

# **THURROCK**

## **Joint Strategic Needs Assessment (JSNA) Product for Clinical Commissioning Groups**

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**NHS South West Essex Public Health Informatics Team**

Ian Wake, Consultant in Public Health

Emma Sanford, Epidemiologist

Vikki Ray, Health Needs Assessment Manager

Tom Fowler, Senior Public Health Information Analyst

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## 1. INTRODUCTION

At the heart of the Thames Gateway, to the east of London, Thurrock encompasses the urban areas of Grays, Tilbury, Stanford-le-Hope and Corringham together with swathes of Green Belt and 18 miles of Thames riverfront. Thurrock has national significance with its key location and significant port capacity for the import and export of goods and services for the UK. Transport links into London and the south-east are excellent and there are opportunities for growth in housing and employment. The population is currently served by Thurrock Council – a Unitary Local Authority and NHS South Essex.

Thurrock Clinical Commissioning Group is a Clinical Commissioning Group that is geographically coterminous with Thurrock Unitary Authority and the Thurrock (Shadow) Health and Wellbeing Board. It recently obtained status as a sub group of the Board of NHS South Essex and from April 2013 will be responsible for commissioning secondary health care services for the population of Thurrock.

This document has been produced as part of the Thurrock Joint Strategic Needs Assessment process and supports the first JSNA Product – *A Strategic Refresh of the original Thurrock JSNA*, which can be accessed at the following web address:

[www.shapingthurrock.org.uk/health](http://www.shapingthurrock.org.uk/health)

Whilst the first product provided a ‘broad brush’ strategic picture of the health and wellbeing of the population of Thurrock, this product is far more specific, and is designed to further assist Clinical Commissioning Groups (CCGs) in developing commissioning priorities. It provides a clinical profile of the population of Thurrock, and compares local performance, spend and quality against other areas of England to identify where we are outliers. As such it should also provide a useful mechanism to assist the Thurrock CCG in developing future QIPP priorities.

Data is presented at a Thurrock local authority level where available. However some health comparator data is only available at PCT level, and where this is the case, the performance of South West Essex PCT has been compared with other PCTs in England.

The document does not generally consider data at a GP practice level as it is designed to be a commissioning tool for GP consortia rather than a primary care performance improvement document. However, on clinical issues where Thurrock (or South West Essex PCT) is identified as an outlier compared to England or our Office of National Statistics (ONS) cluster PCTs (PCTs with similar population demographics), the Thurrock CCG may wish to drill further down to GP practice level to identify where improvements could be made. The Public Health Informatics function is available to support this work if required.

## 2. RECOMMENDATIONS FOR KEY CCG COMMISSIONING/QIPP PRIORITIES IN THURROCK

This report recommends that Thurrock CCG prioritise the following areas for further investigation, care pathway commissioning review and development of QIPP programmes.

### 1. Circulatory Disease

SWE PCT currently has the greatest spend per head on Circulatory Diseases compared to all of the other 23 Programme Budgeting disease categories (excluding 'other'). Our spend is greater than 2SDs (Standard Deviations) from mean spend within our ONS Cluster of PCTs (PCTs with similar population characteristics). It also spends more per head on coronary heart disease than any other PCT in England

Case finding for CHD, Hypertension, Heart failure is poor, particularly hypertension which is a key driver for many other circulatory diseases. Despite high spend, clinical outcomes for patients are only average, and emergency admission rates for CHD are high.

The CCG should:

- Review commissioning arrangements of the relevant clinical care pathways in terms of circulatory disease, particularly CHD to ensure implementation of NICE Guidance /evidence of best practice and with a view to improving quality and efficiency and reducing cost
- Identify practices within the consortia with poor case finding for hypertension, CHD and Heart Failure and ensure that this is addressed.
- Ensure that National Institute of Clinical Excellence Guidelines for management of patients with Hypertension are being implemented by all practices. (NICE CG127, August 2011.  
<http://publications.nice.org.uk/hypertension-cg127>

### 2. Respiratory Disease

Programme spend in south west Essex for respiratory problems are amongst the largest in England. Whilst outcomes in some areas of the programme are good including asthma and bronchitis, COPD has poor outcomes and poor case finding.

The CCG should:

- Review commissioning arrangements of the COPD care pathway to ensure evidence of best practice and with a view to improving quality and efficiency and reducing cost, ensuring current commissioning arrangements reflect the latest NICE Guidance for Commissioning Services for COPD (CMG43, January 2012).  
<http://publications.nice.org.uk/services-for-people-with-chronic-obstructive-pulmonary-disease-cmg43>
- Identify practices within the consortia with poor case finding for COPD and ensure that this is addressed.

### 3. Endocrine, Nutritional and Metabolic Problems

The spend on Endocrine, Nutritional and Metabolic problems within SW Essex is above the ONS group average and is in the top quintile for spend nationally whilst performance and clinical outcomes are average. 50% of spend on this programme relates to diabetes, where Thurrock practices have below average performance in 5 of 12 QOF indicators suggesting poor clinical management.

The CCG should:

- Review commissioning arrangements of the Diabetes care pathway(s) against NICE Guidance to ensure evidence of best practice is being implemented locally with a view to improving quality and reducing cost.  
<http://www.nice.org.uk/guidance/index.jsp?action=byTopic&o=7239#/search/?reload>
- Ensure practices improve the management of patients with diabetes in primary care.

### 4. Lung Cancer

Despite having below average spend per head of population on cancers as a whole, SWE PCT spends more per head on lung cancer than any other PCT in England.

The CCG should:

- Work with the Essex Cancer network to review commissioning of the lung cancer care pathway against NICE Guidance to ensure quality and value for money.  
<http://publications.nice.org.uk/lung-cancer-cg121/guidance>
- Work with the Thurrock Council Public Health Team and the Health and Thurrock Health and Wellbeing Board to ensure appropriate Tobacco Control programmes and early detection of lung cancer programmes are commissioned
- Ensure that practices participate fully in smoking cessation initiatives by identifying and referring current smokers into commissioned smoking cessation services

### 5. Lifestyle Issues

Although Local Government have the lead commissioning responsibility for lifestyle programmes, GP Practices within CCGs have a key part to play in promoting healthy lifestyles to patients, delivering interventions or making appropriate referrals. Smoking and Obesity prevalence in Thurrock are significantly greater than regional and national rates and smoking cessation services are failing to impact on health inequalities by increasing quit rates of deprived communities over affluent ones.

Breastfeeding prevalence is also poor compared with comparator areas. Bottle feeding is a driver for obesity

Alcohol related hospital admissions are increasing at a faster rate than England's and emergency admissions for coronary heart disease are significantly greater in Thurrock compared to England. Alcohol, obesity and smoking are key drivers for hypertension and all the other four disease areas highlighted above. Focusing on primary prevention initiatives to address poor lifestyles is highly cost effective and will reduce secondary health care costs in the short, medium and long term.

The CCG should:

- Ensure practices promote healthy lifestyles to patients and refer patients into smoking cessation, obesity prevention/treatment, NHS checks, and alcohol brief screening and intervention commissioned programmes
- Work with the Thurrock Health and Wellbeing Board and Thurrock Council Public Health staff to ensure that appropriate lifestyle programmes are commissioned locally

## SUMMARY OF OTHER ISSUES THAT MAY WARRANT FURTHER INVESTIGATION

Issue	Page Number
SW Essex PCT's spend on Disorders of the Blood ranks 4 <sup>th</sup> out of 152 PCTs with the majority of costs in secondary care	36
SW Essex PCT's spend on Endocrine ranks 11 <sup>th</sup> out of 152 PCTs	
SW Essex PCT has a high number of cancer bed days and a large gap between the number of people who are on a palliative care register compared to what we would expect to find given our populations characteristics	38
Thurrock is in the highest ranking quintile for emergency hospital admissions relating to Alzheimer's and Dementia. This may reflect the poor QOF attainment for indicator DEM2 and is likely to be the cause of poor performance on the secondary care indicator 'Mental Health Admissions' that is currently significantly worse than the England average.	65
SW Essex PCT is in the highest spending quintile of expenditure per 100,000 population against all PCTs in England, particularly for burns where South West Essex is the second highest ranking PCT by spend in England.	87
SW Essex PCT ranks very highly against other PCTs in terms of emergency re-admissions to hospital within 28 days of discharge following fractured proximal femur warrants further investigation.	91
There is a high rate of deliveries by C-Section and the large increase between 08/09 and 09/10 which may be unjustified and require improvements to the maternity care pathway	95
SW Essex PCT's spend on Respiratory (other) ranks 15 <sup>th</sup> out of 152 PCTs	
There are significant differences in prescribing behaviours of different GP practices in terms of cost and quality within Thurrock	122
Overall prescribing of antibiotics in SW Essex is high compared to England PCTs	123
Thurrock has a significantly higher proportion of people dying at hospital than the national average and is a major outlier when compared to other LA populations in England	131
SW Essex PCT has a significantly higher rate of use of MRI and CT activity for its population than compared nationally.	132

Issue	Page Number
Casefinding (Diagnosis) of Diabetes is lower than expected in Basildon, and there is poor performance on some of the QOF disease management indicators for SW Essex. However, SW Essex has achievement significantly better than the national average in diabetes emergency admissions	
South West Essex continues to have a large Miscellaneous Programme Budgeting category. Investigating possible reasons why this category is so large recurrently for SWE will help re-align any relevant spends to more appropriate programme budgeting categories and give a more accurate picture for spend and outcome analysis in the future.	
Most GP practices have CKD registers that are not statistically different from expected, however there are a few which may require further investigation.	

### 3. EXECUTIVE SUMMARY OF THE CLINICAL COMMISSIONING ISSUES IN THURROCK

#### 3.1 Demographics

Thurrock has a greater proportion of its population in the age groups of 0-14 and 30-44 compared to England, and a greater proportion of females than males aged over 70 years. Life expectancy for both males and females has shown a slight increase over the past five years, although life expectancy for both sexes is less than regional but similar to national levels.

The majority of GP practices in Thurrock have Index of Multiple Deprivation (2010) IMD scores within the mid to upper range of those for SW Essex. This indicates there are high levels of deprivation within Thurrock.

#### 3.2 Burden of Illness

With the expected ageing and growth of the population [Key Demographics, Thurrock JSNA 2011; refresh], and the drive to ensure earlier identification of many chronic conditions, we can expect a rise in disease prevalence and consequential increase in demand on health and social care services. However, early intervention and better clinical management of chronic health conditions can ameliorate expensive secondary care costs, particularly in terms of emergency admissions.

In Thurrock Unitary Authority average disease prevalence for all practices is greater in four of the 18 Quality Outcomes Framework (QOF) conditions compared to the national average. These are hypertension, hypothyroidism, obesity and diabetes.

Comparing numbers of patients on a chronic disease register to modelled expected prevalence suggests that the majority of practices within Thurrock have less Coronary Heart Disease (CHD), Chronic Obstructive Pulmonary Disease (COPD) and hypertensive patients on QOF disease registers than is expected suggesting poor case finding. This warrants further investigation as failure to identify and appropriately patients with chronic conditions will impact on patient health and drive significant increases in CCG future healthcare costs.

#### 3.3 Overall Analysis of Spend

There are some discrepancies in how individual PCTs may allocate expenditure across the list of categories used in the national programme budgeting analysis. Therefore some information provided in this report should be treated with caution. Programme budgeting information and analysis is only available at a PCT rather than LA level.

NHS South West Essex highest spend areas per head of population excluding Programme 23 (Other) are:

- £180 per head per year on Circulation
- £174 on Mental Health
- £96 on Cancers & Tumours
- £96 on Musculoskeletal



- £95 on Respiratory Disease

NHS South West Essex has the highest expenditure per 100,000 population of any PCT in England on lung cancer, even though over all cancer spend rate is ranked at 103 out of 152 PCTs nationally. It is also has the highest expenditure per 100,000 for coronary heart disease, which contributes to the PCTs overall rank of 3<sup>rd</sup> out of all PCTs for problems of circulation. This expenditure is likely to be a product of a large prevalence of smoking in our deprived populations, and working through Health and Wellbeing Boards to ensure appropriate Tobacco Control Programmes are commissioned together with commissioning programmes that encourage the early detection of lung cancer and circulatory diseases are likely to impact positively on this issue.

Spend on disorders of the blood ranks 4<sup>th</sup> out of 152 PCTs with the majority of costs in secondary care. This warrants further investigation.

Other areas of high spend compared to other PCTs are:

- Burns in Problems of the skin (ranked 2<sup>nd</sup> out of 152 PCTs)
- Endocrine (ranked 11<sup>th</sup> out of 152 PCTs)
- Problems of the respiratory system (other) (ranked 15<sup>th</sup> out of 152 PCTs)

Compared to our Office of National Statistics (ONS) cluster of PCTs (PCTs with similar population demographics to SW Essex), spend in SW Essex on the majority of programmes is lower. It is difficult, however, to conclude that no shift in spend needs to be made as we have a large spend in the 'Miscellaneous' category which may reflect differences in coding between PCTs. Indeed if spending across all programme budgeting categories was brought into line with ONS PCT cluster averages, a net saving of £5,923,652 per annum would be delivered.

Spend on Circulatory Disorders and Blood Disorders are over two standard deviations greater than the mean for our ONS cluster despite delivering only average outcomes. Further investigation is required as these are also high spending areas in absolute cash terms.

### **3.4 Cost and Quality – Cancers and Tumours**

Spend on cancers and tumours in SWE is slightly below average for both England and ONS comparator PCTs.

According to programme budgeting data South West Essex has the highest spend per head of all PCTs in England. Given the large disparity further investigation is needed in order to determine whether this spend is real or a coding issue. Given the large smoking population in Thurrock it is likely that at least some of this disparity is real spend.

Although the incidence of cancer is comparatively low and mortality levels comparable to England, low numbers of people on palliative care registers may be resulting in a significantly higher number of cancer bed days being used (55.5 per 1000 pop vs 54.2 per 1000 pop).

A decline in the number of patients being seen within two weeks could be detrimental to patients prognosis and to the areas future survival and mortality rates.

The importance of maintaining a high level of cervical cancer screening and better targeting in 25-29 year old women is clear.

The Bowel Screening Programme is still in its early stages but to have a real impact on patients prognosis, and in incidence, and mortality rates, coverage needs improving.

### **3.5 Cost and Quality – Endocrine**

The spend on Endocrine, Nutritional and Metabolic problems within SW Essex is above the ONS group average and is in the top quintile for spend nationally. Despite this high spend SW Essex is performing at an average standard compared to all PCTs in England.

SW Essex has achievement significantly below the national average in five of the 12 QOF diabetes indicators. Particular areas of concern include ACE inhibitor therapy and micro-albuminuria testing where SW Essex is one of the worst performing PCTs nationally. SW Essex has achievement significantly above the national average in four of the QOF indicators with no significant difference with the England average in the remaining three indicators. More than 50% of diabetes patients in South West Essex are not receiving all 9 of the key care processes for Diabetes care as outlined by NICE; the complications associated with not keeping diabetes under control can have a huge financial impact.

Interestingly SW Essex (-17%) and Brentwood (-25%) have significantly less diagnosed diabetes patients than expected. Thurrock (+9%) and Basildon (+3%) have significantly more diagnosed diabetes patients than expected.

Given that detection of cases is lower than expected and there is poor performance on some of the disease management indicators. One might expect that secondary care use might be high, however, this is not the case:

In terms of Secondary Care indicators SW Essex has achievement significantly below the national average in diabetes emergency admissions per 100 on the disease register. SW Essex is performing significantly better in the number of bariatric procedures compared to the national average although there is no significant difference in the remaining Secondary Care indicators.

One explanation of this disparity could be that patients are being diagnosed at a later stage of their diabetes and so being managed (well) in outpatients departments. Further investigation would need to be had in order to refute or accept this hypothesis.

Improved early detection and management of the condition would have a great financial impact.

Rates of mortality (<75) from diabetes are statistically in line with the England average (slightly lower).

### **3.6 Cost and Quality –Mental Health**

Spend on Mental Health is currently low compared to our ONS Cluster and England average. It is estimated that 62% of our population who have Dementia are undiagnosed and of those who are diagnosed, only 76% are diagnosed have had a care review in the last year. This has resulted

in South West Essex being in the highest quintile nationally for the rate of hospital admissions for Alzheimer's disease and Dementia, and means that the physical, Mental Health, and Social care needs are potentially not being met.

The improving Access to Psychological Therapies (IAPT) programme in South West Essex is currently running well, and as a result almost 5 people per month are moving people from benefits into employment.

### **3.7 Learning Disabilities**

Spend on Learning Disabilities is in line with National and Cluster averages.

### **3.8 Neurological Conditions**

Our spend on this programme is average compared to other PCTs in the country.

It is estimated that almost 20% of our registered practice population suffering from epilepsy are unknown to local clinicians.

### **3.9 Eye and Vision**

SW Essex has an average to low spend in the area of vision despite having a significantly high surgical intervention rate for cataracts. A lower than expected diabetic detection rate as shown it could give rise to increased spending with late diagnosis and complications from diabetes.

### **3.10 Circulatory Diseases**

Spend on this programme is significantly above average with SW Essex being the highest and third highest spending PCT nationally on coronary heart disease and overall problems of Circulation respectively. Mortality rates continue to improve and are significantly better than average. There is marked variation in observed and expected circulatory diseases prevalence rates, and observed rates are much lower than expected rates across CHD, Hypertension, Heart Failure and Stroke indicating poor case finding. Thurrock has rates of emergency admissions for CHD significantly greater than the national average. Improving case finding and hence early intervention and management of CHD is likely to reduce emergency admissions rates which in turn should reduce overall spend on this programme.

SW Essex has up to 38% of patients with Hypertension who are not on a QOF disease register and therefore may not be getting appropriate clinical care to manage their disease. Hypertension is one of the leading causes of CHD, HF, Stroke and is a cause of CKD. Given that it can be easily controlled using drugs, it is imperative that more is done to keep it at a safe and healthy level within the population of SW Essex. The health effects from lowering blood pressure can be key in lowering the burden of disease from CVD and decreasing the large associated costs. It should therefore become a priority within SW Essex to find and treat people with hypertension.

SW Essex has average performance in the management of its patients on disease registers relating to circulation. SW Essex is performing better than the national average with regards to Blood Pressure (BP) for CHD and Stroke/TIA but significantly worse with regards to cholesterol for CHD and Stroke/TIA. SW Essex needs to improve its performance in maintaining cholesterol levels below 5mmol in CHD and Stroke/TIA patients to decrease the costs associated with further complications. Consistent and effective lifestyle interventions will improve management of these patients. SW Essex has an average rate of coronary artery bypass grafts (CABG) and a rate of percutaneous transluminal coronary angioplasty (PTCA) significantly below average.

SW Essex CCGs and GP practices within them should take further actions to tackle problems of Circulation including:

- Promoting smoking prevention and cessation
- Promotion of physical activity at all ages
- Improve management of cholesterol
- Dissemination, implementation and monitoring of NICE guidance particularly in terms of identification and treatment of patients with hypertension
- Redeploy resources from lower cost-effective interventions

### **3.11 Respiratory Diseases**

Programme spend in south west Essex for respiratory problems are amongst the largest in England, with the PCT falling into the worse performing quintile. Although directly standardised mortality rates for Asthma and Emphysema and Bronchitis are significantly better than national rates, when other COPD is considered, our rates as a PCT are significantly worse.

Case finding at a practice level for COPD is currently poor and improving this will likely impact positively on both outcomes for patients and overall programme spend. As such it is recommended that the CCG considers developing QIPP schemes to improve case finding, improve clinical management and reduce spend on COPD. Smoking is also the key risk factor for COPD and reducing smoking prevalence across Thurrock should be a key priority for all key agencies

### **3.12 Skin Conditions**

South West Essex currently has a high spend on Conditions of the skin; we currently lie in the highest quintile nationally and spend the second most in our cluster. More detailed analysis needs to be conducted to assess why this is.

### **3.13 Musculo-Skeletal System and Trauma**

South West Essex generally performs well on this programme. Despite Programme budgeting spend being average for England, outcomes are generally significantly better than for England, specifically in the areas of Primary and Revision Hip Replacements, Knee Replacements, Emergency Admissions for Hip Replacements, and mortality from falls in the over 65s.

The PCT has commissioned comprehensive falls prevention programmes since 2005 and these may partly explain our good performance on this programme. The high ranking of the PCT in terms of mean PROMS score for Hip Replacement suggests that our population are having hip replacements at a relatively early stage in terms of their health deterioration compared with other PCT populations. Given that the rate of Hip Replacements performed on our population is significantly lower than the England average, this does not suggest that we are performing unnecessary procedures.

The very high ranking of the PCT in terms of emergency re-admissions to hospital within 28 days of discharge following fractured proximal femur warrants further investigation.

### **3.14 Genito-Urinary System**

SW Essex is one of the lowest spending PCTs nationally on problems of the Genitourinary System. However, SW Essex is performing at a comparable level given the lack of spend on this

programme. SW Essex is not performing significantly worse when compared with the England average in any of the areas recorded within this programme. SW Essex is performing significantly better than the national average on kidney function testing, testing more patients relative to the national average.

That said, there are still improvements that can be made to the performance of SW Essex within this programme including better management of diabetes and hypertension to prevent renal failure.

### **3.15 Maternity and Reproductive Health**

Spend on Maternity and Reproductive Health is comparably high in South West Essex. This is partly explained by the fact that we have a comparably high birth rate. However, the high rate of deliveries by C-Section and the large increase between 08/09 and 09/10 may be unjustified and warrants investigation to determine whether there are potential improvements to be made to care pathways along with associated cost savings.

Overall the rate of conceptions for females aged 15-17 in Thurrock has declined and at a steeper rate than England. Thurrock rates remain higher than the East of England region. However Thurrock has started to fall within England rates. Teenage pregnancy is a major driver in health inequality, both in terms of poor health and wellbeing outcomes for both parent and child, and because children of teenage mothers are much more likely to become teenage parents themselves, perpetuating inequality across generations. Belhus, Chadwell St Mary and Tilbury Riverside and Thurrock Park wards in Thurrock have conception rates significantly higher than that of England. The Homesteads and Stanford-le-Hope West have rates significantly lower than England. The highest conception rates are in wards with high deprivation.

The rate of conceptions in Thurrock has decreased and those leading to abortion have increased. Whilst termination has an associated initial cost, it could be argued to be a better result in terms of impact on reducing health inequalities, as a positive driver to reducing teenage maternities. It may also suggest an increase in aspiration within Thurrock young people, as there is strong evidence that the aspirations and life chances of an under 18 year old girl correlates positively with her decision to opt for a termination rather than a birth. That said, primary prevention of under 18 conceptions remains the best possible outcome for both our population and health economy and has clearly been an effective driver of under 18 conception rate reduction in Thurrock during the last decade.

There is a large gap between the breast feeding initiation rates in South West Essex compared to England and the East of England. Evidence suggests that breastfeeding reduces the risk of later consequences (to child in terms of childhood illness and mother in terms of breast cancer prevention), therefore there is potential in the reduction of costs in other areas by encouraging mothers to breast feed.

The rate of women smoking at time of delivery has decreased in Thurrock, furthermore, at a rate faster than the East of England and England. Thurrock has a statistically significantly lower rate of smoking at time of delivery at 95% confidence compared to the East of England and England. From a public health point of view this is highly encouraging, although rates of smoking at time of delivery are likely to vary between different geographical areas of Thurrock and correlate with deprivation levels.

Thurrock has an infant mortality rate that is slightly lower than the average.

### **3.15 Healthy Individuals**

SW Essex PCT is in the highest quintile in terms of spend on preventing ill health per head of population when compared to other PCTs in England. However, given its high levels of deprivation this is to be expected. When compared to its ONS cluster of PCTs, SW Essex spend on preventing ill health is average.

