GP practices are H85019, H85035, H85076, H85030 and H85033. The highest referral rate is 2453.05 per 100,000 population (95%CI 2046.48 – 2916.71) at practice H85019.

Figure 34: Sutton & Merton urgent 2WW referrals for suspected cancer, crude rate per 100,000 population.

Source: Practice Profiles, NHS Cancer Commissioning Toolkit.

The lowest cancer referral rate was 294.12 per 100,000 population (95%CI 107.40 – 640.19) at practice H85618 and was significantly lower than the PCT average. In total seventeen GP practices recorded urgent cancer referral rates significantly below the PCT average. The five lowest GP practices were H85618, H85053, H85665, H85070 and H85656.

9.1.5 Wandsworth

Thirteen GP practices in Wandsworth record a suspected cancer referral rate that is significantly higher than the PCT average. These practices were H85052, H85006, H85048, H85100, H85082, H85003, H85005, H85114, H85011, H85111, H85069, H85087 and H85045. The PCT average was 1267.93 per 100,000 population (95%CI 1229.93 – 1307.17) (Figure 35). The highest suspected urgent cancer referral rate was 2788.03 per 100,000 population (95%CI 2339.12 – 3297.96) at practice H85052.

Figure 35: Wandsworth urgent 2WW referrals for suspected cancer, crude rate per 100,000 population.

Source: Practice Profiles, NHS Cancer Commissioning Toolkit.
One GP practice did not record a cancer referral for 2009, while a further two GP practices recorded less than five referrals in the year. The lowest generated referral rate was 279.20 per 100,000 population (95%CI 144.10 – 487.74) at practice H85088. Along with another sixteen practices the referral rates recorded were significantly below the PCT average. The five lowest GP practices were H85088, H85107, H85650, H85008 and H85056.

9.2 Proportion of lung cancer cases diagnosed through non-urgent referral by PCT and Cancer Network 2010

In general, the earlier a cancer is diagnosed, the greater the prospect of a cure. Evidence suggests that later diagnosis of cancer has been a major factor in the poorer survival rates in the UK compared with some other countries in Europe. One of the priorities of the Cancer Reform Strategy for England is to diagnose more cancers early. The proportion of cases of cancer diagnosed through the two week wait programme (2WW) is an indicator of GPs' recognition of the signs and symptoms of cancer and appropriateness of the referral. There is wide variation across the country in the percentage of cases diagnosed through non-urgent referral routes. If relatively high numbers of patients are diagnosed through non urgent referrals, this would merit investigation by the PCT (Cancer Commissioning Toolkit 2010).

Figure 36: Percentage of total lung cancer cases diagnosed through non-urgent referral, 2010.

Source: National Cancer Waiting Times database (CWT-db).

Croydon records the highest proportion of diagnosed non-urgent gynaecological cancer referrals at 73.6% (Figure 36). This is high relative to the national average at 52.2%. Wandsworth has the next lowest proportion at 69.4%. All PCTs in SWL except Richmond & Twickenham (51.7%) appear in the lowest quartile of the range of proportions across the country. The SWLCN records the highest proportion in London at 64.5%. There was no data available for the (N)WLCN.

9.3 Urgent 2 week wait referrals resulting in lung cancer diagnosis ('The Hit Rate') by PCT and Cancer Network 2010

Figure 37 shows the percentage of suspected lung cancer referrals that result in an actual diagnosis of lung cancer. The proportion of cases of cancer diagnosed through the two week wait programme (2WW) is an indicator of GPs' recognition of the signs and symptoms of cancer and appropriateness of the referral.
Figure 37: Percentage of urgent lung cancer referrals diagnosed with lung cancer.

Source: National Cancer Waiting Times database (CWT-db).

Just over a quarter (26.7%) of urgent 2 week suspected lung cancer referrals resulted in a diagnosis of lung cancer in the SWLCN (Figure 37). Within the SWLCN Croydon PCT records the highest percentage of referrals resulting in lung cancer at 34.6%, while Wandsworth and Richmond & Twickenham record the lowest at 21.6% each. This is within the lowest quartile. As a whole the SWLCN shows a percentage of diagnosis which is below the national average at 32.2%, while Croydon PCT exceeds the national average.

Although not a Department of Health standard, this metric demonstrates the percentage of two week referrals (TWR) found to have cancer, and may be indicative of the quality of service provided by local organisations. If the benchmarked data show the organisation within the lower quartile (i.e. a smaller proportion of patients referred as TWR are diagnosed with cancer than other organisations) then questions could be asked about the interpretation of the TWR NICE Referral Guidelines by primary care. In addition local secondary care teams could be asked to audit the appropriateness of all TWR referrals received (NHS Cancer Commissioning Toolkit 2010).
10.0 Primary Care Audit 2010

The Cancer Reform Strategy 2007 proposed undertaking a national audit in primary care of newly-diagnosed cancers, to inform decisions about how best to support primary care professionals and ensure the earliest diagnosis. During the period April-June 2010 the SWLCN undertook such an audit. A person’s cancer pathway begins when they recognise and then act on signs and symptoms. A person who has a type of cancer with easily recognisable symptoms will present sooner. For example, breast cancer signs are more recognisable than those of colon cancer. Sometimes, despite recognising symptoms, people are reluctant to present to primary care. The audit covered 39 practices across South West London. Seventy-one cases of lung cancer were found, accounting for 10% of all cancer incidence found in the audit. Two-thirds of these cases were diagnosed at the stages of either ‘local spread’ (31%) or ‘distant metastases’ (32%). A fifth were diagnosed at ‘organ’ while 17% were ‘Not known’ or ‘Not stated’. Due to small numbers the findings presented here are a mixture of lung cancer specific figures as well as data aggregated for all cancers.

Of all the cancer patients found in the audit 46% (299 cases) were 2 week referrals, which is similar to the average (45%) recorded across England for 2009-10. Fourteen percent (89) were emergency cases and 15% (101) were classed as routine. The number of emergency cases appears excessive (compared to other networks); this may be due to occurrences of patients that did not visit the GP but were admitted to hospital via A&E being recorded as emergency cases. The correct definition in relation to GPs is only those patients that visit the GP and are immediately (same day) referred to the acute trust. Consultation with participating GPs and the lead GP for the SWLCN audit confirmed this ambiguity had arisen (SWLCN 2010).

Twelve percent (81) were not referred by the practice. Overall 146 cases (22%) were identified as cases where an avoidable delay had occurred.

The median time for patients noticing and reporting symptoms of lung cancer were 15 days, while the median time between reporting symptoms to a GP referral to secondary care was 5 days with the median time from referral to first visit to secondary care being 10 days. Comparisons with other cancers are shown in Figure 38.

Figure 38: Median times from patients noticing and reporting symptoms to first being seen in secondary care.

Source: SWLCN Primary Care Audit 2010.

10.1 Avoidable delays (all cancers)

GP’s identified 146 cases of avoidable delays as assessed by auditing GP. Of these:

- 31% (45 cases) due to patient delaying first presentation, investigation or hospital referral.
- 11% (16 cases) could have been referred sooner using 2 week rule.
- 23% (34 cases) delayed in referral to secondary care, often due to the GP not initially thinking of cancer as a possible diagnosis.
- 9% (14 cases) delayed due to communication problems between primary and secondary care.
- 18% (27 cases) delayed after referral to secondary care.
- 7% (10 cases) delayed due to other causes.

10.2 Lung cancer summary

Patients with lung cancer presented with a variety of different symptoms. The most common were chest pain (16 cases, 33%), cough (17 cases, 35%) and shortness of breath (9 cases, 19%). Others included weight loss, haemoptysis, neck lump, hoarse voice and recurrent chest infections.

Sixteen of the patients (33%) were referred through the 2 week wait rule. Five cases (10%) were referred routinely. Seventeen cases (35%) were admitted as emergencies. One case of lung cancer in a 78 year old male COPD patient delayed presentation of worsening of SOB symptoms by 267 days (9 months). The case was rapidly investigated, CXR, admission and diagnosed with lung adenocarcinoma.
11.0 Cancer Awareness Measure (CAM) Survey in South West London 2010

Information presented in this section from Ipsos MORI is to be treated as confidential and is subject to copyright. Please see the end of this section in regard of copyright.

This section summarises the findings from research conducted by Ipsos MORI Social Research Institute (2010) and commissioned by the SWLCN on cancer awareness amongst the residents of South West London undertaken between May and August 2010. A total of 5,009 resident people were interviewed across South West London.

The majority of South West London residents report having been affected by cancer in some way, either personally or through friends or family having the disease. One in ten residents (12%) has personally had cancer themselves. Specific groups of residents – particularly women, white residents, those aged 45-54 and those from social grades AB – are particularly more likely to have been affected by cancer. Over half of residents (54%) reported having a close family member having had cancer.

Residents mention a range of possible warning signs and symptoms of cancer, the most commonly mentioned of which is an unusual lump or swelling (59%). More relevant to lung cancer, only 8% of respondents stated a cough or hoarseness as a possible symptom of cancer rising to 66% when prompted (Table 6). Unprompted figures ranged from 12% in Richmond, significantly higher than the sector average to 5% in Sutton, significantly lower than the sector average. A quarter of the sector population recognised unexplained bleeding as a possible warning sign of cancer ranging from a high of 29% in Richmond to a low of 22% Croydon.

Table 6: Summary of CAM responses (%).