Smoking prevalence is largely in line with Thurrock's CIPFA Comparator Local Authorities although significantly greater than both regional and national rates. Smoking prevalence is not distributed evenly within Thurrock and is positively correlated with areas of deprivation.

There is no statistically significant difference in smoking four week quit rate through NHS commissioned services in Thurrock as a percentage of estimated smoking population between deprived vs. affluent populations in Thurrock. This would suggest that whilst NHS stop smoking services are successful at helping some smokers quit, they are failing to impact on health inequalities, as smokers in Thurrock's most deprived communities are not quitting smoking at a faster rate than in its affluent ones.

Thurrock has the lowest prevalence of pregnant women smoking at time of delivery, when compared to its CIPFA comparator local authorities and lower than both the regional and national rates. This is highly encouraging, although rates of smoking at time of delivery are likely to vary between different geographical areas of Thurrock and correlate with deprivation levels.

The rate of alcohol admissions for the Thurrock population is slightly greater than for the SW Essex population but less than both regional and national averages. However, from 2008-9 to 2011-12, the gap in admission rate between Thurrock and England has narrowed, with admissions in Thurrock increasing at a faster rate than those for England. Early identification of patients in primary care who are drinking at hazardous or harmful levels together with brief or extended alcohol interventions will impact positively on alcohol admission rates and have been shown to be extremely cost effective. Commissioning hospital based alcohol services that aim to provide tier II, III and IV alcohol related services to those admitted for disease related to alcohol have also shown to be highly cost effective and should be considered.

In comparison with the CIPFA comparator local authority populations Thurrock has the highest prevalence of obesity in Year R children and by Year 6 Thurrock is in the top quartile of the CIPFA areas in terms of obese children. This highlights a need to tackle obesity in reception age children and preschool children in the levels of obesity are already very high by the time children start school.

Thurrock's prevalence of obese adults is significantly greater than the national and East of England average and is near the top of the range of CIPFA comparator local authorities. 28 out of the 36 practices in Thurrock have recorded obesity prevalence's that are more than 3 standard deviations lower than their expected obesity register size. This suggests that GP practices are failing to identify and record adequately, patients with a BMI over 30.

Thurrock has a lower prevalence of healthy eating amongst adults compared to regional and national rates, and a prevalence that is not statistically different to all but one CIPFA comparator local authorities. Thurrock has the lowest percentage of adults who are physically active compared to its CIPFA local authorities, and a rate that is statistically significantly lower than three CIPFA comparators, England and the region.

Encouraging patients to eat more healthily or become more physically active, or referring them into commissioned health improvement programmes (e.g. Vitality) that assist patients to improve their lifestyles is likely to impact positively on Thurrock's obesity problem which in turn should translate into reduced future healthcare cost savings in terms of 'lifestyle related' diseases such as CVD, hypertension, diabetes etc.

Childhood Immunisation coverage has improved in SW Essex in the last three years significantly, and shows a slight improvement between 2010-11 and 2011-12 on every vaccination except Diphtheria, Tetanus, Polio and Pertussis booster, although the differences between the two years are small and could be due to random variation, coverage of Diphtheria, Tetanus, Polio and Pertussis booster and MMR remain below the 95% required for herd immunity. Childhood immunisations remain one of the most cost effective health interventions that the NHS undertakes, in terms of return on investment, and ensuring 95% herd immunity for all childhood immunisations is an important priority.

SW Essex is in the best performing quintile and one of the best performing PCTs in England for flu vaccination coverage in the 65+ population.

### **3.16 Social Care Needs**

SW Essex is in the bottom quintile of spenders nationally and below the ONS Cluster Group average. The evidence suggests that collaborative working around carers support, community development and improved engagement with the third sector will promote innovative approaches in prevention work, support improved productivity and can contribute to significant savings to health and social care spend.

### **3.17 Older People Health & Well-being**

Emergency admissions in people aged 75 years and over within SW Essex are significantly lower than the national average. Up to 13.4% of the population of many wards within SW Essex are providing unpaid care. This is worrying because it is likely that these carers may be suffering from ill health themselves. The growth in the ageing population will translate into additional pressure on all services, especially with an increase in neurological, circulatory, endocrinology, respiratory and mental health conditions.

### **3.18 End of Life Care**

Thurrock has a significantly higher level of deaths happening in hospital than the national average and is a major outlier compared to other local authority populations in England. The aim should be to achieve higher rates of patients dying at their place of choice (e.g. at home) and this requires collaborative working and good planning. Improving the number of patients recorded on a palliative care register and thus having an end of life plan might help to achieve this.

### **3.19 GMS/PMS and Pharmaceutical Services**

SW Essex is in the bottom quintile, below the ONS Cluster average and is spending less than all of the ONS Cluster comparators.

### **3.20 Diagnostic Services**

SW Essex has a significantly higher rate of use of MRI and CT activity for its population than compared nationally. It would be interesting to ascertain why SW Essex has such a significantly higher rate than compared nationally. This warrants further investigation.

### **3.21 Prescribing**

Programme Budgeting spend across SWE on GMS/PMS and Pharmaceutical services is generally low compared to other PCTs and our ONS PCT cluster.

The percentage of all lipid lowering drugs prescribed as ezetimibe and the percentage of cephalosporins and quinolones as a percentage of all antibacterial drugs are also relatively low compared with other PCTs in England and in line with regional averages. This suggests across Thurrock prescribing behaviour is of relatively high quality.

There are however significant differences between different GP practices in prescribing behaviour which provides further scope for QIPP savings and quality improvements. Similarly overall prescribing of anti-biotics is high compared to England PCTs and warrants further investigation.

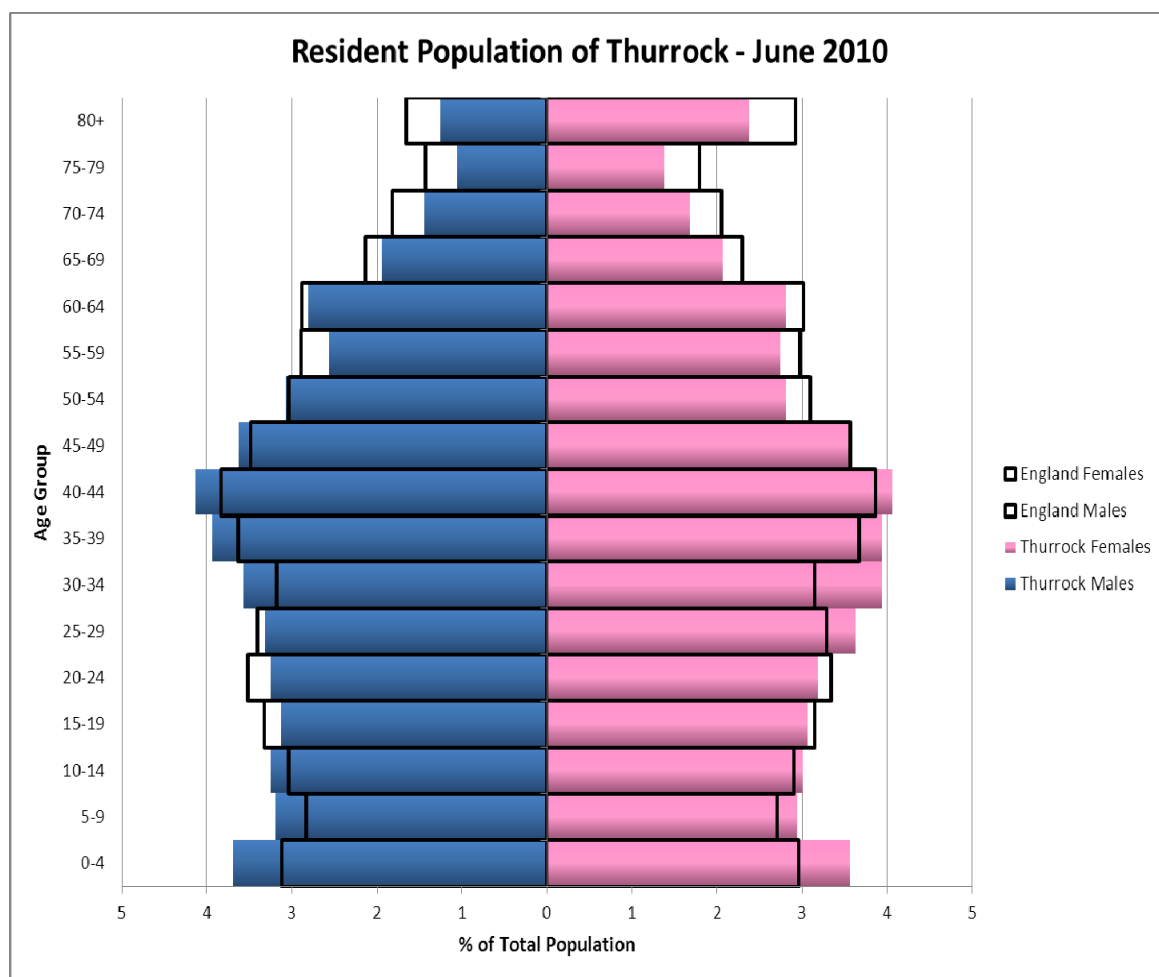


## 4. KEY DEMOGRAPHICS

### Population

Figure 4.1 shows the 2010 population distribution, by age and sex, of Thurrock compared to the 2010 England average. The percentage resident population of Thurrock is greater in the age groups of 0-14 and 30-44 compared with the England average. The percentage resident population of Thurrock is very similar between males and females in all age groups before 70 years of age. There are a greater percentage of females than males aged over 70 years.

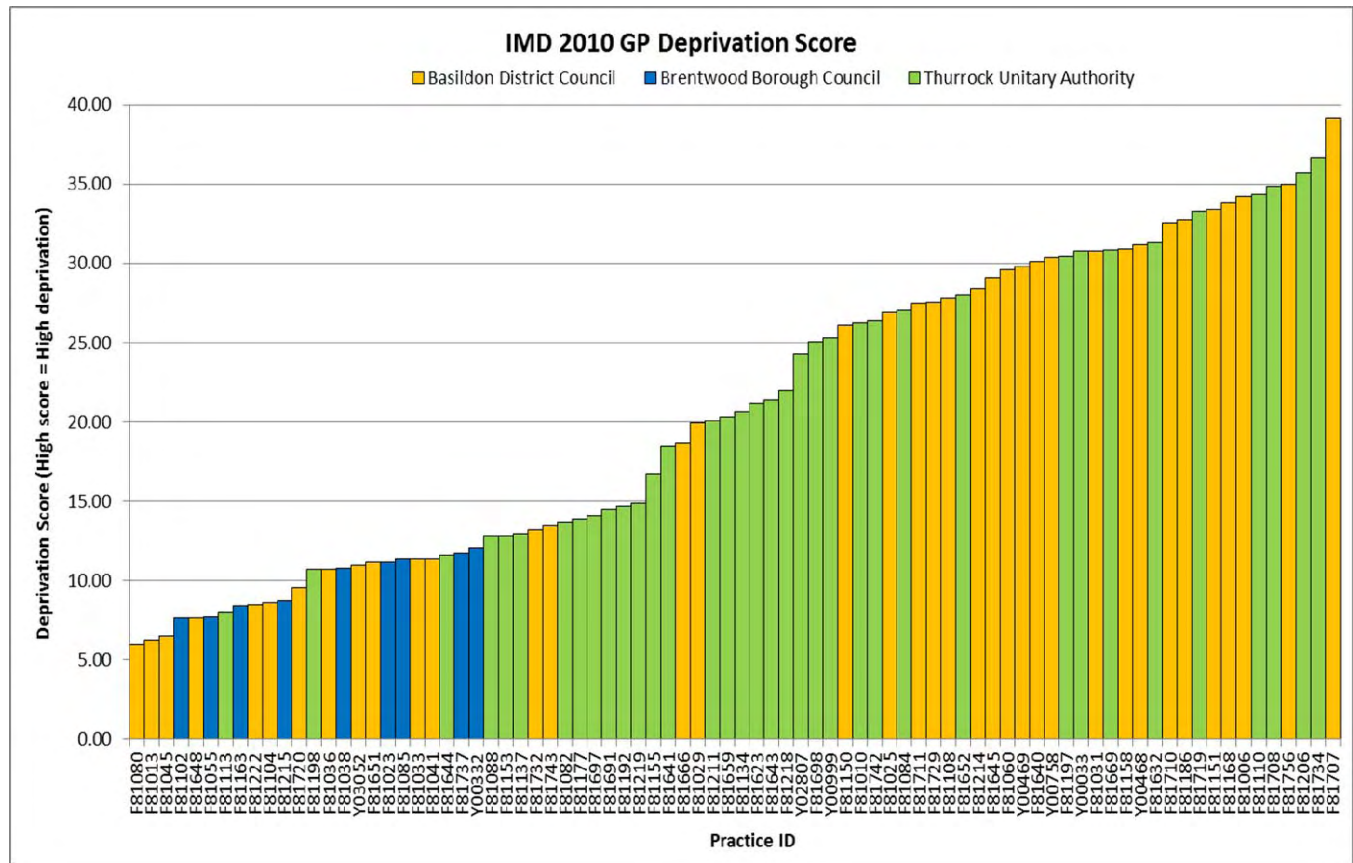
Figure 4.1: Thurrock Population



## Level of Deprivation

Figure 4.2 shows GP practice level deprivation scores using the index of multiple deprivation (IMD) 2010. There is a large variation in the level of deprivation between practices in south west Essex. The majority of practices in Brentwood have low IMD scores where there is much larger variation in the IMD scores of practices within Basildon and Thurrock.

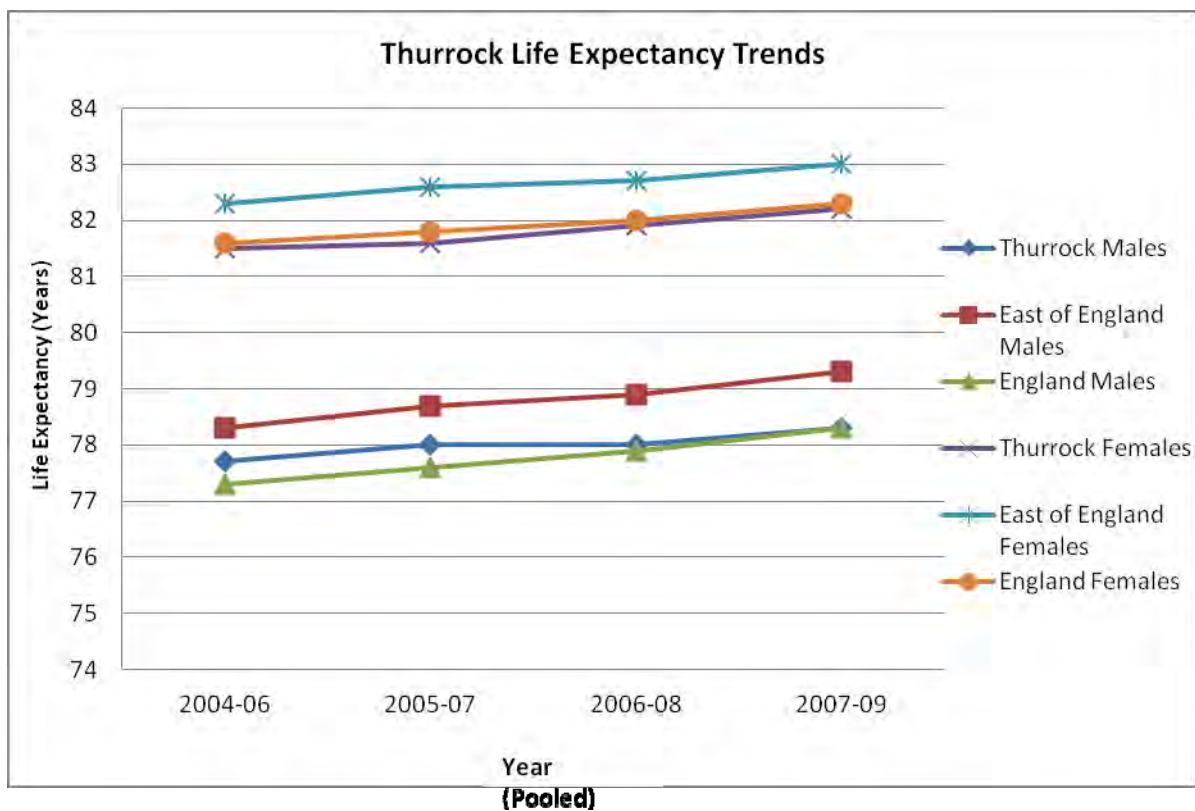
Figure 4.2: GP practice level deprivation scores using the index of multiple deprivation (IMD) 2010



## Life Expectancy

Figure 4.3 shows life expectancy at birth for both males and females in Thurrock comparing that to England and East of England from 2004 to 2009. Life expectancy has increased in both males and females from 2004 to 2009. Life expectancy in Thurrock is greater in females than males. The life expectancy for males is less than the East of England average but similar to the England average. The life expectancy for females is less than the East of England average but in line with the England average.

Figure 4.3: Thurrock life expectancy trends



### Summary / Conclusions

The proportion of the resident population of Thurrock compared to England is greater in the age groups of 0-14 and 30-44 with a greater proportion of females than males aged over 70 years.

Life expectancy has increased in both males and females from 2004 to 2009 with life expectancy being greater in females than males.

The majority of practices in Thurrock have IMD scores within the mid to upper range compared with all practices in SW Essex. This indicates there are high levels of deprivation within Thurrock.

## 5. BURDEN OF DISEASE AND PREVENTING ILL HEALTH

This section provides an overall summary for SW Essex. More detailed information will be shown for the individual disease areas in later sections.

### Disease Prevalence

As part of the Quality and Outcomes Framework (QOF) within which GP Practices can operate, disease registers are kept for a variety of conditions. These registers assist the GP Practice in ensuring that all patients are supported in managing their condition and receive the treatment they require. The following prevalence estimates are from the 2010-11 QOF disease registers. These are measures of disease register size so any observed change or difference may be due to the completeness of the disease register.

Table 5.1 shows the current prevalence and number of patients on the disease registers compared to England for selected conditions. Early identification of 'at risk' patients and better management of chronic conditions will enhance and improve quality of life, increase life expectancy and reduce costs by preventing hospital admissions.

In Thurrock average disease prevalence for all practices is higher in four of the 18 QOF conditions compared to the national average. The greatest absolute difference in disease prevalence in Thurrock compared to the national average was obesity (13.2% prevalence in Thurrock compared to 10.5% nationally).

It is important to note that disease prevalence being higher than the England average may in fact be appropriate. Disease prevalence is dependent on many things such as the structure of a population. Higher disease prevalence may indicate better recording. In subsequent sections we will investigate and compare the current prevalence of diseases on the local registers with modelled estimates of the expected prevalence. Prevalence models provide estimates of underlying prevalence derived from population statistics and scientific research on the risk factors for each disease. The models can be used to support case-finding by identifying those areas where detection rates are low and targeting enhanced diagnostic activity on them.

Table 5.1: Table showing disease prevalence against England for range of different disease

**NHS South West Essex**

**Prevalence for QOF conditions (2010-11)**

Data Source:

National - The Information Centre

SW Essex - QMAS (March 2011)

Disease register (QOF 2010-11)		England	SW Essex	Brentwood Borough Council	Basildon District Council	Thurrock Unitary Authority
CHD	Count		13,278	2,390	6,257	4,631
	Prevalance	3.4%	3.1%	3.2%	3.3%	2.9%
Heart Failure	Count		3,351	573	1,628	1,150
	Prevalance	0.7%	0.8%	0.8%	0.9%	0.7%
Stroke	Count		6,805	1,358	3,114	2,333
	Prevalance	1.7%	1.6%	1.8%	1.7%	1.5%
Hypertension	Count		61,706	11,167	27,809	22,730
	Prevalance	13.5%	14.6%	14.8%	14.9%	14.1%
Diabetes	Count		18,535	2,735	8,656	7,144
	Prevalance	5.5%	5.5%	4.5%	5.8%	5.7%
COPD	Count		7,097	1,016	3,494	2,587
	Prevalance	1.6%	1.7%	1.3%	1.9%	1.6%
Epilepsy	Count		2,457	456	1,134	867
	Prevalance	0.8%	0.7%	0.8%	0.8%	0.7%
Hypothyroidism	Count		16,307	2,661	7,838	5,808
	Prevalance	3.0%	3.8%	3.5%	4.2%	3.6%
Cancer	Count		5,919	1,365	2,635	1,919
	Prevalance	1.6%	1.4%	1.8%	1.4%	1.2%
Palliative Care	Count		583	89	272	222
	Prevalance	0.2%	0.1%	0.1%	0.1%	0.1%
MH	Count		2,937	490	1,447	1,000
	Prevalance	0.8%	0.7%	0.6%	0.8%	0.6%
Asthma	Count		25,824	3,953	12,650	9,221
	Prevalance	5.9%	6.1%	5.2%	6.8%	5.7%
Dementia	Count		1,811	436	750	625
	Prevalance	0.5%	0.4%	0.6%	0.4%	0.4%
Depression	Count		28,674	4,666	13,351	10,657
	Prevalance	11.2%	8.7%	7.7%	9.2%	8.7%
CKD	Count		14,085	2,305	6,740	5,040
	Prevalance	4.3%	4.3%	3.8%	4.6%	4.1%
AF	Count		5,767	1,232	2,658	1,877
	Prevalance	1.4%	1.4%	1.6%	1.4%	1.2%
Obesity	Count		38,870	4,660	17,450	16,760
	Prevalance	10.5%	11.5%	7.5%	11.6%	13.2%
LD	Count		1,289	236	565	488
	Prevalance	0.4%	0.4%	0.4%	0.4%	0.4%

Using modelled estimates figures 5.2, 5.3, 5.4 and 5.5 show a comparison of the observed QOF register sizes and expected register sizes for CHD, Hypertension, COPD and Stroke by practice for all practices in SW Essex. Value of 100 (0%) means observed= expected; above 100 (0%) means observed= higher than expected; below 100 (0%) means observed= lower than expected.

Figure 5.2 shows observed versus expected CHD prevalence by practice within SW Essex. In terms of population CHD ascertainment, it is estimated that the majority of practices in SW Essex have less CHD patients than expected. Practices that fall below the 2SD and 3SD lower limit are from Basildon, Brentwood and Thurrock. One practice from the Basildon locality falls above the 3SD upper limit on the funnel indicating the practice has significantly more CHD patients than expected.