<table>
<thead>
<tr>
<th>Warning Signs of Cancer</th>
<th>SWL</th>
<th>Croydon</th>
<th>Kingston</th>
<th>Merton</th>
<th>Richmond</th>
<th>Sutton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td>A cough or croaky voice/hoarseness</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>12</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Breathing difficulties/shortness of breath</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>24</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Bleeding</td>
<td>24</td>
<td>22</td>
<td>25</td>
<td>27</td>
<td>29</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>Persistent unexplained pain</td>
<td>20</td>
<td>20</td>
<td>22</td>
<td>21</td>
<td>27</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Unexplained weight-loss</td>
<td>18</td>
<td>20</td>
<td>17</td>
<td>15</td>
<td>22</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Loss of appetite</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>11</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td><strong>Unprompted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A cough or croaky voice/hoarseness</td>
<td>66</td>
<td>66</td>
<td>63</td>
<td>67</td>
<td>69</td>
<td>67</td>
<td>66</td>
</tr>
<tr>
<td>Bleeding</td>
<td>83</td>
<td>81</td>
<td>83</td>
<td>81</td>
<td>87</td>
<td>85</td>
<td>81</td>
</tr>
<tr>
<td>Persistent unexplained pain</td>
<td>79</td>
<td>79</td>
<td>79</td>
<td>80</td>
<td>81</td>
<td>79</td>
<td>76</td>
</tr>
<tr>
<td>Unexplained weight-loss</td>
<td>83</td>
<td>85</td>
<td>81</td>
<td>80</td>
<td>84</td>
<td>85</td>
<td>80</td>
</tr>
<tr>
<td><strong>Prompted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A cough or croaky voice/hoarseness</td>
<td>1-3 days</td>
<td>10</td>
<td>12</td>
<td>7</td>
<td>15</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Bleeding</td>
<td>4-6 days</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Persistent unexplained pain</td>
<td>1 week</td>
<td>20</td>
<td>22</td>
<td>21</td>
<td>24</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>Unexplained weight-loss</td>
<td>2 weeks</td>
<td>24</td>
<td>21</td>
<td>27</td>
<td>24</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>1 month</td>
<td>18</td>
<td>17</td>
<td>19</td>
<td>12</td>
<td>19</td>
<td>21</td>
</tr>
</tbody>
</table>

If you had a cough or hoarseness, how soon would you contact your doctor to make an appointment

| What things do you think affect a person's chance of getting cancer - Agree |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Smoking                     | 90        | 90        | 93        | 89        | 92        | 93        | 88        |
| Drinking alcohol            | 41        | 41        | 42        | 49        | 38        | 36        | 39        |
| <5 portions of fruit & veg a day | 39 | 37        | 37        | 41        | 45        | 34        | 39        |
| Not doing enough exercise   | 38        | 33        | 39        | 41        | 39        | 38        | 41        |
The depth of residents’ awareness appears to be quite shallow, with only a relatively small proportion able to identify more than five signs of symptoms of cancer (13%). While prompted awareness of symptoms is significantly higher than unprompted, South West London residents appear to have lower levels of awareness than residents elsewhere in the country.

South West London residents clearly believe that lifestyle makes the greatest contribution to developing cancer in the UK, with around half (53%) ranking it as the most important factor. This is followed by genetic inheritance (29%), while South West London residents rank environmental factors, ageing and chance as having lower levels of influence on occurrences of cancer in the UK. This follows a similar pattern to that for residents across the country.

When asked about the actual causes of cancer, the factors highlighted by South West London residents are largely consistent with the priority ranking. They are dominated by avoidable lifestyle factors (especially smoking, 90%). Few residents do not know or did not mention any factors that affect a person’s chance of getting cancer (five per cent combined). Over half of respondents would make an appointment to see the doctor within 2 weeks if they had a cough or hoarseness.

In almost identical results to residents across the country as a whole, South West London residents clearly believe that breast cancer is the most common form of cancer among women, with over four in five residents believing this to be true (82%). Few residents highlight other cancers, with breast cancer ten times more likely to be mentioned than the next most popular choice. In reality the three most common forms of cancer among women in South West London are breast, colorectal (bowel) and lung cancer.

The results for common cancers among men are slightly more varied, with just under half (48%) thinking that prostate cancer is the most common form, while a quarter of residents (23%) believe that lung cancer is the most common, while one in ten residents (12%) think it is testicular cancer. Only four per cent of residents say they do not know. The three most common forms of cancer among men are prostate, lung and colorectal (bowel) cancer.
12.0 Conclusion

12.1 GP practice summaries

All cancer emergency admissions and urgent two week wait referral data is presented by GP practice in this baseline assessment.

Croydon

Seven GP practices recorded all cancer emergency admission rates significantly higher than the PCT average; they were H83029, H83619, H83031, H83033, H83019, H83050 and H83015. Four GP practices recorded emergency admission rates significantly lower than the PCT average; they were H83041, H83051, H83625 and H83025. Thirteen GP practices recorded all cancer emergency admission rates significantly higher than the PCT average; they were H83035, H83048, H83009, H83013 and H83016. The highest referral rate is 2990.30 per 100,000 population at practice H83035. Twenty-four GP practices record an all cancer crude urgent 2WW referral rate that is significantly lower than the PCT average.

Kingston

Five GP practices recorded all cancer emergency admission rates significantly higher than the PCT average; they were H84015, H84049, H84607, H84053, and H84033. Four GP practices recorded rates significantly lower than the PCT average; they were Y02379, H84020, H84025, and H84619. Four GP practices in Kingston record a suspected cancer referral rate that is significantly higher than the PCT average. These four GP practices were: H84008, H84637, H84025 and H84034. GP practice H84008 records a much higher referral rate compared to all other GPs in Kingston at 3807.11 per 100,000 population. The lowest referral rate was 426.48 per 100,000 population at practice H84629.

Richmond & Twickenham

Four GP practices recorded all cancer emergency admission rates significantly higher than the PCT average; they were H84060, H84018, H84031 and H84032. Three GP practices recorded rates significantly lower than the PCT average; they were H84625, H84005 and Y01206. Seven GP practices, H84623, H84060, H84006, H84031, H84007, H84615, and H84012, record a referral rate that is significantly higher than the PCT average. The highest referral rate is 2246.73 per 100,000 population (95%CI 1916.97 – 2616.93) at practice H84623. The lowest referral rate was 163.13 per 100,000 population at practice H84041, a rate significantly below the PCT average. Eleven other GP practices record urgent suspected cancer referral rates significantly below the PCT average. The five lowest practices were: H84632, H84608, H84625, H84630 and H84005.

Sutton & Merton

Eight GP practices recorded all cancer emergency admission rates significantly higher than the PCT average; they were H85108, H85110, H85683, H85032, H85653, H85038, H85030, and H85037. Seven GP practices also recorded rates significantly lower than the PCT average; they were H85112, H85022, H85649, H85634, H85027, H85028 and H85686. Fifteen GP practices record a referral rate that is significantly higher than the PCT average. The five highest GP practices are H85019, H85035, H85076, H85030 and H85033. The highest referral rate is 2453.05 per 100,000 population (95%CI 2046.48 – 2916.71) at practice H85019. The lowest cancer referral rate was 294.12 per 100,000
population at practice H85618 and was significantly lower than the PCT average. In total seventeen GP practices recorded urgent cancer referral rates significantly below the PCT average. The five lowest GP practices were H85618, H85053, H85665, H85070 and H85656.

Wandsworth

Six GP practices recorded all cancer emergency admission rates significantly higher than the PCT average; they were H85006, H85643, H85005, H85067, H85008 and H85045. Five GP practices recorded admission rates significantly lower than the PCT average; they were Y01132, H85012, H85049, H85048 and H85087. Thirteen GP practices in Wandsworth record a suspected cancer referral rate that is significantly higher than the PCT average. The five highest practices are H85052, H85006, H85048, H85100 and H85082. The highest suspected urgent cancer referral rate was 2788.03 per 100,000 population (95%CI 2339.12 – 3297.96) at practice H85052.

12.2 PCT summaries

Detailed figures of each PCT are shown in the matrix below (Figure 39).

Croydon

There are more areas of high deprivation in Croydon compared to other PCTs in SWL. This is possibly reflected in the higher estimated smoking prevalence for the PCT, and therefore it would be expected that Croydon experiences the highest mortality from lung cancer in the sector. However this is not the case, both male and female under 75 years old mortality are significantly lower than the national average. Female under 75 years incidence is also significantly lower than the national average. The male mortality rate has also nearly halved since 1993-95 (3-year rolling average) while female mortality has reduced by 23%. Despite having only 9.5% (male) and 12% (female) of lung cancers diagnosed at stage 1 Croydon still has a relatively high one year survival rate at 31.9% but it is below the EUROCare-4 study based benchmarks of “Average” (36%) and “Good Practice” (37%). For males 28.0% and for females 29.9% of lung cancers are diagnosed at stage 1. This may account for why the one-year survival rate was high. One in ten people are still alive after 5 years after being diagnosed with lung cancer. In terms of service provision Croydon has one of the lowest emergency bed days rate in London. The crude rate for all cancer emergency admissions was 610.41 per 100,000 population. The average 2WW crude referral rate for suspected cancer in Croydon for 2009 was 1092.41 per 100,000 population. Over seventy percent (73.6%) of lung cancer cases are diagnosed through non-urgent referrals in Croydon. However the PCT records the highest proportion of urgent lung cancer referrals (34.6%) that result in a cancer diagnosis.

Kingston

Examination of the matrix below (Figure 39) shows that Kingston appears as not the worst or best performing PCT in the sector. There is little deprivation in the Kingston area and has possibly the lowest smoking rates in SWL. This PCT is characterised by healthier living with high estimates for exercise and fruit and vegetable consumption. However male under 75 years old mortality is one of the highest (after Wandsworth) in SWL (but not for females). One and five year survival rates are amongst the highest in SWL and across London. It is possible the true value for the one-year survival rate is up to the EUROCare-4 based benchmarks at 36 and 37%. Kingston records higher than Croydon proportions for cancer staged at stage 1 (23.5% male – 20.0% female) which may account for the better one-year survival rates in Kingston. A third is staged at stage 4 while a large proportion (44%) of females is not staged. For males 34.3% of cases are not staged. However under 75 mortality has only decreased 10% for women since 1993-95 (3-year rolling average) and 37% for males. The rate of emergency bed days is high at 477 per 100,000. The crude rate for all cancer emergency admissions was 506.50 per 100,000 population. The PCT urgent 2WW cancer referral rate was
1234.63 per 100,000 population. A high proportion (65.2%) of lung cancer cases are diagnosed through non-urgent referrals. Nearly a quarter of urgent lung cancer referrals result in a cancer diagnosis. This is in the lowest quartile for the country and may need investigation in terms of primary care interpretation of the two week referral NICE Referral Guidelines.