Figure 5.2: Observed vs. Expected funnel plots for CHD for all practices in SW Essex

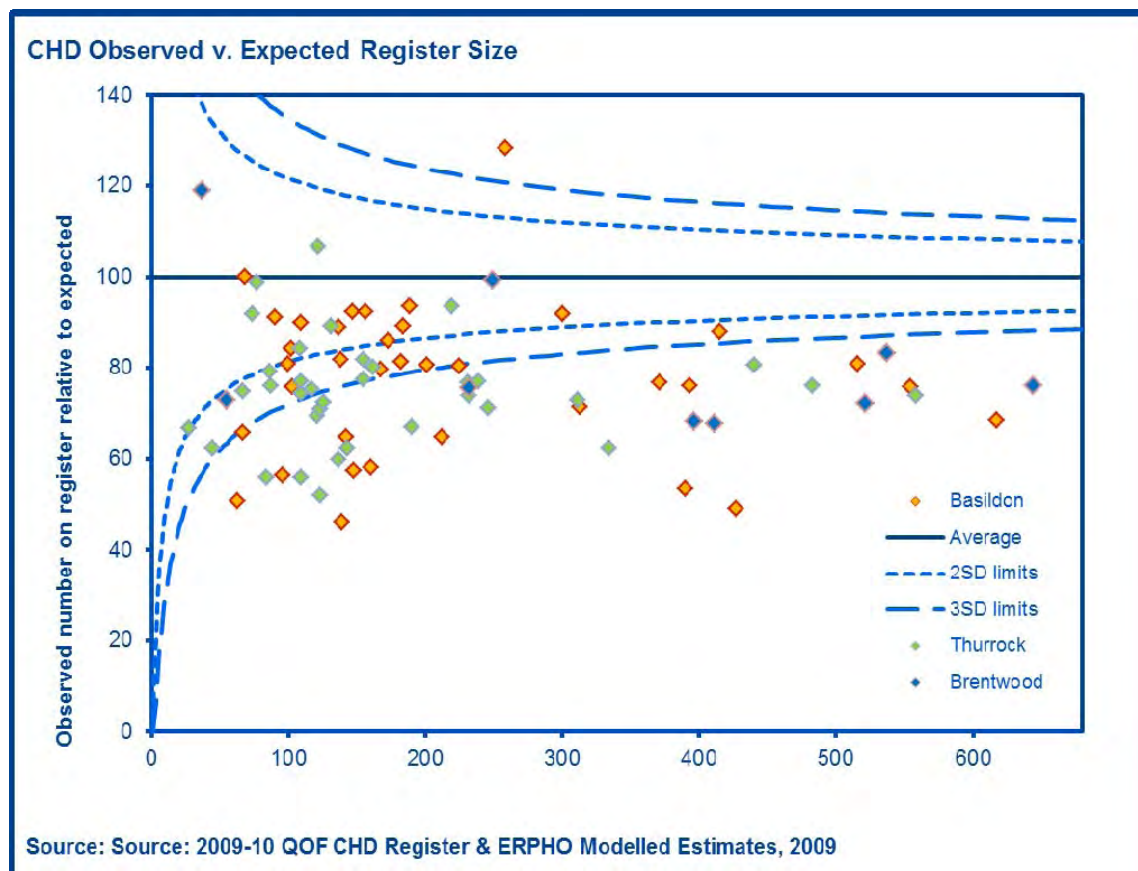


Figure 5.3 shows observed versus expected hypertension prevalence by practice within SW Essex. In terms of population hypertension ascertainment, it is estimated that all practices excluding one within SW Essex have less hypertension patients than expected with practices falling below the 3SD lower limit.

Figure 5.3: Observed vs. Expected funnel plots for hypertension for all practices in SW Essex

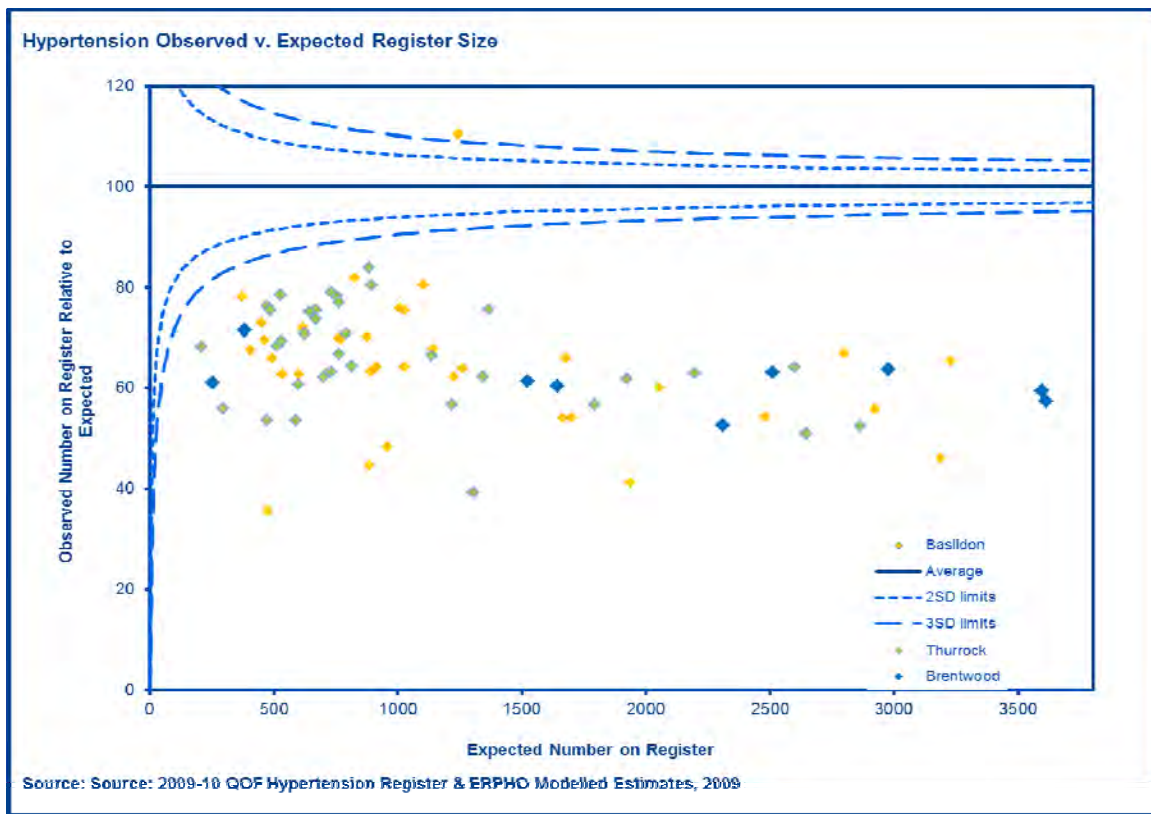


Figure 5.4 shows observed versus expected COPD prevalence by practice within SW Essex. In terms of population COPD ascertainment, it is estimated that the majority of practices have less COPD patients than expected. Practices that fall below the 2SD and 3SD lower limit are from Basildon, Brentwood and Thurrock. One practice from the Basildon locality falls above the 3SD upper limit on the funnel and two practices fall above the 2SD upper limit indicating these practices have significantly more COPD patients than expected.

Figure 5.4: Observed vs. Expected funnel plots for COPD for all practices in SW Essex



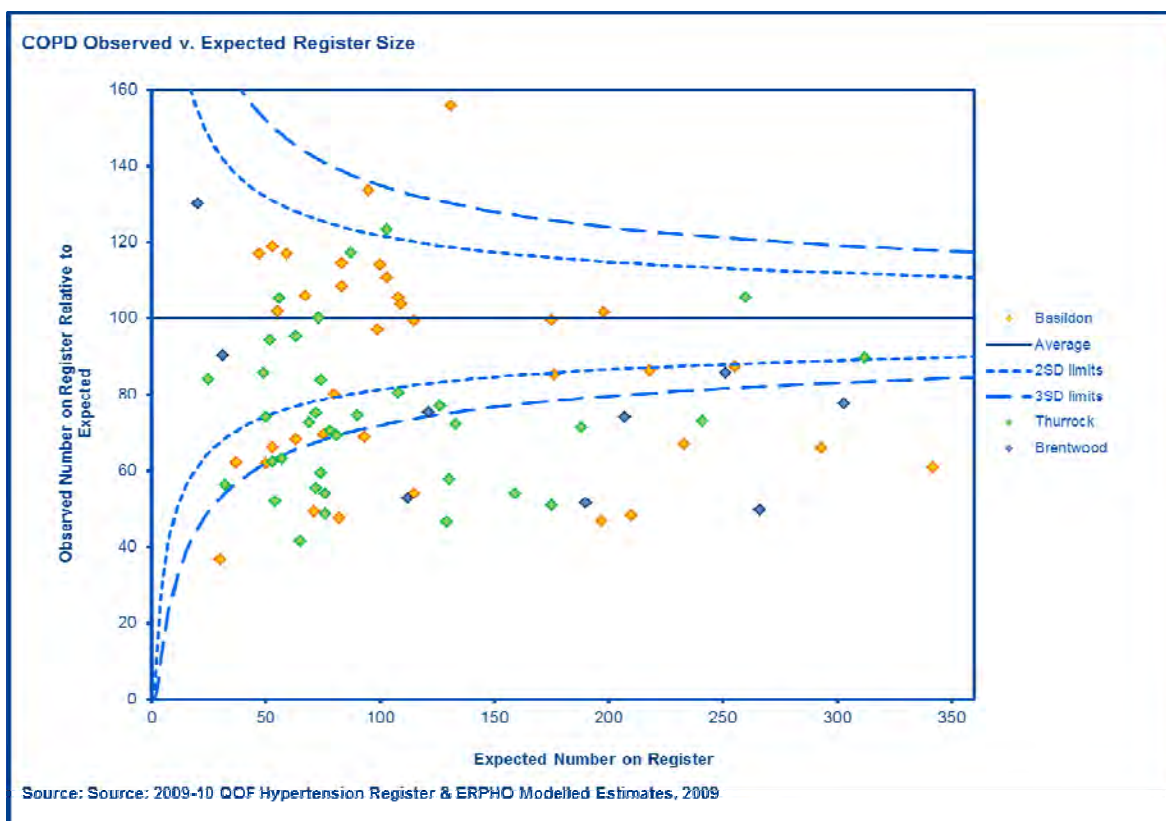


Figure 5.5 shows observed versus expected stroke / TIA prevalence by practice within SW Essex. In terms of population stroke / TIA ascertainment, it is estimated that the majority of practices have the expected number of stroke / TIA patients within SW Essex. A number of practices fall outside the 2SD and 3SD limits with the majority being from Basildon and Thurrock falling below the 2SD and 3SD lower limits. A practice from Basildon falls above the 3SD upper limit and two practices fall above the 2SD upper limit (Brentwood and Thurrock) indicating these practices have significantly more stroke / TIA patients that expected.

Figure 5.5: Observed vs. Expected funnel plots for Stroke/TIA for all practices in SW Essex



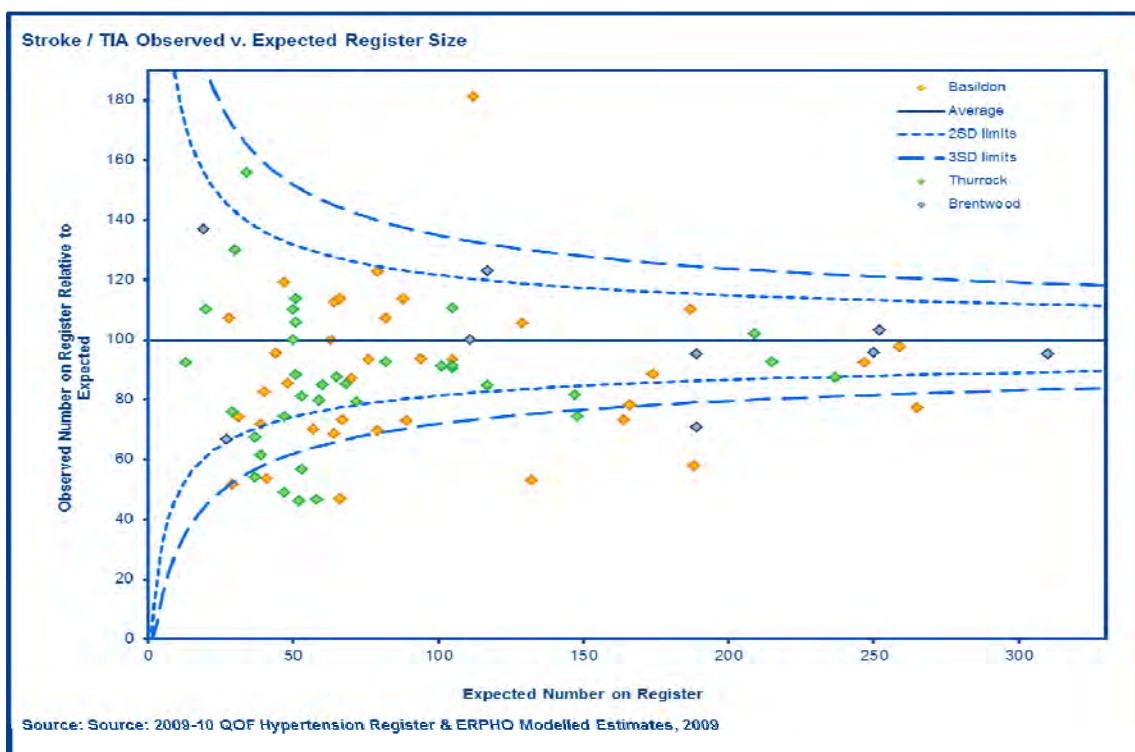


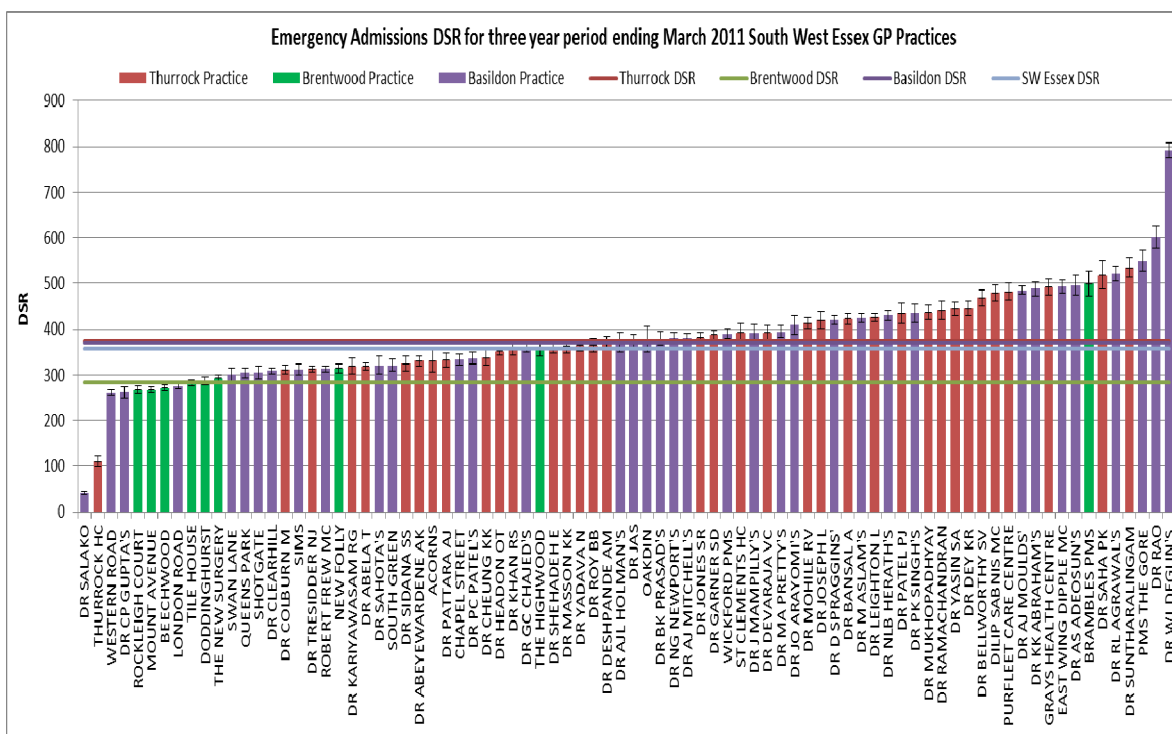
Table 5.6 shows the projected prevalence of CHD, COPD, Hypertension and Stroke until 2020 by district. The prevalence of all conditions look set to rise in all areas over the next eight years. This will not only have a large impact on the health of the population but it will also have a considerable impact on the NHS.

Table 5.6: Estimated disease prevalence for CHD, COPD, Hypertension and Stroke for 2010, 2015 and 2020

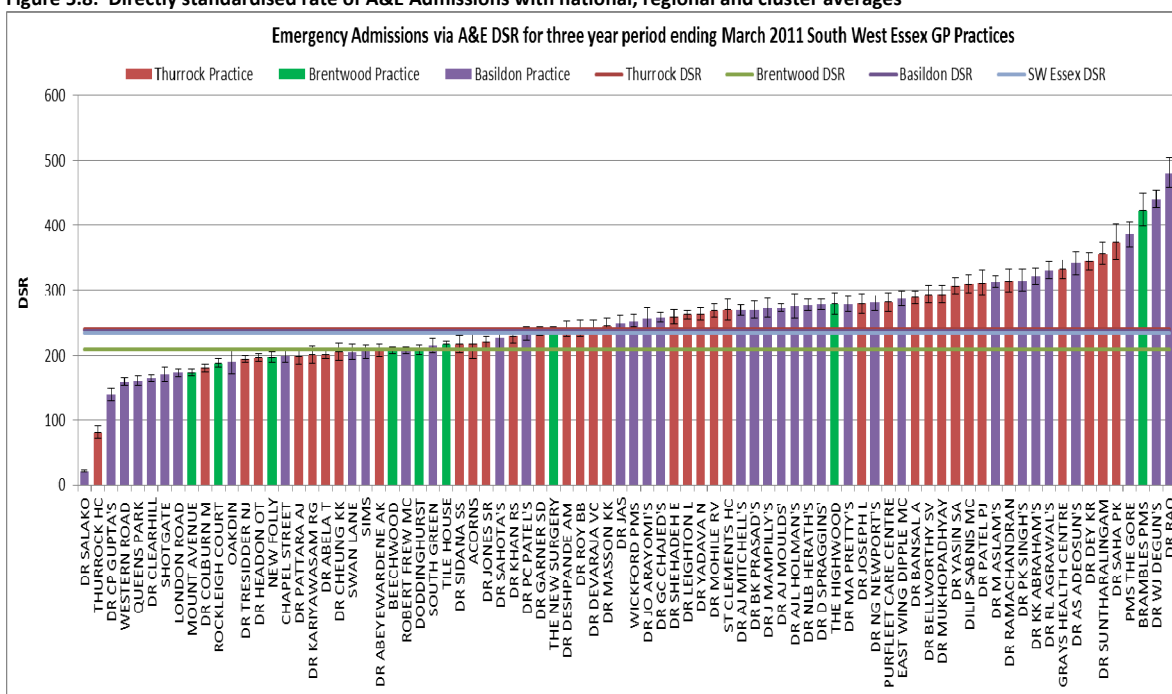
	Basildon			Brentwood			Thurrock		
	2011	2015	2020	2011	2015	2020	2011	2015	2020
Prevalence of CHD (persons 16+)	5.11%	5.40%	5.70%	5.29%	5.40%	5.60%	4.62%	5.80%	6.10%
Prevalence of COPD (persons 16+)	2.89%	3.20%	3.30%	2.53%	2.60%	2.70%	2.76%	3.40%	3.60%
Prevalence of Hypertension (persons 16+)	30.24	31.40%	32.20%	30.33%	30.70%	31.30%	28.43%	30.30%	31.20%
Prevalence of stroke (persons 16+)	2.3%	2.4%	2.5%	2.5%	2.6%	2.7%	2.0%	2.4%	2.6%

Figure 5.7 shows the DSR of emergency admission attendances per practice with national, regional and cluster averages. Figure 5.8 shows the DSR of A&E admissions per practice with national, regional and cluster averages. The DSR of emergency admission attendances and of A&E admissions is higher in Thurrock and Basildon compared to Brentwood. Over 50% of practices within SW Essex have a significantly greater rate of emergency admission attendances and of A&E admissions than the SW Essex average. There appears to be a link between practices in the rate of emergency admission attendances compared to A&E admissions. Practices that have high rates of emergency admission attendances normally also have high rates of A&E admissions. This is probably due to the areas of deprivation that the practices fall into.

Figure 5.7: Directly standardised rate of Emergency Admission attendances per practice, with national, regional and cluster averages



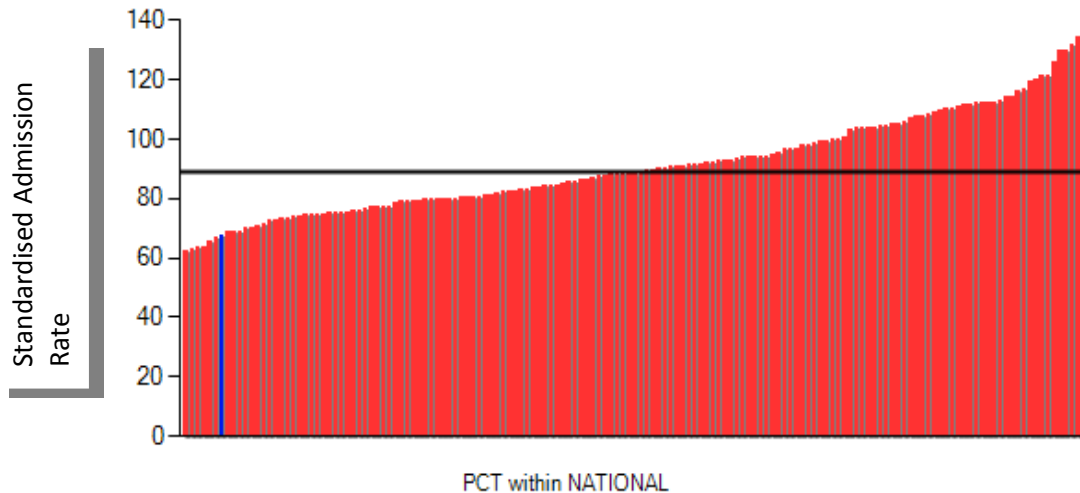
**Figure 5.8: Directly standardised rate of A&E Admissions with national, regional and cluster averages**



## Emergency Admissions

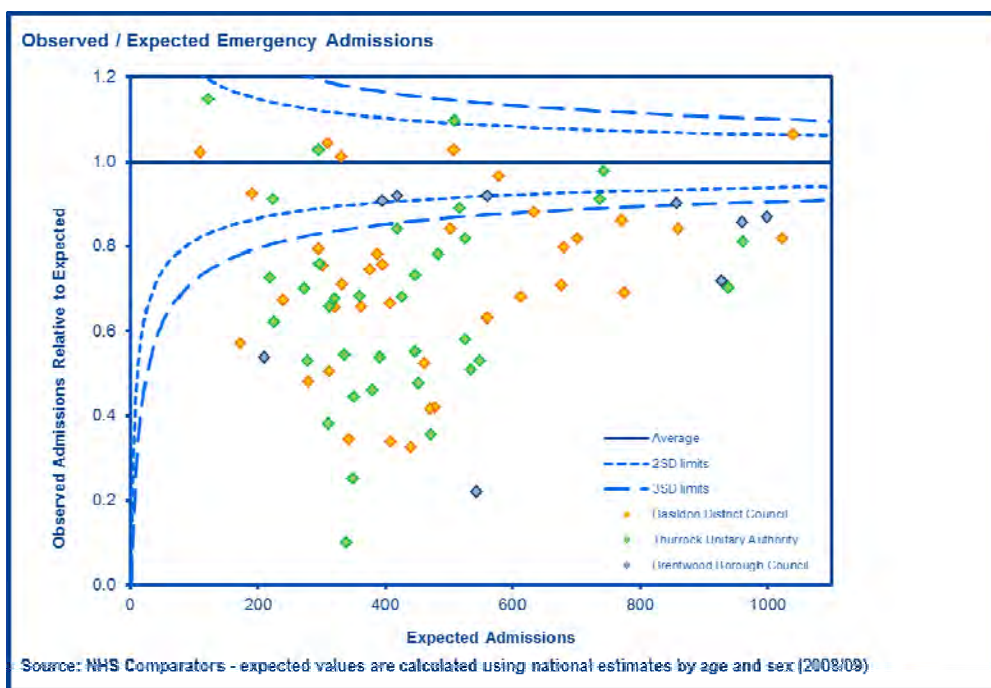
In 2010/11 SW Essex had 28,654 emergency admissions in total. (Standardised rate of 67.7 per 1000). Compared to the East of England and national (74.5 and 89.0 respectively) this figure is significantly low.