Richmond & Twickenham

This PCT is the healthiest in SWL, characterised by healthier living with high estimates for exercise and fruit and vegetable consumption while having the lowest smoking prevalence estimates as well as experiencing the lowest deprivation. This is shown in that male under 75 lung cancer incidence and mortality is significantly below the national average. The PCT has the highest one-year survival rate in SWL at 34.1% which is also higher than all cancer network averages across London. The estimate is below the EUROCare-4 benchmarks however the confidence intervals range over them meaning it is possible the true survival rate reaches these benchmarks. This may be due to the higher percentages of lung cancers diagnosed at stage one in the PCT, 27.2% for males and 26.2% for females. Around a third is diagnosed at stage 4 while just over a third is classed as not known. However, the female under 75 mortality rate (3-year rolling average) has increased by 43% between 1993-95 and 2006-08 (however involves small numbers). The mortality rate for men has decreased by 44% for the same period. Richmond & Twickenham have the highest emergency bed days rate per 100,000 population in SWL at 507 per 100,000 weighted population. The crude rate for all cancer emergency admissions was 536.97 per 100,000 population. The 2WW crude cancer referral rate in Richmond & Twickenham for 2009 was 1156.66 per 100,000 population. Richmond & Twickenham records the lowest proportion of lung cancer cases being diagnosed through non-urgent referrals at 51.7%. The PCT has the lowest proportion of urgent lung cancer referrals (21.6%) that result in a cancer diagnosis in SWL. This is in the lowest quartile for the country and may need investigation in terms of primary care interpretation of the two week referral NICE Referral Guidelines.

Sutton & Merton

Sutton & Merton reveals lifestyle prevalence estimates (smoking, exercise, diet) which rank in the middle across the SWL PCTs. There is some deprivation present with 15% of small areas (LSOA) classed amongst the highest deprivation in the sector. Male under 75 mortality is significantly lower than the national average while female mortality is similar to the national average. Furthermore, under 75 mortality (3-year rolling average) has decreased by 46% for men and 23% for women between 1993-95 and 2006-08. Despite this Sutton & Merton has low one and five year survival rates at 31.2% and 8.3% respectively. The one-year survival rate is below the EUROCare-4 based benchmarks. Staging data for the PCT show that a low proportion of male lung cancer are diagnosed at stage 1, 18.5%, while a third is at stage 4 with a high 41.8% not known. Female staging data shows that 21.3% of cancers were diagnosed at stage 1, while 30% were at stage 4 and a higher 44.8% were not known. The emergency bed day rate in Sutton & Merton was below the national average at 44.5 per 100,000 weighted population. The crude rate for all cancer emergency admissions was 634.87 per 100,000 population. The urgent 2WW crude cancer referral rate in Sutton & Merton for 2009 was 1313.64 per 100,000 population. Less than sixty percent (59.4%) of lung cancer cases are diagnosed through non-urgent referrals, however this is higher than the national average at 52.2%. The proportion of urgent 2 week lung cancer referrals resulting in a cancer diagnosis was 31.5% and is comparable to the national average.

Wandsworth

Wandsworth has the highest estimated smoking prevalence in SWL reflecting the level of deprivation and young population in the borough. Twenty-nine percent of small areas (LSOA) in the borough are classed as highly deprived. Exercise and fruit and vegetable consumption is relatively high. Both male and female under 75 lung cancer incidence and mortality are the highest in SWL and are significantly higher than national averages. The one-year survival rate is less than 30% while the five-year survival...
rate is the highest in SWL at 11.4%. The one-year survival rate is well below the EUROCARE-4 based benchmarks. The proportion of cancers being diagnosed at stage 1 is 23% for males and 26.3% for females, the highest in SWL. Around 30% are diagnosed at stage 4 while 34-35% are classed as not known. Male under 75 mortality rates (3-year rolling average) have decreased by 30% between 1995 and 2008 but is still the lowest decrease amongst SWL PCTs. Female under 75 mortality rates (3-year rolling average) have increased by 6% during the same period. Wandsworth also reveal a high emergency bed days rate at 481 per 100,000 weighted population. The crude rate for all cancer emergency admissions was 443.07 per 100,000 population. The PCT urgent 2WW cancer referral rate was 1267.93 per 100,000 population. Nearly seventy percent (69.4%) of lung cancer cases are diagnosed through non-urgent referrals. Primary care interpretation of the 2 week referral of NICE Referral Guidelines may require investigation as the proportion of urgent lung cancer referrals resulting in a cancer diagnosis is relatively low at 21.6%.
Figure 39: PCT Matrix of key lung cancer figures for South West London.

<table>
<thead>
<tr>
<th></th>
<th>Croydon</th>
<th>Kingston</th>
<th>Richmond &amp; Twickenham</th>
<th>Sutton &amp; Merton</th>
<th>Wandsworth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking prevalence</td>
<td>21.0 - 25.7%</td>
<td>18.7-24.9%</td>
<td>16.1 - 23.0%</td>
<td>18.7 - 23.3% (Merton)</td>
<td>17.1 - 20.1% (Sutton)</td>
</tr>
<tr>
<td>% of small areas (LSOA) classed as highest deprivation (2007)</td>
<td>33%</td>
<td>5%</td>
<td>4%</td>
<td>15%</td>
<td>29%</td>
</tr>
<tr>
<td>65+ Population as % of PCT population (2010)</td>
<td>12.9%</td>
<td>12.0%</td>
<td>12.1%</td>
<td>12% (Merton)</td>
<td>13.5% (Sutton)</td>
</tr>
<tr>
<td>65+ Population increase (2010-2030)</td>
<td>3.6%</td>
<td>3.0%</td>
<td>1.5%</td>
<td>3.1% (Merton)</td>
<td>3.9% (Sutton)</td>
</tr>
<tr>
<td>Estimated Moderate intensity sport &amp; active recreation (2003-05)</td>
<td>17.8%</td>
<td>27.3%</td>
<td>28.5%</td>
<td>22.7% (Merton)</td>
<td>21.1% (Sutton)</td>
</tr>
<tr>
<td>Estimated fruit &amp; vegetable consumption (2003-05)</td>
<td>27.8%</td>
<td>33.4%</td>
<td>37.1%</td>
<td>30.4%</td>
<td>31.1%</td>
</tr>
<tr>
<td>Male Under 75 incidence (2004-06)</td>
<td>36.47</td>
<td>40.75</td>
<td>31.64</td>
<td>39.8</td>
<td>51.79</td>
</tr>
<tr>
<td>Female Under 75 incidence (2004-06)</td>
<td>20.84</td>
<td>27.91</td>
<td>27.35</td>
<td>24.15</td>
<td>37.65</td>
</tr>
<tr>
<td>Male Staging (2003-07)</td>
<td>Stage 1: 9.5% Stage 4: 28.0% NK: 58.6%</td>
<td>Stage 1: 23.5% Stage 4: 33.2% NK: 36.2%</td>
<td>Stage 1: 27.2% Stage 4: 32.2% NK: 36.2%</td>
<td>Stage 1: 18.5% Stage 4: 32.5% NK: 41.8%</td>
<td>Stage 1: 27.2% Stage 4: 32.2% NK: 36.2%</td>
</tr>
<tr>
<td>Female Staging (2003-07)</td>
<td>Stage 1: 12.0% Stage 4: 29.9% NK: 52.6%</td>
<td>Stage 1: 20.0% Stage 4: 33.3% NK: 44.0%</td>
<td>Stage 1: 26.2% Stage 4: 35.2% NK: 34.3%</td>
<td>Stage 1: 21.3% Stage 4: 29.5% NK: 44.8%</td>
<td>Stage 1: 26.3% Stage 4: 32.2% NK: 35.3%</td>
</tr>
<tr>
<td>One-year survival (2002-07)</td>
<td>31.90%</td>
<td>32.20%</td>
<td>34.10%</td>
<td>31.20%</td>
<td>29.00%</td>
</tr>
<tr>
<td>Five-year survival (1998-02)</td>
<td>10.00%</td>
<td>10.20%</td>
<td>9.70%</td>
<td>8.30%</td>
<td>11.40%</td>
</tr>
<tr>
<td>Male Under 75 mortality (2006-08)</td>
<td>26.18</td>
<td>30.91</td>
<td>23.45</td>
<td>25.54</td>
<td>40.71</td>
</tr>
<tr>
<td>Female Under 75 mortality (2006-08)</td>
<td>16.21</td>
<td>18.21</td>
<td>22.00</td>
<td>18.01</td>
<td>28.1</td>
</tr>
<tr>
<td>Male % Decrease U75 mortality (1993-95-2006-08)</td>
<td>45%</td>
<td>37%</td>
<td>44%</td>
<td>46%</td>
<td>30%</td>
</tr>
<tr>
<td>Female % Decrease U75 mortality (1993-95-2006-08)</td>
<td>23%</td>
<td>10%</td>
<td>+43%</td>
<td>23%</td>
<td>+6%</td>
</tr>
<tr>
<td>Emergency Bed Days per 100,000 (2007-08)</td>
<td>379</td>
<td>477</td>
<td>507</td>
<td>445</td>
<td>481</td>
</tr>
<tr>
<td>Average all cancer emergency admission crude rate per 100,000 (2008-09)</td>
<td>610.41</td>
<td>506.50</td>
<td>536.97</td>
<td>634.87</td>
<td>443.07</td>
</tr>
<tr>
<td>2WW cancer referral rate per 100,000 (2009)</td>
<td>1092.41</td>
<td>1234.63</td>
<td>1156.66</td>
<td>1313.64</td>
<td>1267.93</td>
</tr>
<tr>
<td>% of cases diagnosed through non-urgent referrals (2010)</td>
<td>73.6%</td>
<td>65.2%</td>
<td>51.7%</td>
<td>59.4%</td>
<td>69.4%</td>
</tr>
<tr>
<td>% urgent 2 week wait referrals resulting in cancer diagnosis (2010)</td>
<td>34.60%</td>
<td>23.60%</td>
<td>21.60%</td>
<td>31.50%</td>
<td>21.60%</td>
</tr>
</tbody>
</table>
12.3 South West London Cancer Network specific