Figure 5.9: Standardised emergency admission rates, All PCTs, 2010/11



Using modelling methods we can model how many admissions would be expected for each GP practice in the country based on the size of a GP practice, the proportion of this total who are aged over 85, disability free life expectancy at age 70, indirectly standardised mortality rate, and CHD and diabetes QOF register sizes. 80% of the variation in number of emergency admissions nationally can be explained by these variables. (Methodology is explained in appendix A) We can then compare our observed number of emergency admissions in 2010/11 to this expected figure for all GP practices in South West Essex [figure 5.10].

Figure 5.10



The value of 1 indicates that there is no difference between what would be observed and what would be expected.

The figure shows that given characteristics of the South West Essex Population most GP practices have significantly fewer emergency admissions in 2010/11 than would be expected.

When looking at emergency admissions as a total it may appear that there is not much room to make savings here, however there may still be admissions for specific diseases which are high compared to other areas, or higher than expected that could yield great savings.

### Mortality

Figure 5.11 shows the absolute difference in mortality between PCTs and the East of England average from 2001 to 2008. Mortality rates have been significantly worse in SW Essex than the EoE average in every two year period from 2001 to 2008 for males, females and for both males and females combined. This is probably because we have larger areas of deprivation compared with the EoE.

Figure 5.11: Absolute Difference in Under-75 All-Cause Mortality between PCTs & East of England (EoE)

	Under-75 All Cause Mortality (DSR in years)																	
	PERSONS						MALES						FEMALES					
	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08
LUTON PCT	78	70	81	85	79	77	92	80	96	99	99	97	57	55	59	66	55	54
SOUTH EAST ESSEX PCT	14	12	9	5	6	4	16	12	10	5	11	9	14	13	10	6	3	2
BEDFORDSHIRE PCT	7	8	8	15	11	6	13	17	11	16	6	4	0	2	4	13	16	15
EAST & NORTH HERTS PCT	7	8	11	10	4	2	10	12	16	17	8	0	4	3	5	3	1	5
WEST HERTFORDSHIRE PCT	16	9	11	5	12	10	22	5	10	6	18	15	7	12	10	4	4	5
PETERBOROUGH PCT	72	57	58	55	70	64	94	76	71	70	89	82	53	41	47	43	53	48
CAMBRIDGESHIRE PCT	11	11	15	13	13	14	12	11	15	13	13	15	12	12	16	14	14	13
NORFOLK PCT	14	11	13	12	11	11	16	16	16	13	10	11	13	7	10	12	12	12
GT YARMOUTH & W. PCT	25	19	24	22	27	34	41	27	40	31	41	41	12	13	10	15	15	27
SUFFOLK PCT	17	16	17	23	26	26	22	20	23	28	31	30	13	13	13	19	22	24
WEST ESSEX PCT	6	10	0	0	1	2	12	13	0	7	5	1	1	6	2	5	2	4
NORTH EAST ESSEX PCT	12	14	18	18	17	18	18	20	27	27	21	27	8	9	11	10	14	11
MID ESSEX PCT	21	19	13	17	17	17	26	22	14	22	20	19	17	18	14	15	15	15
SOUTH WEST ESSEX PCT	26	26	21	21	20	19	27	21	16	18	20	20	27	34	28	26	22	21

## Summary / Conclusions

Mortality rates have been significantly worse in SW Essex than the EoE average in every two year period from 2001 to 2008 for males, females and for both males and females combined.

In Thurrock average disease prevalence for all practices is greater in four of the 18 QOF conditions compared to the national average.

Comparison of observed versus expected prevalence suggests that the majority of practices within Basildon, Brentwood and Thurrock have less CHD, COPD and hypertensive patients than expected. This warrants further investigation as if there are a large number of people that have undiagnosed conditions, it could have a detrimental effect on their health and increased costs to the NHS in the future.

With the growth of an ageing population and the drive to ensure earlier identification of some chronic conditions, we can expect a rise in disease prevalence and consequential increase in demand on health and social care services.

## 6. OVERALL ANALYSIS OF SPEND

### Programme Budgeting and SPOT Tool Analysis

The Programme Budgeting Project was introduced by the Department of Health in 2002. Its aim was to develop a source of information to give a greater understanding of where money is being invested in the NHS and what is obtained for the investment. It maps Primary Care Trust expenditure to 23 programmes of care based on medical conditions such as mental health, cardio vascular disease and cancer. Programme Budgeting along with the Association of Public Health Observatories (APHO) SPOT tool is a powerful mechanism for assessing expenditure relative to clinical value by comparing a specific Primary Care Trust to other similar Primary Care Trusts. It is used to evaluate the effectiveness of the current pattern of resource deployment and to support and improve the process for identifying the most effective way of commissioning services for the future. It can also be used to identify future QIPP priorities.

Each Primary Care Trust's expenditure per head of unified weighted population (UWP) by programme can be compared with the average for its ONS cluster. Regrettably this data is only available at PCT rather than CCG level. NHS South West Essex falls into the category of new and growing towns and is grouped with other similar Primary Care Trusts to provide a realistic benchmark.

### Overall Programme Budgeting Spend (per 100,000 population) Compared to other PCTs.

Overall, South West Essex PCT ranks 76<sup>th</sup> out of 152 PCTs for spend per 100,000 populations on programmes in primary and secondary care.

Figure 5.13 shows estimated Primary, Secondary and urgent/emergency care expenditure for a range of programme budgetary disease categories against national rank NHS South West Essex has the highest expenditure per 100,000 population of any PCT in England on lung cancer, even though over all cancer spend rate is ranked at 103 out of 152 PCTs nationally. It is worth noting spend on Lung Cancer is on Secondary Care services and that Programme budgeting estimations suggest no spend on early detection or prevention of lung cancer. It is also has the highest expenditure per 100,000 for coronary heart disease, which contributes to the PCTs overall rank of 3<sup>rd</sup> out of all PCTs for problems of circulation.

Other areas of high spend compared to other PCTs are:

- Burns in Problems of the skin (ranked 2<sup>nd</sup> out of 152 PCTs)
- Disorders of the blood (ranked 4<sup>th</sup> out of 152 PCTs)
- Endocrine (ranked 11<sup>th</sup> out of 152 PCTs)
- Problems of the respiratory system (other) (ranked 15<sup>th</sup> out of 152 PCTs)



Figure 5.13

Expenditure per 100,000 population (£million)			
Programme Budgeting category		Total expenditure	PCT Rank (1 = Highest Expenditure)
01	<b>Infectious diseases</b>	1.8	108
01a	HIV and AIDS	0.0	151
01x	Infectious diseases (Other)	1.8	31
02	<b>Cancers and tumours</b>	9.6	103
02a	Head or neck cancers	0.3	28
02b	Upper gastro intestinal cancers	0.4	51
02c	Lower gastro intestinal cancers	0.7	83
02d	Lung cancers	1.2	1
02e	Skin cancers	0.2	71
02f	Breast cancers	0.9	110
02g	Gynaecological cancers	0.2	86
02h	Urological cancers	0.7	57
02i	Haematological cancers	0.8	72
02x	Cancers and tumours (Other)	4.1	130
03	<b>Disorders of blood</b>	4.1	4
04	<b>Endocrine, nutritional and metabolic problems</b>	6.3	23
04a	Diabetes	3.2	29
04b	Endocrine	1.0	11
04x	Endocrine, nutritional and metabolic problems (	2.1	46
05	<b>Mental health disorders</b>	17.4	128
05a	Substance misuse	2.1	71
05b	Organic mental disorders	2.2	85
05c	Psychotic disorders	0.5	149
05d	Child and adolescent mental health disorders	0.1	148
05x	Mental health disorders (Other)	12.4	58
06	<b>Problems of learning disability</b>	5.0	83
07	<b>Neurological</b>	7.3	95
07a	Chronic pain	2.7	46
07x	Neurological (Other)	4.5	115
08	<b>Problems of vision</b>	3.9	109
09	Problems of hearing	0.8	73
10	<b>Problems of circulation</b>	18.0	3
10a	Coronary heart disease	7.3	1
10b	Cerebrovascular disease	1.8	43
10c	Problems of rhythm	1.5	9
10x	Problems of circulation (Other)	7.4	59
11	<b>Problems of the respiratory system</b>	9.5	18
11a	Obstructive airways disease	1.4	57
11b	Asthma	2.0	55
11x	Problems of the respiratory system (Other)	6.1	15

Expenditure per 100,000 population (£million)			
Programme Budgeting category		Total expenditure	PCT Rank (1 = Highest Expenditure)
12	Dental problems	7.0	53
13	Problems of the gastro intestinal system	8.8	59
13a	Upper gastro intestinal system problems	2.4	46
13b	Lower gastro intestinal system problems	2.5	53
13c	Hepatobiliary problems	1.4	68
13x	Problems of the gastro intestinal system (Other)	2.6	67
14	Problems of the skin	5.7	9
14a	Burns	1.6	2
14x	Problems of the skin (Other)	4.1	34
15	Problems of the musculoskeletal system	9.6	75
16	Problems due to trauma and injuries	4.6	148
17	Problems of the genito urinary system	7.1	142
17a	Genital tract problems	2.3	61
17b	Renal problems	1.6	132
17c	Sexually transmitted infections	0.1	137
17x	Problems of genito urinary system (Other)	3.1	93
18	Maternity and reproductive health	9.2	26
19	Conditions of neonates	0.7	141
20	Adverse effects and poisoning	2.0	31
20a	Unintended consequences of treatment	1.6	19
20b	Poisoning	0.2	150
20c	Violence	0.2	26
20x	Adverse effects and poisoning (Other)	0.1	132
21	Healthy individuals	6.6	17
22	Social care needs	1.0	138
23	Other	27.5	91
23a	GMS/PMS	12.5	139
23x	Miscellaneous Other	14.9	63

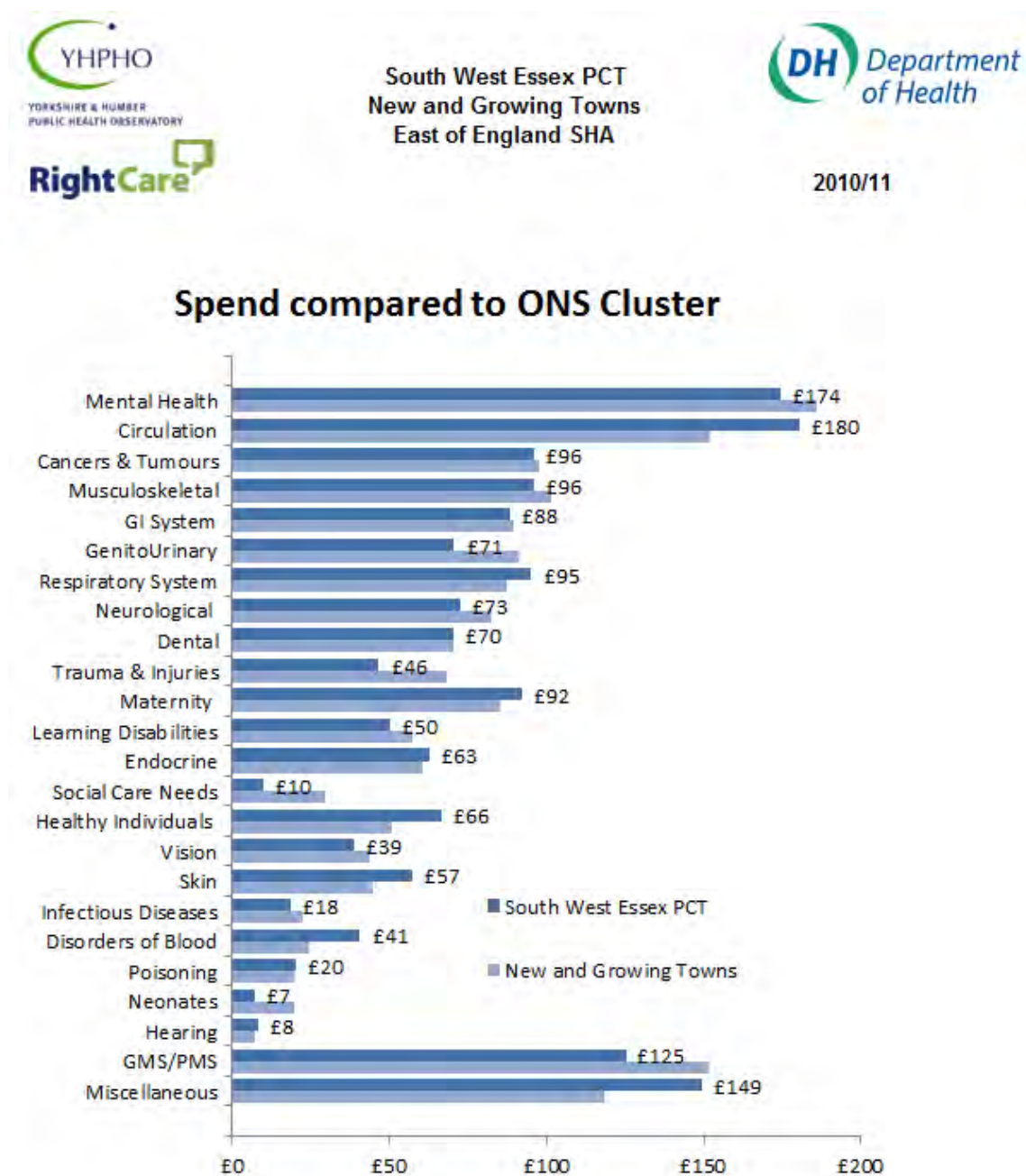
#### Spend in NHS South West Essex compared to the ONS cluster group.

The overall spend per weighted head of population in NHS South West Essex is lower than its cluster but higher than the SHA average. Expenditure in the 'other' category is less than the average for the cluster and for the SHA area for primary GMS/PMS spend and higher than the cluster and SHA in the miscellaneous category.

Figure 5.14 shows NHS South West Essex spend per weighted head of population for 2010-11 in comparison to its ONS cluster. The highest spending programme is Circulation, where previous years showed Mental Health as the largest expenditure.



Figure 5.14



NHS South West Essex highest spend areas per head of population excluding programme 23 (Other) are:

- £180 per head per year on Circulation
- £174 on Mental Health
- £96 on Cancers & Tumours
- £96 on Musculoskeletal
- £95 on Respiratory Disease

However, in South West Essex most of our programmes appear to be spending less than the average for our cluster. It is difficult, however, to conclude that no shift in spend needs to be made when we have such a large Miscellaneous category.

This category may be large for a variety of reasons:

- 1) Coding differences between PCTs
- 2) Coding differences between providers
- 3) How the PCT is structured

Investigating possible reasons why this category is so large recurrently for SWE will help re align any relevant spends to appropriate programme budgeting categories and give a more accurate picture for spend and outcome analysis in the future.

There are three areas where the PCT spend per head is higher than the Cluster average and may warrant investigation:

- £180 per head per year on Circulation
- £95 per head on Respiratory Disease
- £92 per head on Maternity

If the PCT were to reduce its spend on each of these programmes so that it were in line with the ONS Cluster average a potential saving of £18,194,074 would be delivered. Some of this potential saving may, however, be offset by programmes where our outcomes are particularly bad and spend is low. For South West Essex the programmes where some of the outcomes are poor and spend is lower than the cluster average are; Cancers and Tumours, Genito Urinary and Respiratory Diseases. If spend were to be brought in line with the cluster average in an effort to improve the outcomes identified in figure 5.15 then an additional spend of up to £12,270,422 may be justified.

**Figure 5.15**

Programme	SW Essex Registered Population*	Spend per head SW Essex	Spend per head Cluster	Difference per head (SW Essex – ONS)	Potential Saving
Problems with the Circulatory System	423118	£180.00	£152.00	£28.00	£11,847,304
Respiratory Diseases	423118	£95.00	£87.00	£8.00	£ 3,384,944
Maternity	423118	£92.00	£85.00	£7.00	£ 2,961,826
Cancers and Tumours	423118	£96.00	£97.00	-£1.00	-£423,118
Genito Urinary	423118	£71.00	£91.00	-£20.00	-£8,462,360
Respiratory Disease	423118	£95.00	£87.00	-£8.00	-£3,384,944
Total Net Saving					£ 5,923,652

\*SW Essex registered Population as at 1<sup>st</sup> October 2010

### Spend versus Outcome in South West Essex and our ONS Cluster

Figure 5.16 is a spine chart that shows variation in spend and outcomes compared to similar PCTs, the Strategic Health Authority (SHA) and England. In each category, spend in SW Essex compared to our ONS cluster is given first, and outcome(s) against our cluster below.

Figure 5.16

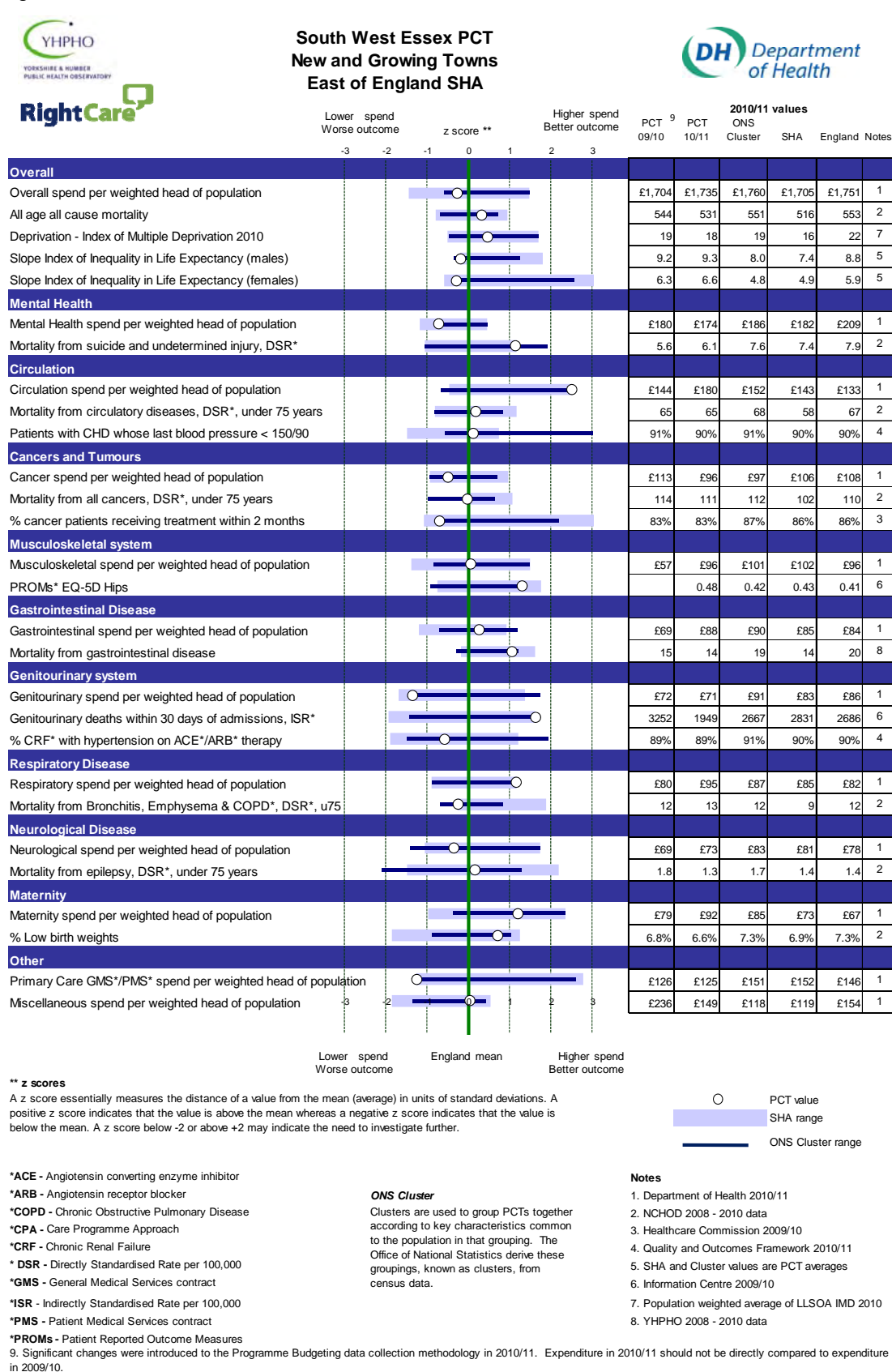
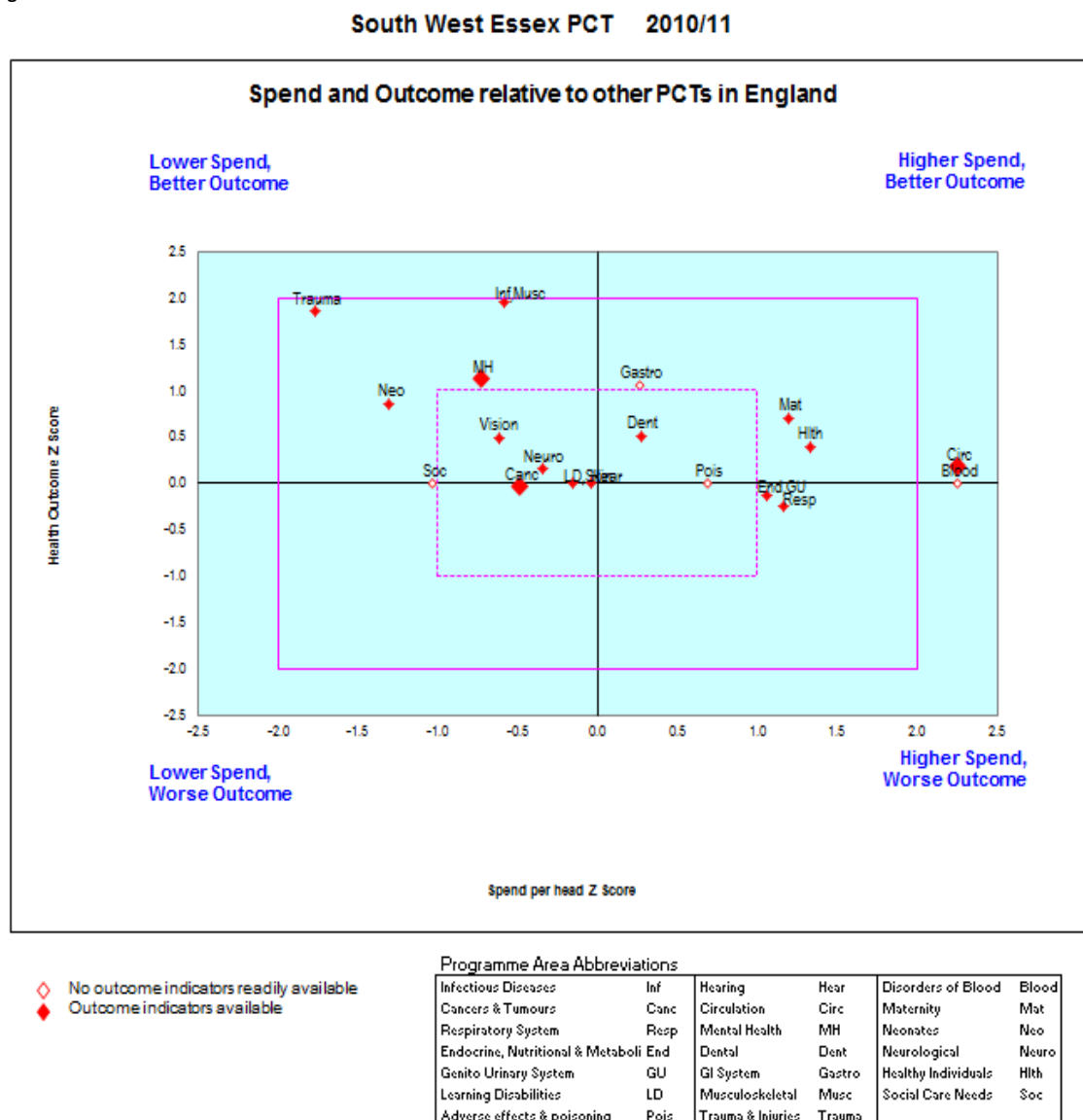


Figure 5.17 presents some of the information from the previous spine chart (figure 5.16) in two dimensions, showing programme budgeting categories for NHS South West Essex (NHS SWE) by level of spend in comparison with outcomes, allowing easy identification of areas that warrant further attention. The largest spending programmes nationally are represented by larger dots on the graph. Programmes outside the inner (dotted) box (z score <-1.0 or > 1.0) are one standard deviation or more from the cluster mean and should be thought of as potential outliers. Programmes that lie outside the second solid box (z score <-2.0 or > 2.0) are two standard deviations from the cluster mean and should be thought of as significant outliers.