Overall the SWLCN performs well against all other networks in London, coming out best 3 out of 5 times on cancer network specific indicators (Figure 40). One indicator, emergency bed days rate is the highest in London, reflecting the high rates in Wandsworth, Richmond & Twickenham and Kingston. One year survival rates for both males and females are significantly higher than the national average, while the five-year survival rate (persons) is higher than the national average. The one-year survival rate for both males and females is comparable to Norway (EUROCARE-4) but not Finland and Sweden. Overall for the SWLCN a large proportion of lung cancers are classed as not known, 41%, meaning the true staging data could reveal higher proportions of cancer diagnosed at stage 1, which would reflect the better survival rates. The SWLCN records the highest proportion of lung cancer cases that originate from non-urgent referrals in London at 64.5%. The percentage of urgent 2 week wait referrals resulting in a lung cancer diagnosis is low reflecting the low rates in Kingston, Wandsworth and Richmond & Twickenham. Overall the urgent 2WW referral rate for SWL was 0.40 per 100,000 population.

Below is a matrix summarising the key statistics for lung cancer in the South West London Cancer Network.

Figure 40: Matrix of key lung cancer figures for South West London Cancer Network.

<table>
<thead>
<tr>
<th></th>
<th>SWLCN</th>
<th>NELCN</th>
<th>NLCN</th>
<th>(N)WLCN</th>
<th>SELCN</th>
</tr>
</thead>
</table>
| Male Staging (2003-07) | Stage 1: 19.8%  
Stage 4: 33.8%  
NK: 41.1% | | | | |
| Female Staging (2003-07) | Stage 1: 21.2%  
Stage 4: 31.3%  
NK: 41.7% | | | | |
| Male one-year prevalence per 100,000 (2006) | 22.2 | 25.4 | 23.8 | 22.4 | 32.3 | Lowest | Highest |
| Female one-year prevalence per 100,000 (2006) | 17.5 | 17.3 | 14.2 | 13.7 | 16.9 | Lowest | Highest |
| Male One-year survival (2002-06) | 30.10% | 26.10% | 28.60% | 30.10% | 28.10% | Significantly higher than national average | Lowest |
| Female One-year survival (2002-07) | 33.2% | 28.2% | 34.1% | 33.8% | 30.9% | Significantly higher than national average | Lowest |
| Five-year survival (Persons) (2006) | 10.4% | 7.2% | 9.2% | 9.5% | 7.3% | Higher than national average | Lowest |
| Emergency Bed Days per 100,000 (2007-08) | 439 | 375 | 436 | 368 | 396 | Lower than national average | Highest but lower than national average |
| % of cases diagnosed through non-urgent referrals (2010) | 64.5% | 59.2% | 59.1% | - | 55.0% | Lowest | Highest |
| % urgent 2 week wait referrals resulting in cancer diagnosis (2010) | 26.7% | 31.7% | 25.9% | 22.6% | 25.8% | Highest | Lowest |
12.4 Recommendations

- Diagnose lung cancer cases earlier, latest figures show at least 30% of cases are diagnosed late at stage 4.

- Improve male and female one-year survival rate as it is below European counterparts. All persons Croydon, Sutton & Merton and Wandsworth rate is substantially below Eurocare benchmarks.

- Investigate the increase in female lung cancer mortality (all ages) in Kingston and Wandsworth from 2004 to 2008, and in Richmond & Twickenham between 2007 and 2008.

- Investigate emergency admissions in Kingston, Richmond & Twickenham and Wandsworth, the emergency bed day rates are above the national average in these PCTs.

- Review the proportion of diagnosed cancer cases referred through a non-urgent route in all PCTs.

- Investigate the interpretation of the NICE Referral Guidelines for breast cancer by primary care at Kingston, Richmond & Twickenham, Sutton & Merton and Wandsworth (Proportion of urgent 2 week referrals resulting in cancer diagnosis is below national average).