Figure 5.17



NHS South West Essex highest spend areas relative to other PCTs in England are circulation and blood disorders. These programmes lie outside the solid pink  $\pm 2z$  box making them outliers compared to other PCTs in England, and investment does not appear to have resulted in significantly better outcomes. Other notably high spend programmes, compared to other PCTs, with better outcomes include maternity, healthy individuals although because the z score on spend is greater than the z score on outcome, it could be argued for both of these programmes that better value should be being achieved.

NHS South West Essex has only average outcomes for respiratory, genitourinary system and endocrine programmes despite high spend and so may warrant further investigation.

Our most cost effective programme is trauma as it has the largest positive z score for outcome and largest negative z score for cost. However overall spend is relatively small compared to some other programmes. Infectious diseases and musculoskeletal programmes also show very positive outcomes for below average spend.

The mental health programme which is our second largest area of spend per head of population is extremely encouraging in the sense that it delivers positive outcomes above 1 standard deviation from the mean and yet costs less than the mean per head of population compared to other PCTs.

### **Procedures of Limited Clinical Value**

Through the drive to implement service modernisation that is efficient and high quality as funding growth slows, procedures of limited clinical value require review to ensure where possible, money can be redirected to delivery of better value treatments. Procedures of limited clinical value are treatments considered to be clinically ineffective or not cost-effective.

Figure 5.18 shows some procedures of limited clinical value of Thurrock Unitary Authority by activity and cost across over the last three years.

Figure 5.18

## NHS South West Essex

Procedures of Limited Clinical Value split by District Council of patient GP registered practice

Procedures based on "Croydon List" of Procedures except for Minor Skin Lesions which is HRG based.

Data Source: SUS as at 30/03/2012

Column Lab						
Row Labels	2008/09 Activity	Cost (£)	2009/10 Activity	Cost (£)	2010/11 Activity	Cost (£)
<b>Thurrock Unitary Authority</b>	<b>1,764</b>	<b>£3,626,547</b>	<b>1,577</b>	<b>£3,937,166</b>	<b>1,645</b>	<b>£4,626,338</b>
Aesthetic Surgery - Breast	21	£41,868	20	£50,755	20	£38,942
Aesthetic Surgery - ENT	19	£24,310	21	£33,667	18	£27,020
Aesthetic Surgery - Ophthalmology	19	£19,610	14	£14,472	21	£21,381
Aesthetic Surgery - Plastics	4	£9,530	6	£17,515	7	£14,306
Anal Procedures	52	£39,439	78	£65,096	85	£77,323
Back Pain: Injections and Fusion	4	£0	3	£17,787	11	£63,896
Bilateral Hips	168	£986,619	198	£1,300,409	226	£1,453,960
Carpal Tunnel	164	£128,578	125	£150,997	142	£194,072
Cochlear Implants	3	£55,827	1	£0	1	£26,402
Dilation and Curettage	2	£1,585	4	£3,184	3	£2,332
Dupuytren's Contracture	15	£19,852	25	£65,926	25	£67,991
Grommets	6	£4,885	6	£4,525	8	£6,366
Hysterectomy for Menorrhagia	103	£282,182	125	£415,147	112	£334,892
Incisional Ventral Hernias	36	£66,361	32	£69,424	48	£135,537
Inguinal Umbilical and Femoral Hernias	196	£256,460	183	£242,003	166	£263,648
Jaw Replacement	17	£32,746	22	£41,130	9	£21,787
Knee Washouts	44	£51,914	23	£36,871	15	£27,563
Knees	162	£918,102	159	£852,892	174	£1,150,861
Minor Skin Lesions	93	£124,277	100	£153,238	99	£180,783
Myringotomy with/without grommets	97	£79,665	91	£61,968	102	£86,228
Orthodontics	4	£2,692	2	£656	2	£1,402
Spinal Cord Stimulation	5	£21,055	7	£12,712	10	£22,321
Tonsillectomy	271	£237,852	198	£199,307	195	£231,402
Trigger Finger	42	£47,149	43	£65,478	49	£100,159
Varicose Veins	4	£4,296	5	£6,152	7	£9,095
Wisdom Tooth Extraction	213	£169,693	86	£55,855	90	£66,669
<b>Grand Total</b>	<b>1,764</b>	<b>£3,626,547</b>	<b>1,577</b>	<b>£3,937,166</b>	<b>1,645</b>	<b>£4,626,338</b>

Overall, the spend on procedures of limited clinical value has increased from £3,626,547 in 2008-09 to £4,626,338 in 2010-11, despite the activity of actual procedures decreasing from 1,764 to 1,645 procedures respectively. It is worth noting that activity has increased between 2009-10 and 2010-11. The greatest spend and activity in 2010-11 was for knees. It should however be noted that Thurrock's population has continued to grow year on year and this trend is predicted to continue, so the increase in costs may be a product of population growth. The least spend was for Orthodontics at £1,402. Interventions relating to Inguinal Umbilical and Femoral Hernias have had a reduction in activity yet this is not reflected in the cost savings and may warrant further investigation.

## Conclusions – Overall Analysis of Spend

NHS South West Essex highest spend areas per head of population excluding Programme 23 (Other) are:

- £180 per head per year on Circulation
- £174 on Mental Health
- £96 on Cancers & Tumours
- £96 on Musculoskeletal
- £95 on Respiratory Disease

NHS South West Essex has the highest expenditure per 100,000 population of any PCT in England on lung cancer, even though over all cancer spend rate is ranked at 103 out of 152 PCTs nationally. It is also has the highest expenditure per 100,000 for coronary heart disease, which contributes to the PCTs overall rank of 3<sup>rd</sup> out of all PCTs for problems of circulation. This expenditure is likely to be a product of a large prevalence of smoking in our deprived populations, and working through Health and Wellbeing Boards to ensure appropriate Tobacco Control Programmes are commissioned together with commissioning programmes that encourage the early detection of lung cancer and circulatory diseases are likely to impact positively on this issue.

Spend on disorders of the blood ranks 4<sup>th</sup> out of 152 PCTs with the majority of costs in secondary care. This warrants further investigation.

Other areas of high spend compared to other PCTs are:

Other areas of high spend compared to other PCTs are:

- Burns in Problems of the skin (ranked 2<sup>nd</sup> out of 152 PCTs)
- Disorders of the blood (ranked 4<sup>th</sup> out of 152 PCTs)
- Endocrine (ranked 11<sup>th</sup> out of 152 PCTs)
- Problems of the respiratory system (other) (ranked 15<sup>th</sup> out of 152 PCTs)

All of these areas warrant further investigation to assess the possibility of new QIPP initiatives to reduce spend.

Compared to our ONS cluster of PCTs, spend in SW Essex on the majority of programmes is lower. It is difficult, however, to conclude that no shift in spend needs to be made as we have a large spend in the Miscellaneous category which may reflect differences in coding between PCTs. Indeed if spending across all programme budgeting categories was brought into line with ONS PCT cluster averages, a net saving of £ 5,923,652 per annum would be delivered.

Spend on Circulatory Disorders and Blood Disorders are over two standard deviations greater than the mean for our ONS cluster despite delivering only average outcomes. Further investigation is required as these are also high spending areas in absolute cash terms.

The most cost effective programme area is trauma which provides significantly better than average outcomes for significantly less than average spend.

Mental Health, our second largest absolute spending area also performs well; with significantly better outcomes for less spend than ONS cluster means.



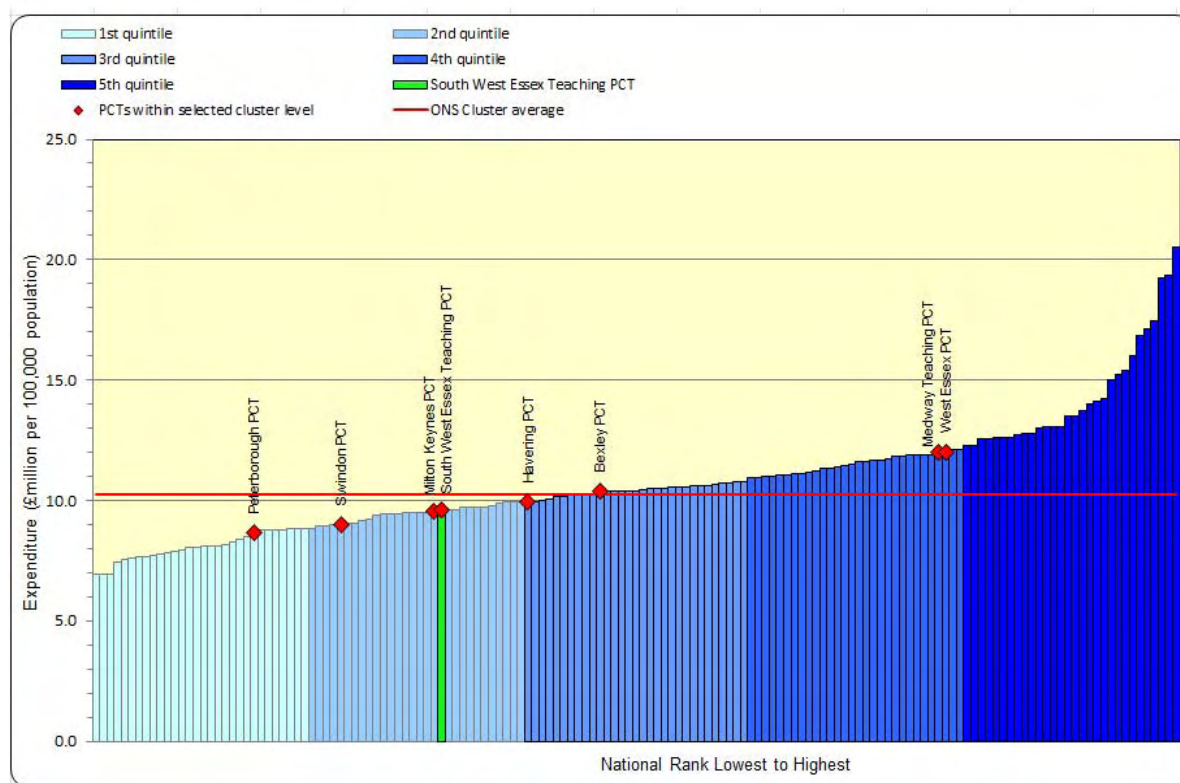
## 7. COST AND QUALITY ANALYSIS BY DISEASE CONDITION

### 7.1 Cancers and Tumours

#### Spend on Cancers and Tumours

Figure 7.1 shows programme budgeting spend on cancers and tumours by PCT, with SWE and its ONS cluster PCTs highlighted. Our spend on cancer services is in the second quintile nationally and in line with (slightly lower than average) ONS cluster average for NHS South West Essex. SW Essex expenditure is £96 per head vs. the ONS cluster average of £97 per head.

Figure 7.1



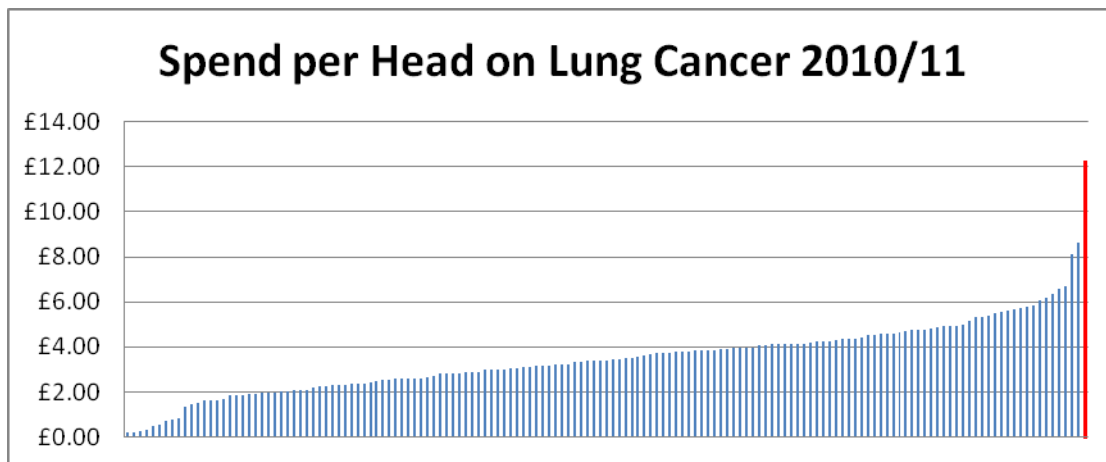
According to programme budgeting data South West Essex has the highest spend per head of all PCTs in England. The difference between spend per head for South West Essex and all other PCTs is illustrated in figure X. Given the large disparity further investigation is needed in order to determine whether this spend is real or a coding issue. Given the large smoking population in Thurrock it is likely that at least some of this disparity is real spend.

Table X: Spend per head of population on Lung Cancer 2010/11

	Spend per head 2010/11
South West Essex	£12.29
England	£3.50
ONS Comparator Group	£4.72



Source: programme budgeting



Source: Programme Budgeting

### Key indicator Outcomes for Cancers and Tumours

Figure 7.2 shows incidence, mortality rates of cancer by type and key secondary care indicators. Overall and under 75 incidence of Cancer is significantly better than the regional and England average. However, both incidence of lung cancers and mortality from cancers is not significantly different from the England average but in the majority of cases is greater than regional average. Secondary care indicators for cancer show that cancer bed days in SWE are significantly worse than the England average but are on par with the region. Cancer emergency admissions are not significantly different from the England average and are in line with the East of England region.

The high number of Cancer bed days could be explained by the fact that in South West Essex case finding is good [Figure 7.3] but we appear to have a large gap between the number of people who are on a palliative care register compared to what we would expect to find given our populations characteristics [Figure 7.4]. Further investigation would be required to ascertain that this is the case.

Figure 7.2

**Key:**

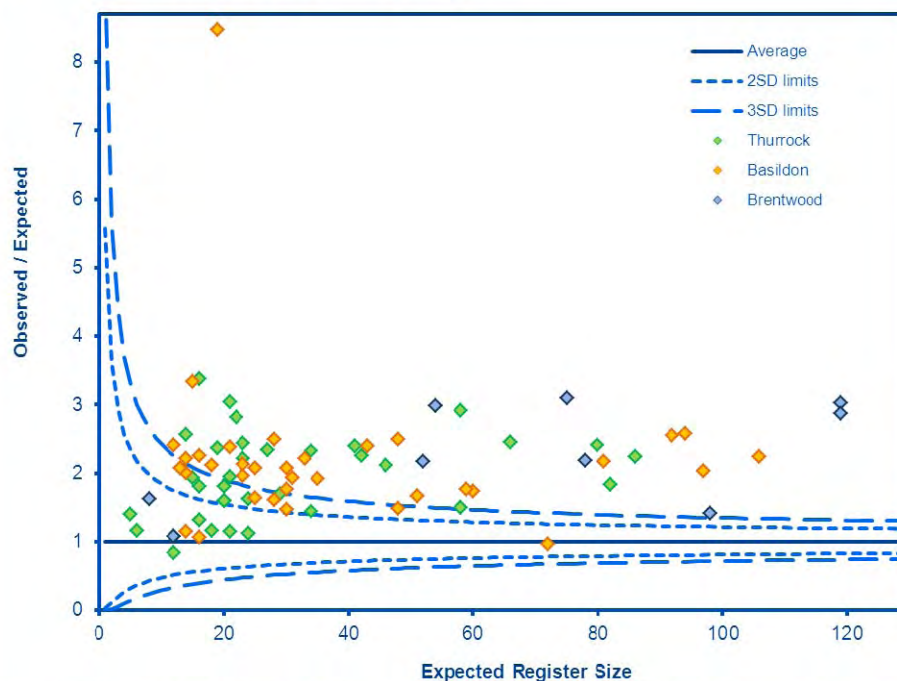
- Significantly better than England average
- Not significantly different from England average
- Significantly worse than England average
- No significance can be calculated

**England Key:**



Indicator	Local Number	Local Value	Eng Avg	Eng Worst	England Range	Eng Best
<b>1 INCIDENCE OF CANCER</b>						
2 All cancers	174	12.9	15.1	28.2		3.7
3 All cancers u75 years	138	11.7	13.6	26.1		2.7
4 Breast cancer	765	106.5	121.8	143.7		85.5
5 Breast cancer u75 years	585	96.4	110.8	132.4		76.9
6 Colorectal cancer	656	43.3	46.4	58.3		33.0
7 Colorectal cancer u75 years	380	31.7	33.6	43.9		23.0
8 Cervical cancer	39	5.9	8.1	17.7		2.7
9 Cervical cancer u75 years	33	5.6	7.9	17.3		2.4
10 Lung cancer	678	43.9	45.2	85.5		27.8
11 Lung cancer u75 years	392	32.2	32.5	64.5		19.7
12 Prostate cancer	535	79.4	97.6	142.4		47.4
13 Prostate cancer u75 years	327	56.6	71.0	118.1		39.9
<b>14 MORTALITY FROM CANCER (DSR)</b>						
15 All cancers	2892	176.1	171.7	235.1		119.4
16 All cancers u75 years	1408	114.5	112.1	159.1		77.3
17 Breast cancer	252	28.8	26.1	34.1		17.6
18 Breast cancer u75 years	135	21.5	20.1	28.3		13.9
19 Colorectal cancer	308	18.2	17.4	22.3		11.9
20 Colorectal cancer u75 years	134	10.9	10.6	14.6		6.0
21 Cervical cancer	18	2.5	2.3	5.8		0.8
22 Cervical cancer u75 years	13	2.2	2.0	5.7		0.5
23 Lung cancer	647	40.6	38.2	69.4		21.8
24 Lung cancer u75 years	353	28.5	26.0	50.3		14.3
25 Prostate cancer	189	24.9	24.2	32.1		14.9
26 Prostate cancer u75 years	53	9.0	8.5	13.7		4.3
<b>27 SECONDARY CARE</b>						
28 Cancer bed days per 1,000 population	21882	55.5	54.2	72.4		29.7
29 Cancer inpatient expenditure per 1000 population	12065107	30.6	30.9	42.8		42.8
30 Cancer Emergency admissions per 100 on disease register (2008-09)	753	17.6	16.6	31.4		8.5

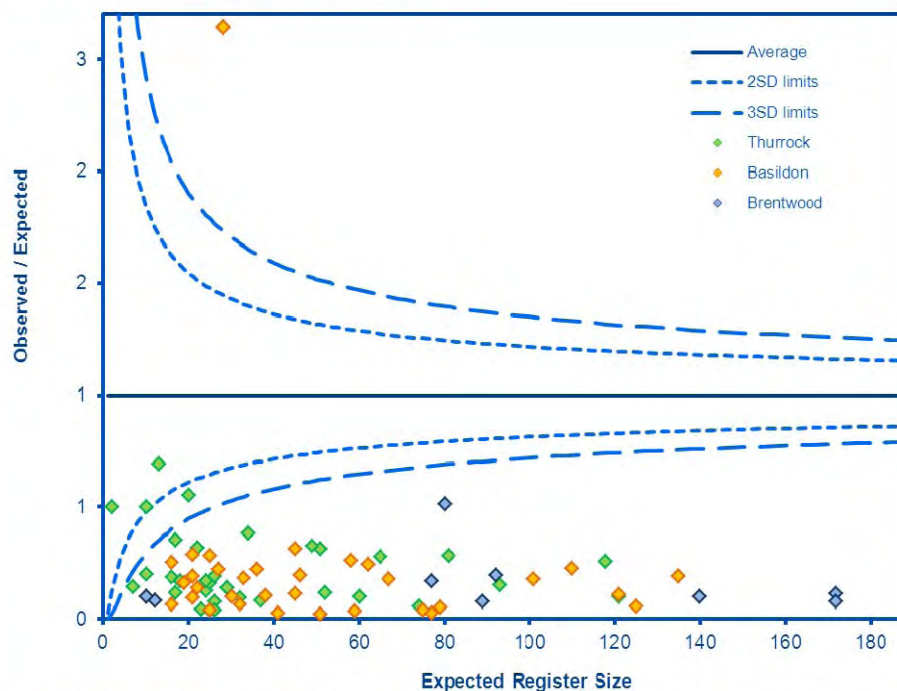
Observed/Expected Cancer Registers by GP practice



Source: NHS Comparators - expected values are calculated using national estimates by age and sex (2008/09)

Figure 6.3

Observed vs Expected Palliative Care Registers



Source: NHS Comparators - expected values are calculated using national estimates by age and sex (2008/09)

Figure 6.4

Early diagnosis of cancer can have an impact on the prognosis, quality of life and mortality for a patient. Figure 7.5 shows the referral to assessment 2-week wait target.

Figure 7.5

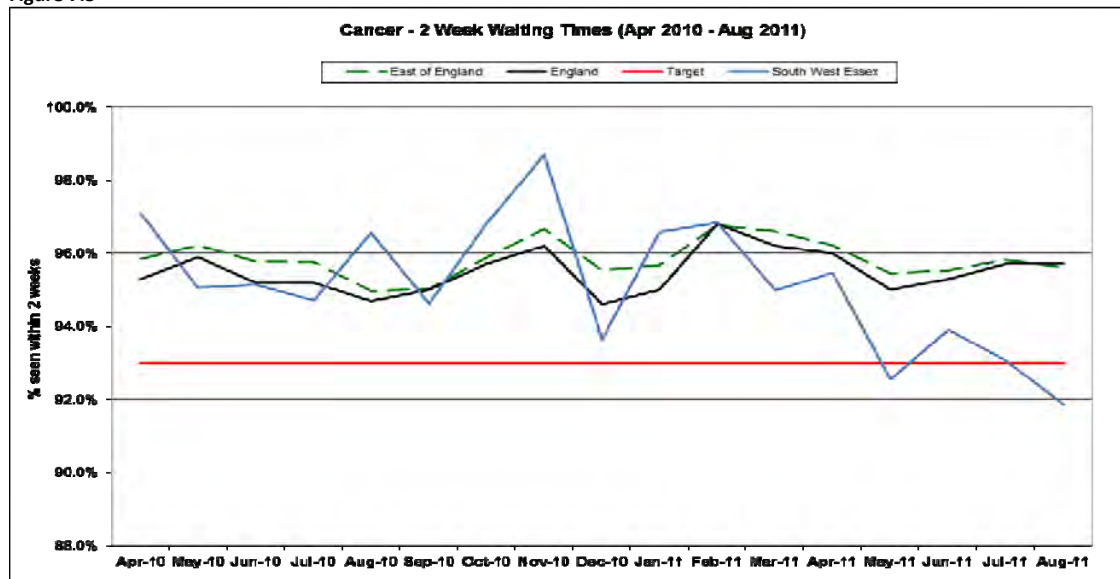
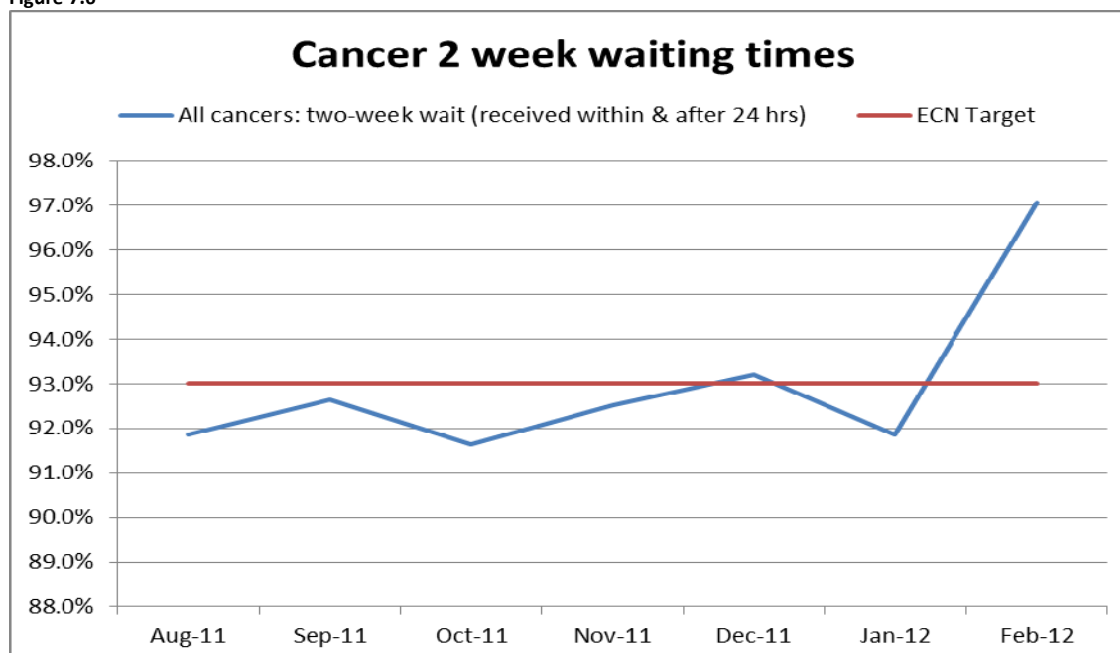


Figure 7.5 and 7.6 indicate an overall decline in the percentage of patients seen within two weeks of their referral and waits below the 93% target in May 2011 and from August 2011 to January 2012.

Figure 7.6



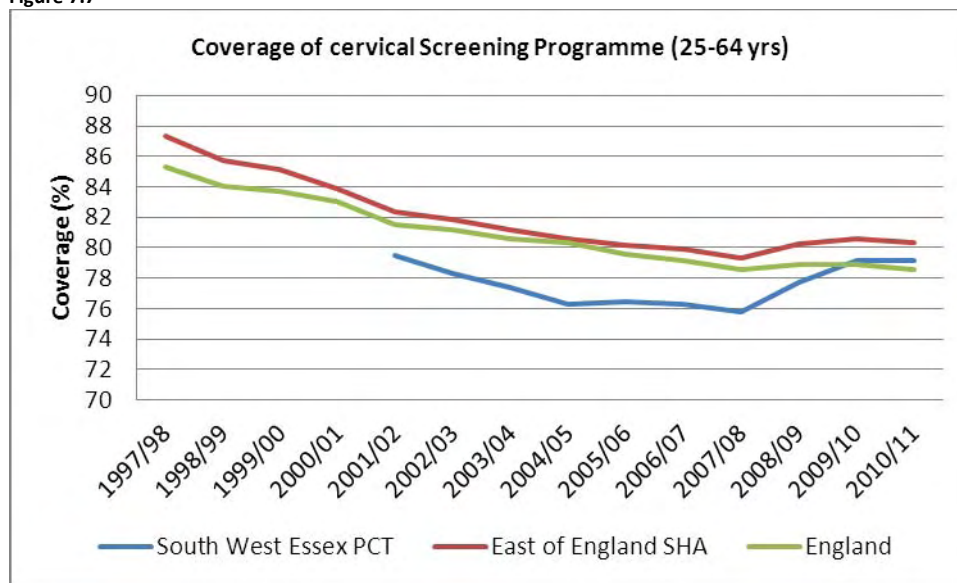
## **Cancer Screening**

We currently offer screening for three types of cancer, Cervical, Breast and Bowel. It is known that early detection of most Cancers greatly improves prognosis. This section looks at screening coverage, incidence, and mortality for these cancers.

### **Cervical Cancer Screening**

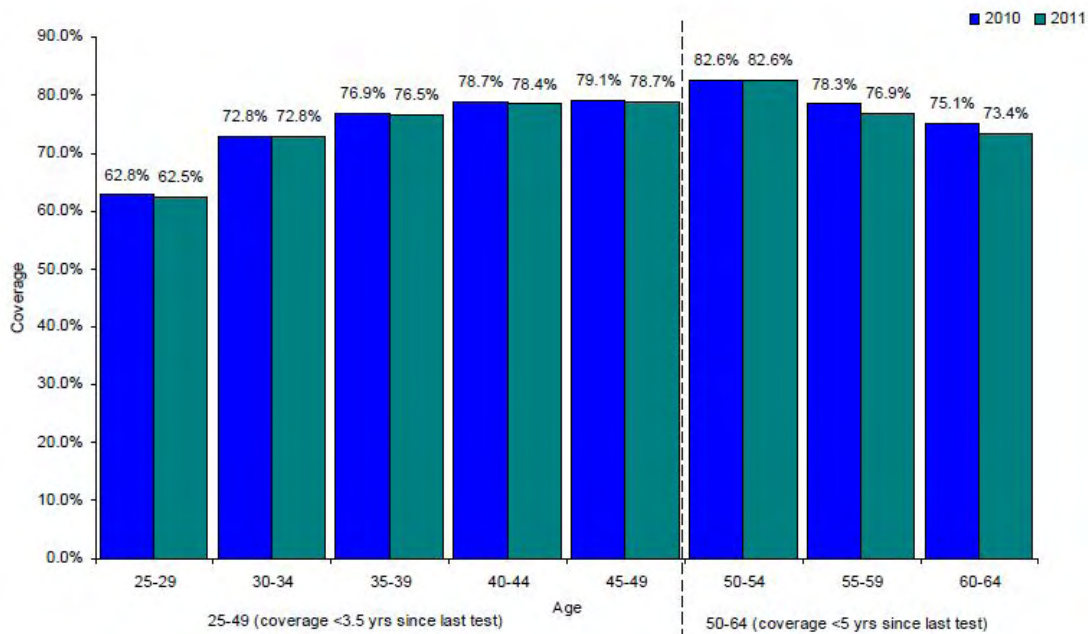
Nationally screening for cervical cancer coverage has been showing a downward trend for some years. This trend was reversed in 2010 (Jade Goodey effect) but may or may not continue in this direction in the future. These trends are also reflected in local figures. Local coverage is generally lower than national levels. [Figure 7.7]

Figure 7.7



Nationally the coverage has fallen most in the younger age groups and is currently only at 62.5 % in 25-19 year olds [figure 7.8]

Figure 7.8



A study published in 2011 by the National Cancer Intelligence Network in collaboration with the NHS Cervical Screening Programme, explores the link between an increase in cervical cancer incidence in younger women and a steady fall in the screening coverage (the percentage of eligible women regularly screened) in younger age groups. Findings were:

Jason Poole, Head of Cancer Analysis at Trent Cancer Registry, summarises the key findings: “There has been an increase in the incidence of cervical cancer in women aged under 35 since the late 1990s. Over this time there has also been a steady fall in the coverage in women of this age group.

“Increasing coverage in these age groups will be important to stop this trend. While screening older women leads to a substantial reduction in cervical cancer, screening in women aged 20 – 24 has been shown to have little or no impact on rates of invasive cervical cancer at ages 25 – 29.7 Indeed, the upward trend in incidence rates began from 2000 following several years of decline in coverage.”

Jason concludes: “It is clear that as screening coverage decreases in younger women, incidence of cervical cancer rises. It is important that the recent upward trend in screening coverage continues, so that the number of women who develop cervical cancer can be reduced.” [NHS Cervical Screening Programme Annual Review 2011]

Despite coverage reducing, incidence[figure 7.9] and premature mortality [figure 7.10] from Cervical Cancer are also both reducing, due to the success in early detection rates via the National Cervical Screening Programme and improvements in treatment options. Survival rates [figure 7.11]are also improving.

Figure 7.9

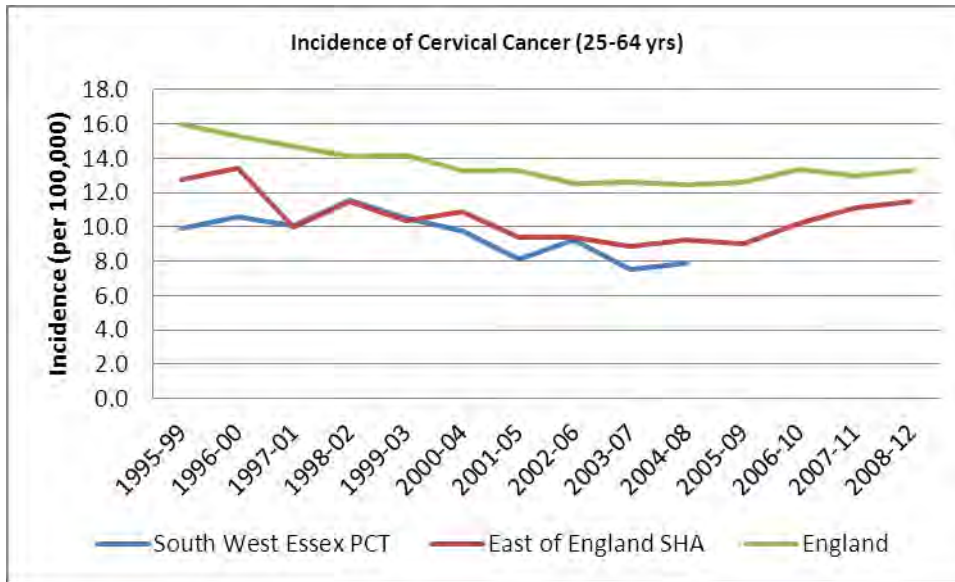


Figure 7.10

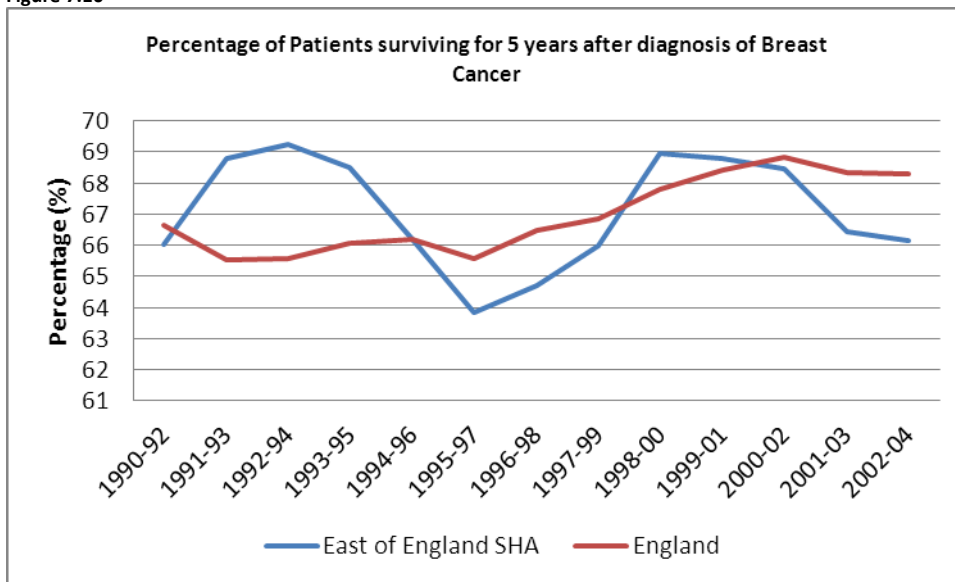
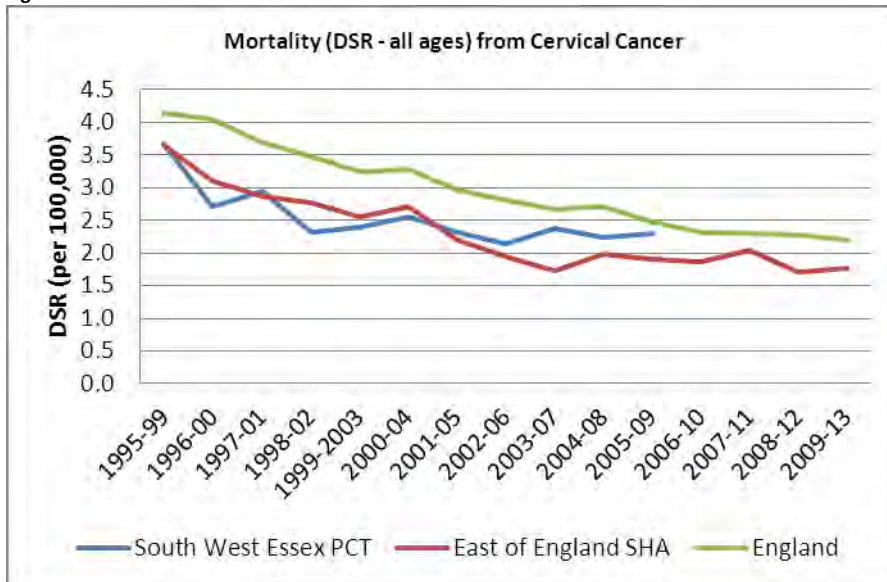




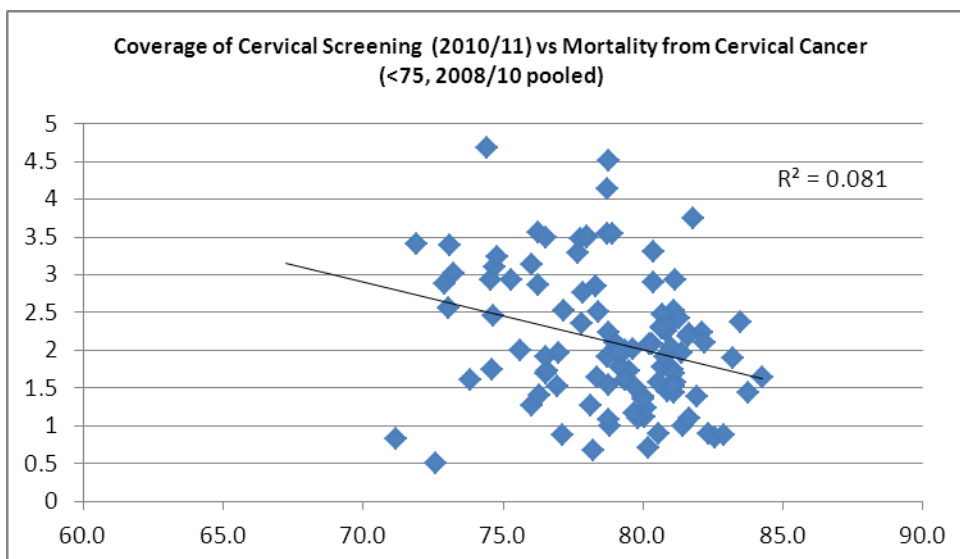
Figure 7.11



The spine chart [figure 7.11] shows that mortality from cervical cancer is in line with the average for England.

Screening coverage only explains a small amount of the variation in mortality rates across PCTs nationally but there is a general pattern that pcts with slightly higher coverage do have lower mortality rates [figure 7.12]. As the programme has been running for such a long time and has good coverage across the board one would not necessarily expect this relationship to be very strong, the variation in cancer mortality would be better explained by the ratio of early to advanced cancers detected through the programme and other factors such as deprivation, attitudes towards health and lifestyle.

Figure 7.12

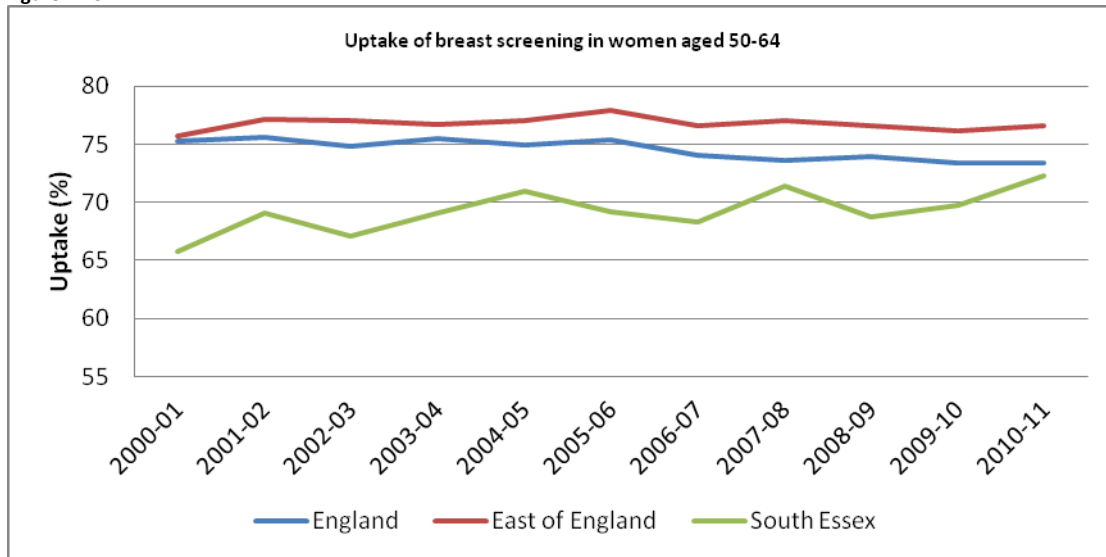




## Breast Cancer Screening

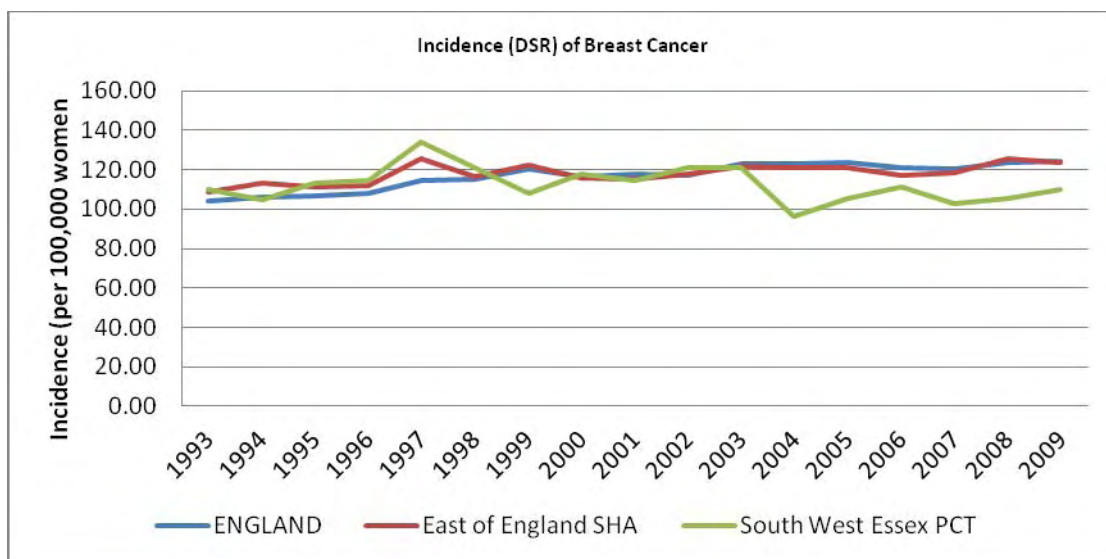
The uptake of Breast Cancer screening in South Essex is below the national and East of England Levels but is showing a slight upward trend. [Figure 7.13]

Figure 7.13



The incidence of breast cancer in South West Essex is in line with that of the East of England and the National. Over recent years the incidence in South West Essex may have reduced slightly but this reduction appears to be as a result of a large reduction in the Brentwood area where rates have since risen again suggesting that this may be the result of random variation. [Figures 7.14 and 7.15]

Figure 7.14



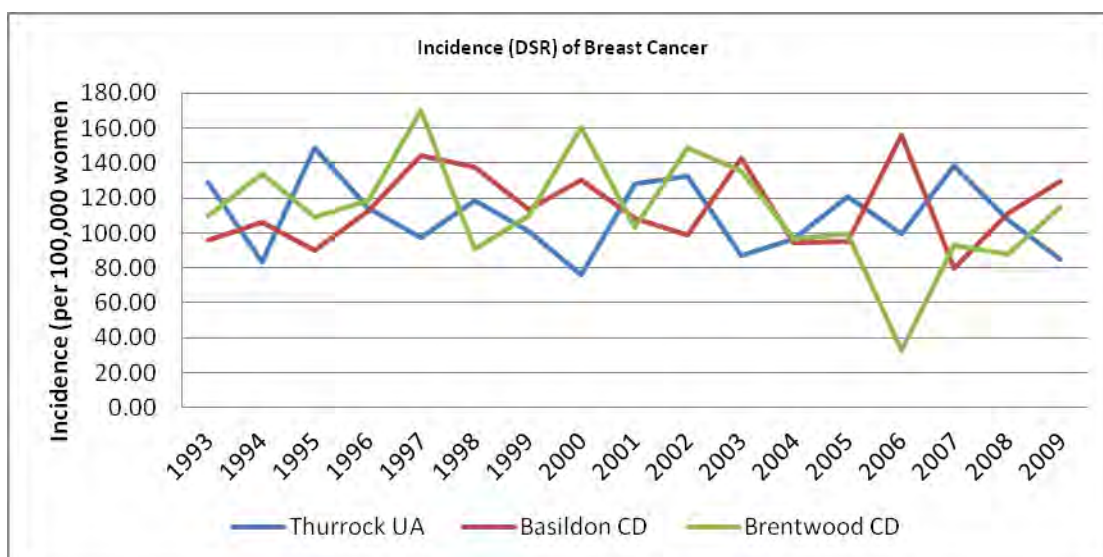


Figure 7.15

Rates of mortality from Breast Cancer have been steadily falling since 1993, both nationally and locally [Figure 7.16], this is a result of a long standing breast cancer screening programme with consistently high coverage, and improvements in treatment.