- Local secondary care teams to consider auditing the appropriateness of all breast cancer urgent 2 week referrals received from Kingston, Richmond & Twickenham, Sutton & Merton and Wandsworth (Proportion of urgent 2 week referrals resulting in cancer diagnosis is below national average).

- Implement the recommendations of the Primary Care Audit of Cancer.

- Implement social marketing strategy resultant from the results of the CAM survey.
References


National Cancer Intelligence Network. GOING FURTHER ON CANCER WAITS (GFOCWs) A GUIDE, (VERSION 6.7).


Royal Marsden NHS Foundation Trust (2010). Email correspondence, dated 13/07/10, with David Marwick, Royal Marsden NHS Found Trust.


### Appendix 1: South West London GLA Projected population by ethnicity, 2010.

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>All Ethnicities</th>
<th>White</th>
<th>Black Caribbean</th>
<th>Black African</th>
<th>Black Other</th>
<th>Chinese</th>
<th>Asian</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Persons</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croydon</td>
<td>341,201</td>
<td>201,514</td>
<td>34,954</td>
<td>23,372</td>
<td>14,072</td>
<td>1,862</td>
<td>56,188</td>
<td>9,239</td>
</tr>
<tr>
<td>Kingston</td>
<td>154,405</td>
<td>119,818</td>
<td>1,101</td>
<td>2,224</td>
<td>1,353</td>
<td>3,074</td>
<td>17,204</td>
<td>9,632</td>
</tr>
<tr>
<td>Richmond</td>
<td>185,634</td>
<td>163,737</td>
<td>660</td>
<td>1,105</td>
<td>2,076</td>
<td>1,278</td>
<td>10,897</td>
<td>5,881</td>
</tr>
<tr>
<td>Sutton &amp; Merton</td>
<td>382,766</td>
<td>293,535</td>
<td>11,156</td>
<td>11,765</td>
<td>7,639</td>
<td>4,367</td>
<td>42,071</td>
<td>12,232</td>
</tr>
<tr>
<td>Wandsworth</td>
<td>293,877</td>
<td>229,791</td>
<td>11,139</td>
<td>10,267</td>
<td>7,268</td>
<td>2,637</td>
<td>20,073</td>
<td>10,231</td>
</tr>
<tr>
<td><strong>Source:</strong> Greater London Authority Ethnic Group Projections 2008 Round, London Plan, Borough.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>All Ethnicities</th>
<th>White</th>
<th>Black Caribbean</th>
<th>Black African</th>
<th>Black Other</th>
<th>Chinese</th>
<th>Asian</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croydon</td>
<td>166,745</td>
<td>99,906</td>
<td>15,195</td>
<td>11,280</td>
<td>6,789</td>
<td>825</td>
<td>28,538</td>
<td>4,211</td>
</tr>
<tr>
<td>Kingston</td>
<td>76,109</td>
<td>59,546</td>
<td>537</td>
<td>1,101</td>
<td>698</td>
<td>1,484</td>
<td>8,188</td>
<td>4,555</td>
</tr>
<tr>
<td>Richmond</td>
<td>90,708</td>
<td>80,182</td>
<td>257</td>
<td>499</td>
<td>1,095</td>
<td>514</td>
<td>5,454</td>
<td>2,706</td>
</tr>
<tr>
<td>Sutton &amp; Merton</td>
<td>187,394</td>
<td>144,540</td>
<td>4,934</td>
<td>5,528</td>
<td>3,577</td>
<td>2,126</td>
<td>21,021</td>
<td>5,668</td>
</tr>
<tr>
<td>Wandsworth</td>
<td>143,260</td>
<td>113,206</td>
<td>4,771</td>
<td>4,710</td>
<td>3,511</td>
<td>1,258</td>
<td>11,214</td>
<td>4,591</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croydon</td>
<td>174,456</td>
<td>101,608</td>
<td>19,760</td>
<td>12,092</td>
<td>7,283</td>
<td>825</td>
<td>28,538</td>
<td>4,211</td>
</tr>
<tr>
<td>Kingston</td>
<td>78,296</td>
<td>60,272</td>
<td>564</td>
<td>1,123</td>
<td>655</td>
<td>1,484</td>
<td>8,188</td>
<td>4,555</td>
</tr>
<tr>
<td>Richmond</td>
<td>94,926</td>
<td>83,555</td>
<td>403</td>
<td>606</td>
<td>981</td>
<td>514</td>
<td>5,454</td>
<td>2,706</td>
</tr>
<tr>
<td>Sutton &amp; Merton</td>
<td>195,372</td>
<td>148,995</td>
<td>6,222</td>
<td>6,236</td>
<td>4,062</td>
<td>2,126</td>
<td>21,050</td>
<td>5,668</td>
</tr>
<tr>
<td>Wandsworth</td>
<td>150,618</td>
<td>116,585</td>
<td>6,368</td>
<td>5,557</td>
<td>3,757</td>
<td>1,563</td>
<td>10,869</td>
<td>5,919</td>
</tr>
</tbody>
</table>