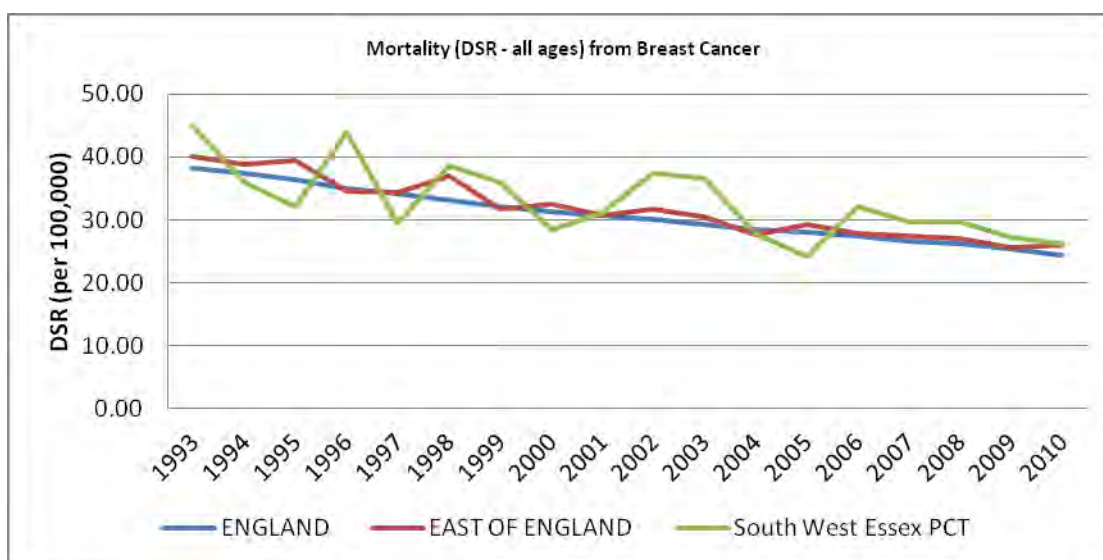
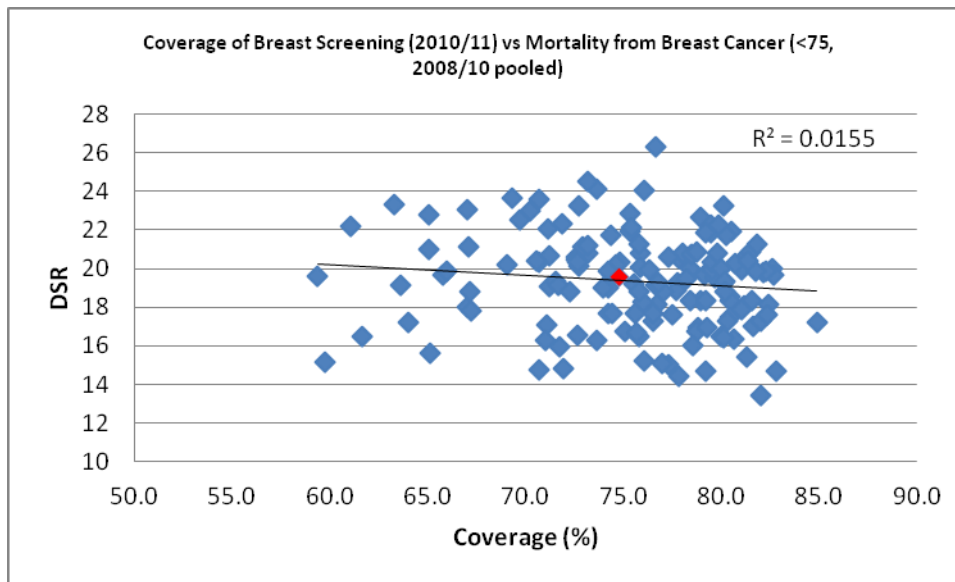


Figure 7.16

Figure 7.16 shows that mortality from breast cancer is in line with the average for England.

Screening coverage only explains a small amount of the variation in mortality rates across PCTs nationally but there is a general pattern that pcts with slightly higher coverage do have lower mortality rates [figure 7.17]. As the programme has been running for such a long time and has good coverage across the board one would not necessarily expect this relationship to be very strong, the variation in cancer mortality would be better explained by the ratio of early to advanced cancers detected through the programme and other factors such as deprivation, attitudes towards health and lifestyle.

Figure 7.17



### **Colorectal (Bowel) Cancer Screening**

The bowel cancer screening programme was rolled out in South West Essex in September 2008 and South East Essex in March 2009. Coverage for 2011/12 for South Essex was 51%. This is the lowest coverage in the East of England (Norfolk was highest at 62%). The programme has not been running for long enough to evaluate the impact it has had on incidence, and mortality.

### **Conclusions**

Spend on cancers and tumours in SWE is slightly below average for both England and ONS comparator PCTs.

According to programme budgeting data South West Essex has the highest spend per head of all PCTs in England. Given the large disparity further investigation is needed in order to determine whether this spend is real or a coding issue. Given the large smoking population in Thurrock it is likely that at least some of this disparity is real spend.

Although the incidence of cancer is comparatively low and mortality levels comparable to England, low numbers of people on palliative care registers may be resulting in a significantly higher number of cancer bed days being used (55.5 per 1000 pop vs. 54.2 per 1000 pop).

A decline in the number of patients being seen within two weeks could be detrimental to patients prognosis and to the areas future survival and mortality rates.

The importance of maintaining a high level of cervical cancer screening and better targeting in 25-29 year old women is clear.

The Bowel Screening Programme is still in its early stages but to have a real impact on patient's prognosis, and in incidence, and mortality rates, coverage needs improving.

## 7.2 Endocrine, Nutritional and Metabolic Problems

This programme covers diseases such as diabetes, endocrine gland disorders, malnutrition and other nutritional disorders. The focus of our analysis will be on diabetes as a key area of concern. This is because 50% of the programmes spend is on diabetes.

Figure 7.18 shows the spend on Endocrine, Nutritional and Metabolic Problems within SW Essex. The spend on these services (6.3m /100k) is above the ONS group average and is in the top quintile for spend nationally.

**Figure 7.18. Programme budgeting spend, Endocrine, Nutritional and Metabolic Problems - compared against all PCTs and ONS cluster**

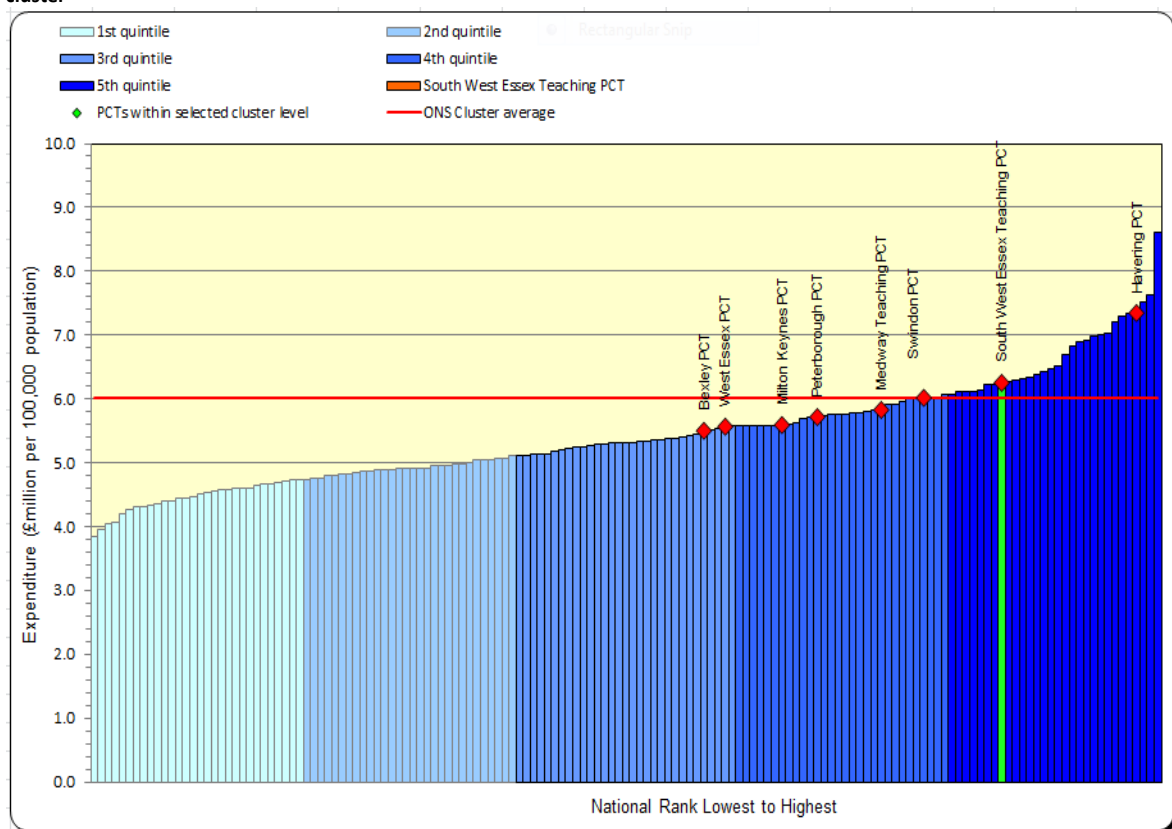


Figure 7.19 shows the prevalence of Endocrine, Nutritional and Metabolic problems for different indicators within SW Essex.

Mortality from diabetes in all ages within South West Essex and in adults under 75 years is in line with the national average.

SW Essex has achievement significantly below the national average in five of the 12 QOF diabetes indicators. Particular areas of concern include ACE inhibitor therapy, neuropathy testing, cholesterol levels, renal function testing and micro-albuminuria testing which is an

important test to detect the onset of kidney disease. SW Essex has achievement significantly above the national average in four of the QOF indicators including blood pressure, retinal screening, controlled blood glucose levels (7 or less) and blood glucose levels (8 or less). There is no significant difference with the England average in the remaining three QOF diabetes indicators.

SW Essex has achievement significantly below the national average in diabetes emergency admissions per 100 on the disease register. SW Essex is performing significantly better in the number of bariatric procedures compared to the national average. SW Essex is not significantly different in the remaining Secondary Care indicators.

Figure 7.19 Spine chart showing the prevalence of Endocrine, Nutritional and Metabolic problems for different risk factors

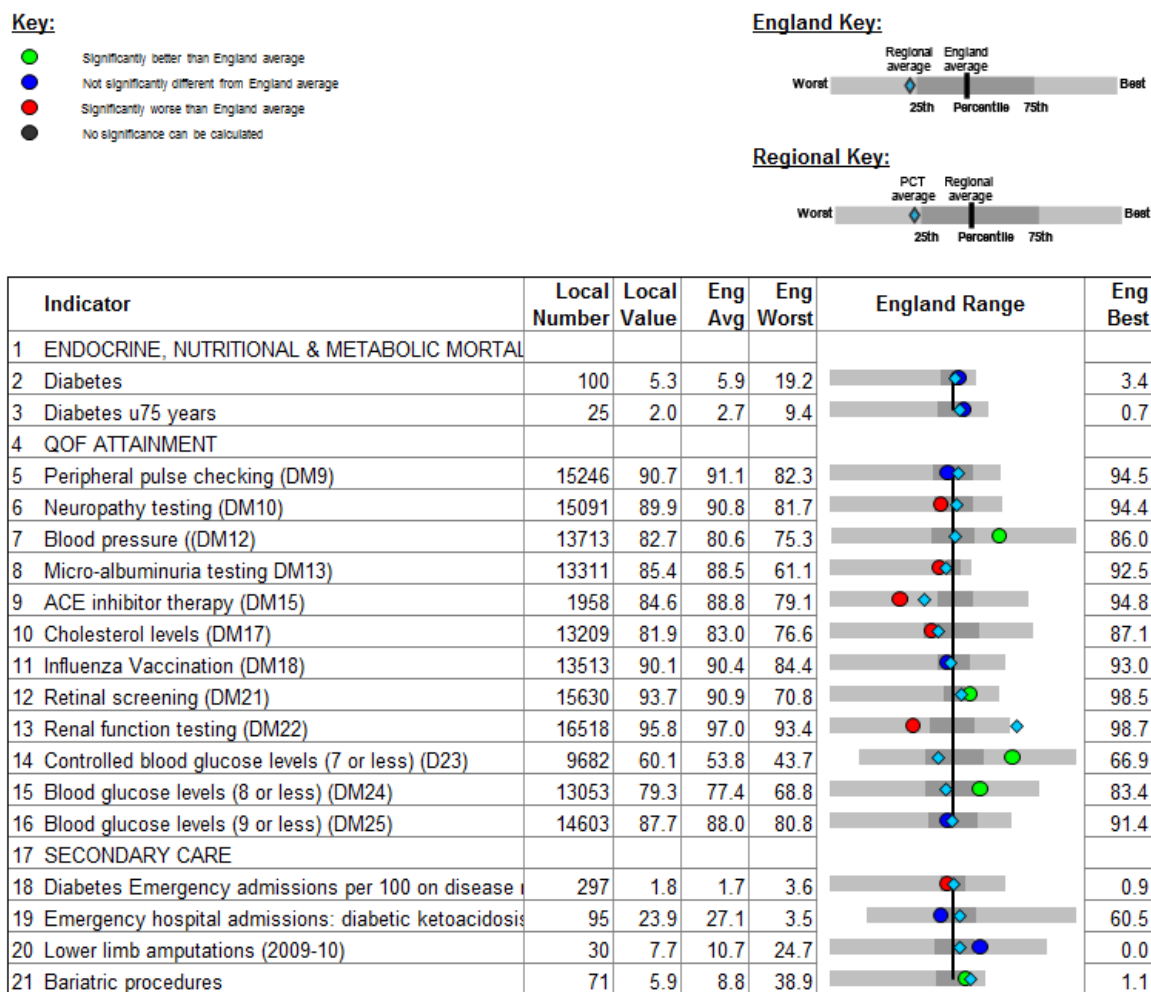


Figure 7.20 shows lower limb amputations in diabetic patients for all PCTs in England. The rate of lower limb amputations in diabetic patients within SW Essex (7.7) is not significantly different to the national average (10.7).

Figure 7.20. Lower Limb Amputations by PCT

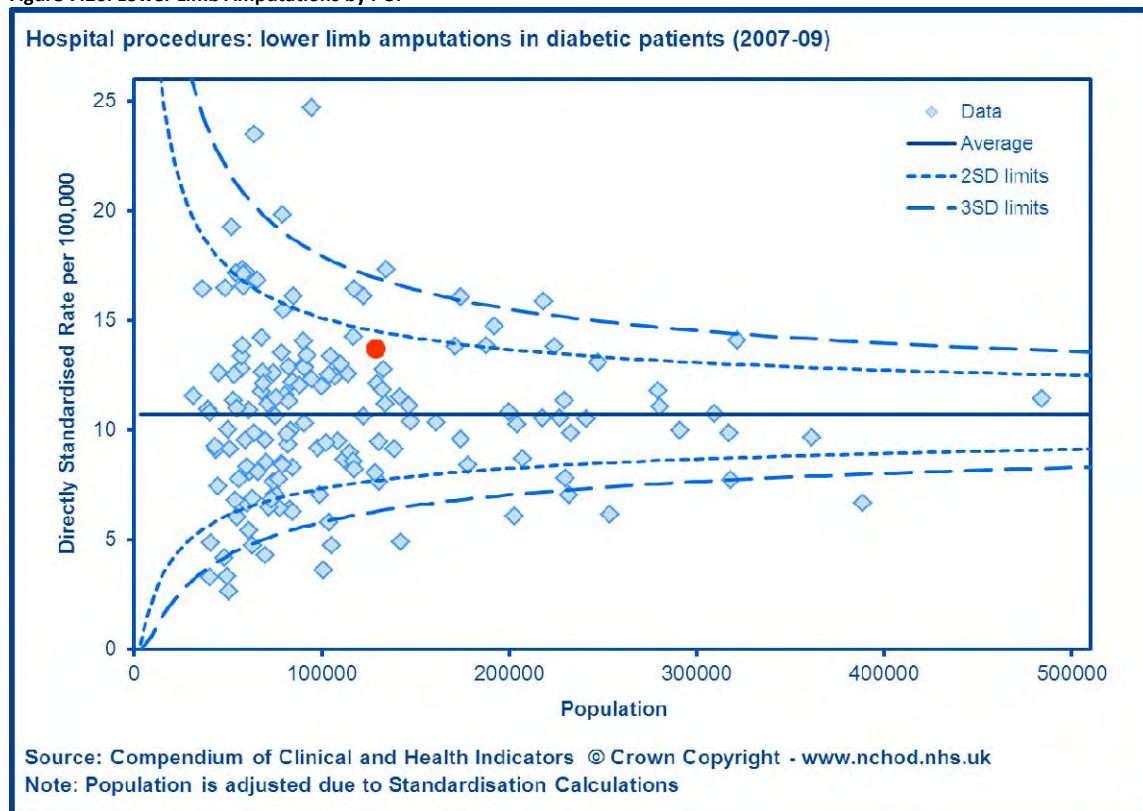


Figure 7.21 shows the percentage of people with diabetes receiving nine key care processes by PCT. SW Essex falls within the bottom of quintile 3 indicating the PCT is ranked mid-range out of all PCTs nationally. More than 50% of known diabetic patients are still not receiving all nine of the key care processes for diabetes care as recommended by NICE; the nine crucial tests at an annual review of diabetes management include measurements of weight, blood pressure, smoking status, HbA1c, urinary albumin, serum creatinine, cholesterol, and tests to assess whether the eyes and feet have been damaged by diabetes.

These tests are essential to ensure that diabetes is controlled. If left unchecked, diabetes can lead to blindness, kidney failure and increase the risk of developing cardiovascular problems such as heart attacks and stroke. The cost savings linked to controlling diabetes are huge.



Figure 7.21. Percentage of people with diabetes receiving 9 key care processes by PCT

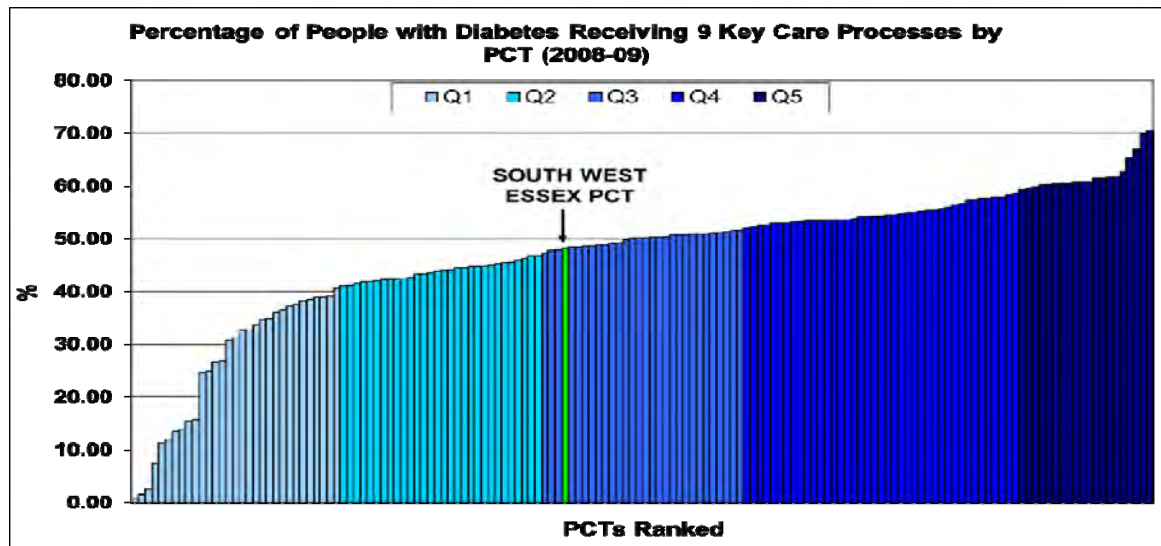


Figure 7.22a shows observed versus expected diabetic prevalence by PCTs and for Basildon, Brentwood and Thurrock. Figure 7.22b shows observed versus expected diabetic prevalence by all practices in SW Essex. In terms of population diabetes ascertainment, it is estimated that the majority of PCTs in England and practices in SW Essex have less diabetes patients than expected. SW Essex and Brentwood have significantly less diabetes patients than expected. Thurrock and Basildon have significantly more diabetes patients than expected. It is important that every opportunity is taken in primary care to improve early identification of diabetics to ensure good care management and better patient outcomes.

Figure 7.22a. Observed vs. Expected prevalence for diabetes for all PCTs in England and LA

- Thurrock
- Brentwood
- Basildon
- SWE PCT

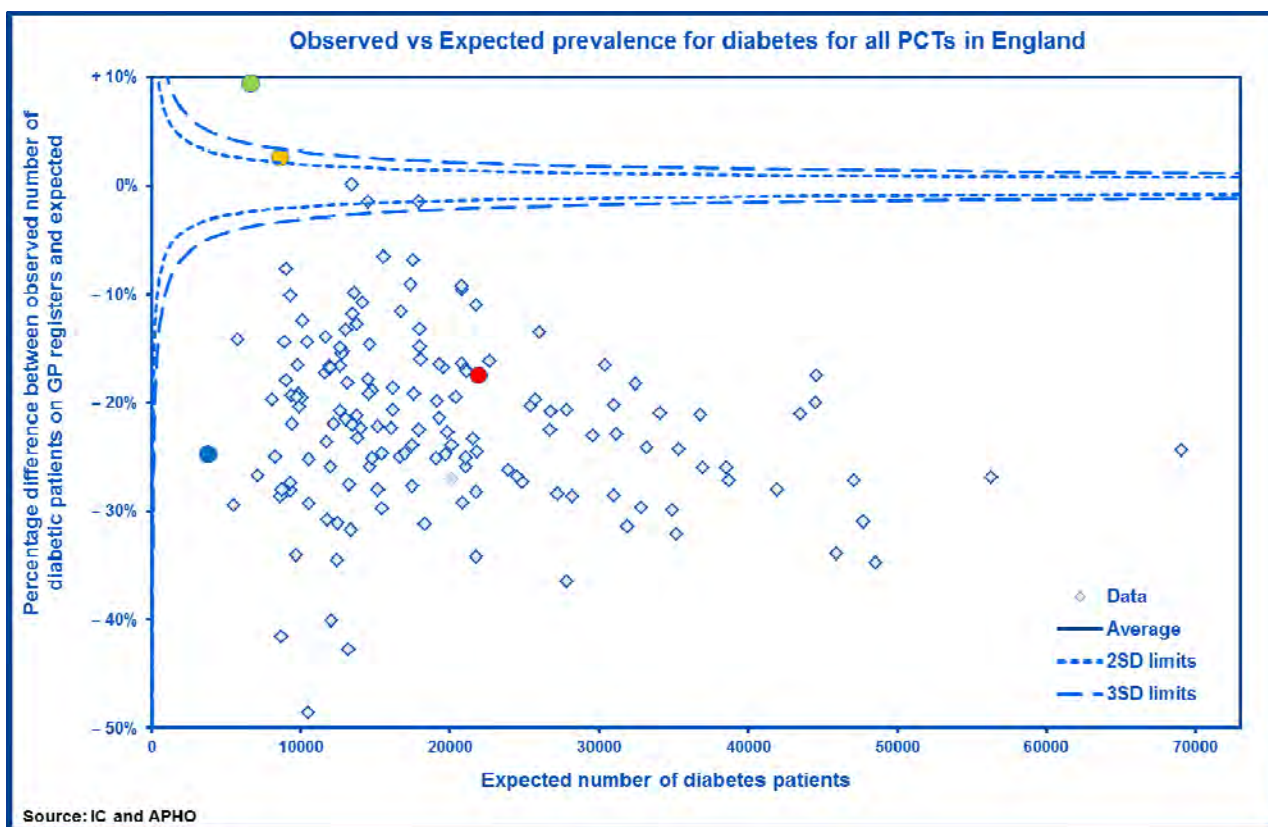
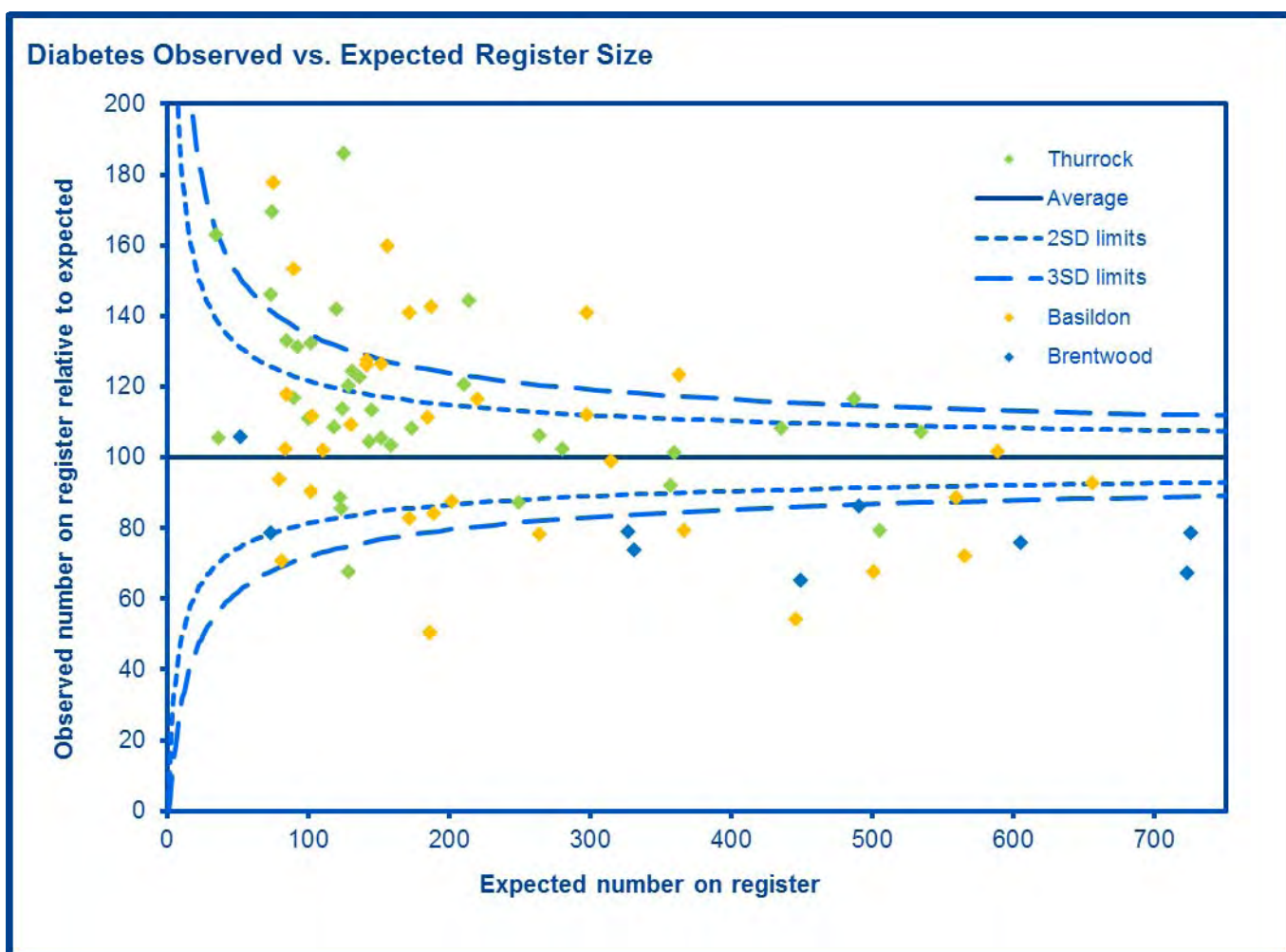


Figure 7.22b. Observed vs. Expected prevalence for diabetes for all practices in SW Essex





Source: 2009-10 QOF Register & ERPHO Modelled Estimates

Figure 7.23 shows mortality from diabetes in people aged less than 75 years for all PCTs in England. There is no significant difference in mortality rates from diabetes in people aged less than 75 years between SW Essex and the national average.

Figure 7.23. DSR from diabetes <75 funnel plot

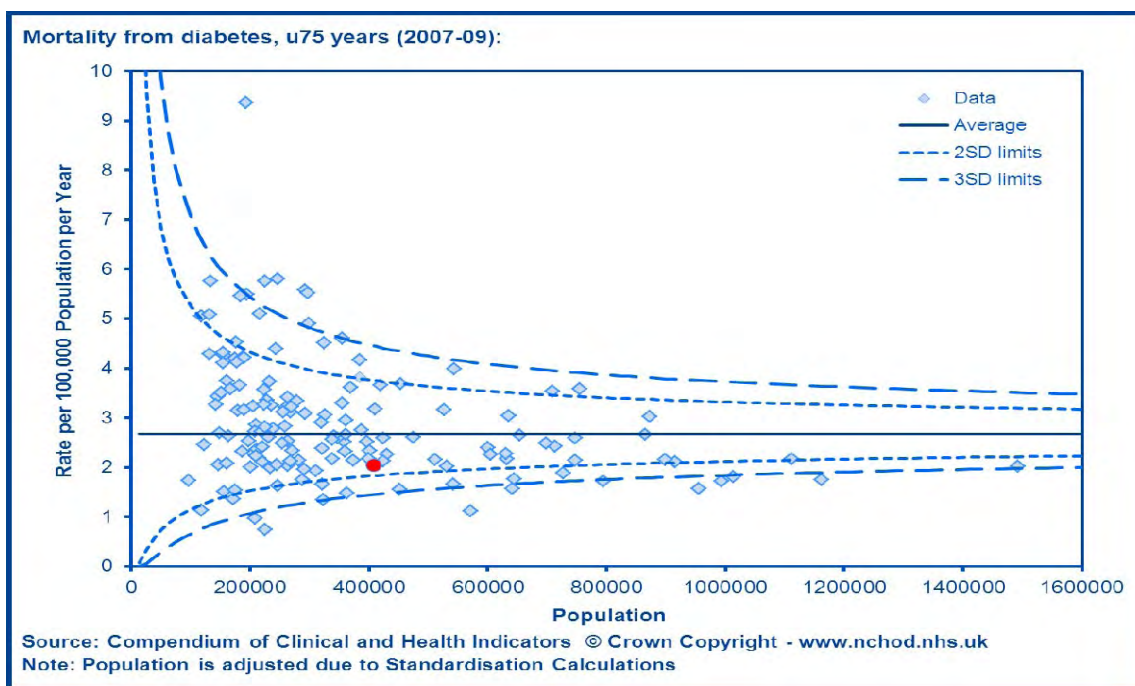


Figure 7.24 shows the rate of emergency hospital admissions for diabetic ketoacidosis and coma for all PCTs in England as well as the England and East of England average. Emergency hospital admissions for diabetic ketoacidosis and coma are lower in SW Essex (23.9) than the England and East of England average.

Figure 7.24. Emergency Hospital Admissions for Diabetic Ketoacidosis and coma

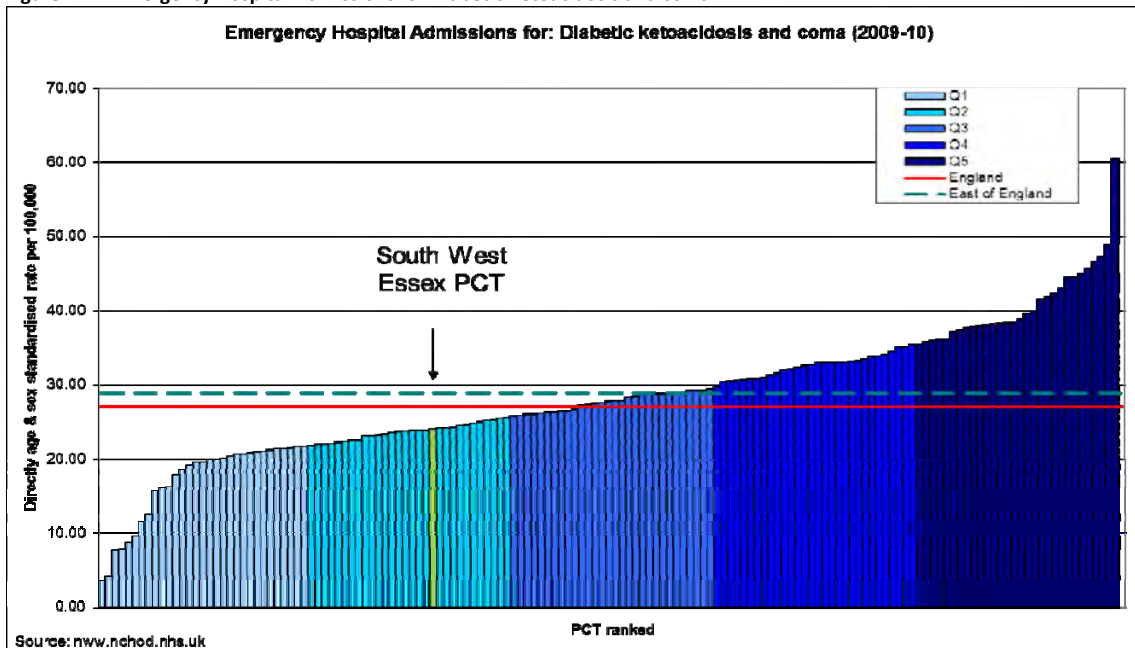


Figure 7.25 shows micro-albuminuria testing in patients with diabetes for all PCTs in England. SW Essex (85.4%) has significantly lower achievement compared to the national average (88.5%). It is important that diabetics are tested for micro-albuminuria to detect the onset of

kidney disease. It is important to detect the onset of kidney disease for the health of the patient but also due to the associated costs for the NHS.

Figure 7.25. Micro-albuminuria testing funnel plot

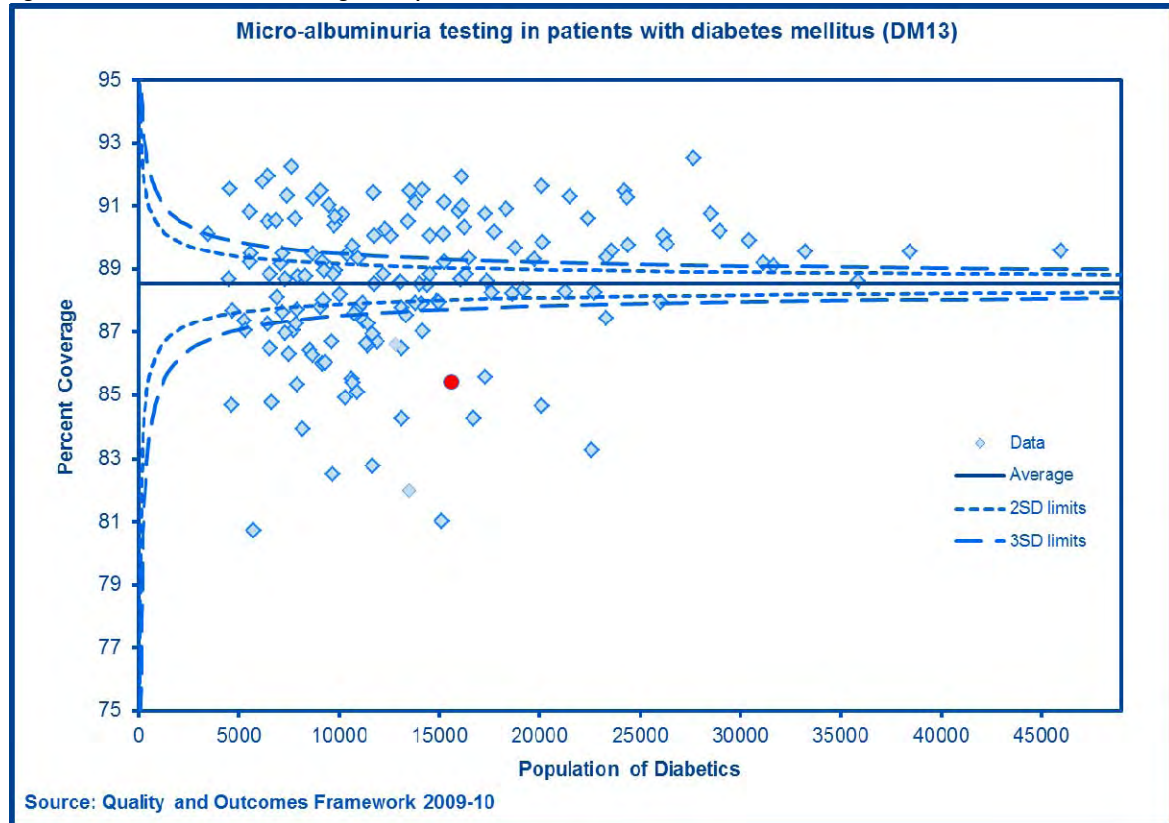


Figure 7.26 shows ACE inhibitor therapy in patients with diabetes for all PCTs in England. SW Essex (84.6%) has significantly lower achievement compared to the national average (88.8%) and is one of the worst performing PCTs nationally. ACE inhibitors can improve the function of a failing heart and the progression of kidney disease. It is important therefore that SW Essex improves performance in this area for health and cost benefits.

Figure 7.26. ACE Inhibitor therapy for diabetes funnel plot

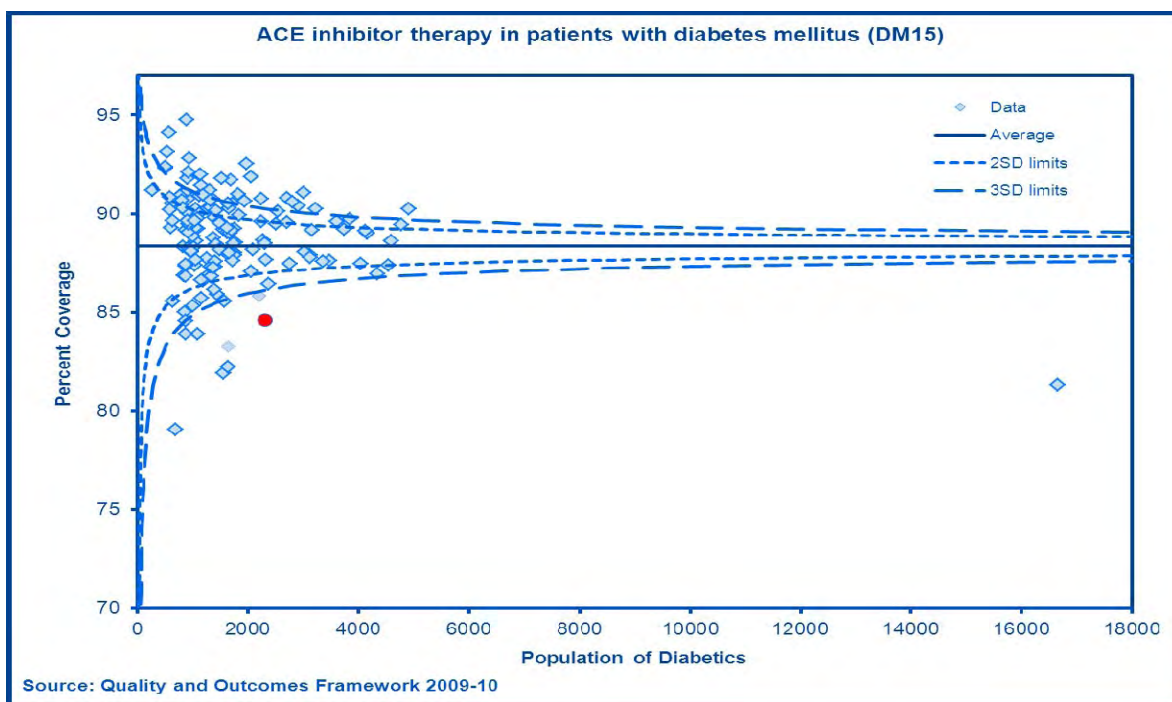


Figure 7.27 shows cholesterol levels which are 5mmol or less in patients with diabetes in all PCTs in England. SW Essex is in line with the national average showing cholesterol is being managed well within diabetic patients.

Figure 7.27: Cholesterol level  $\leq 5$ mmol funnel plot

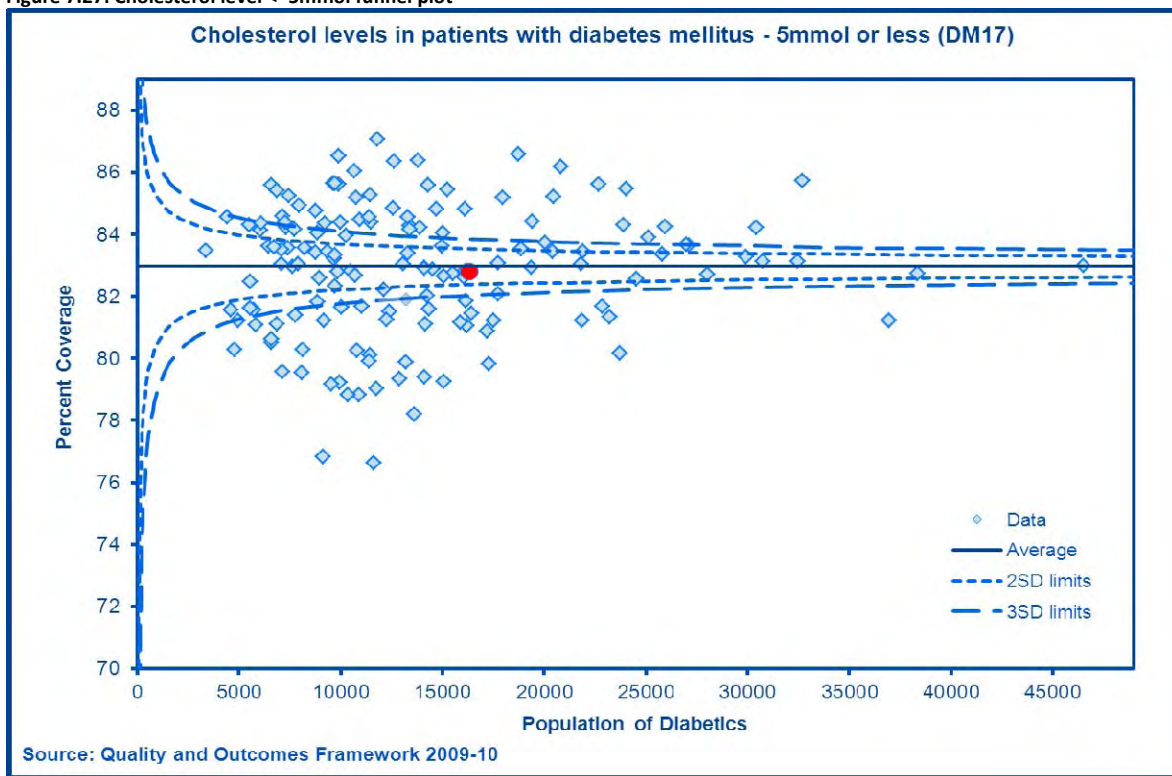
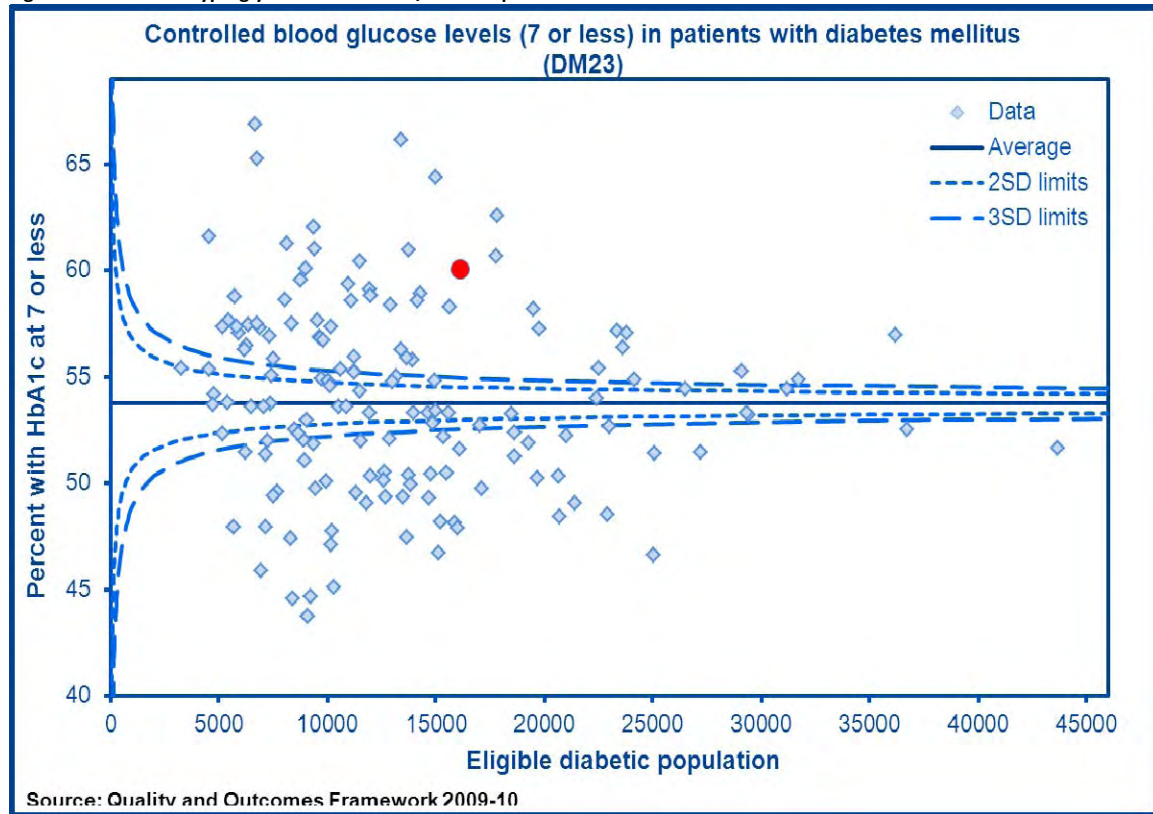


Figure 7.28 shows controlled blood glucose levels in patients with diabetes in all PCTs in England. SW Essex is above the 3SD upper limit indicating that SW Essex has significantly more



diabetes patients with a blood glucose level of 7 or less than the national average. Controlled blood glucose within diabetic patients is being managed very well within SW Essex compared to all PCTs in England. However, SW Essex is still only achieving 60% indicating further improvements need to take place.

Figure 7.28: Control hyperglycaemia  $\leq 7\text{mmol/L}$  funnel plot



### Summary / Conclusion

The spend on Endocrine, Nutritional and Metabolic problems within SW Essex is above the ONS group average and is in the top quintile for spend nationally. Despite this high spend SW Essex is performing at an average standard compared to all PCTs in England.

SW Essex has achievement significantly below the national average in five of the 12 QOF diabetes indicators. Particular areas of concern include ACE inhibitor therapy and micro-albuminuria testing where SW Essex is one of the worst performing PCTs nationally. SW Essex has achievement significantly above the national average in four of the QOF indicators with no significant difference with the England average in the remaining three indicators. More than 50% of diabetes patients in South West Essex are not receiving all 9 of the key care processes for Diabetes care as outlined by NICE; the complications associated with not keeping diabetes under control can have a huge financial impact.

Interestingly SW Essex (-17%) and Brentwood (-25%) have significantly less diabetes patients than expected. Thurrock (+9%) and Basildon (+3%) have significantly more diabetes patients than expected.

Given that detection of cases is lower than expected, and there is poor performance on some of the disease management indicators. One might expect that secondary care use, and perhaps mortality, might be high, however, this is not the case:

In terms of Secondary Care indicators SW Essex has achievement significantly below the national average in diabetes emergency admissions per 100 on the disease register. SW Essex is performing significantly better in the number of bariatric procedures compared to the national average although there is no significant difference in the remaining Secondary Care indicators.

Rates of mortality (<75) from diabetes are statistically in line with the England average (slightly lower).

One explanation of this disparity could be that patients are being diagnosed at a later stage of their diabetes and so being managed (well) in outpatients departments. Further investigation would need to be had in order to refute or accept this hypothesis.

### 7.3 Mental Disorders

The mental disorders programme covers all mental and behavioural disorders including neurosis and psychosis. It also covers areas such as drug and alcohol misuse, child psychiatry and mental health in older age (including Alzheimer's disease and dementia).

Figure 7.29: Programme Budgeting Spend on Metal Disorders

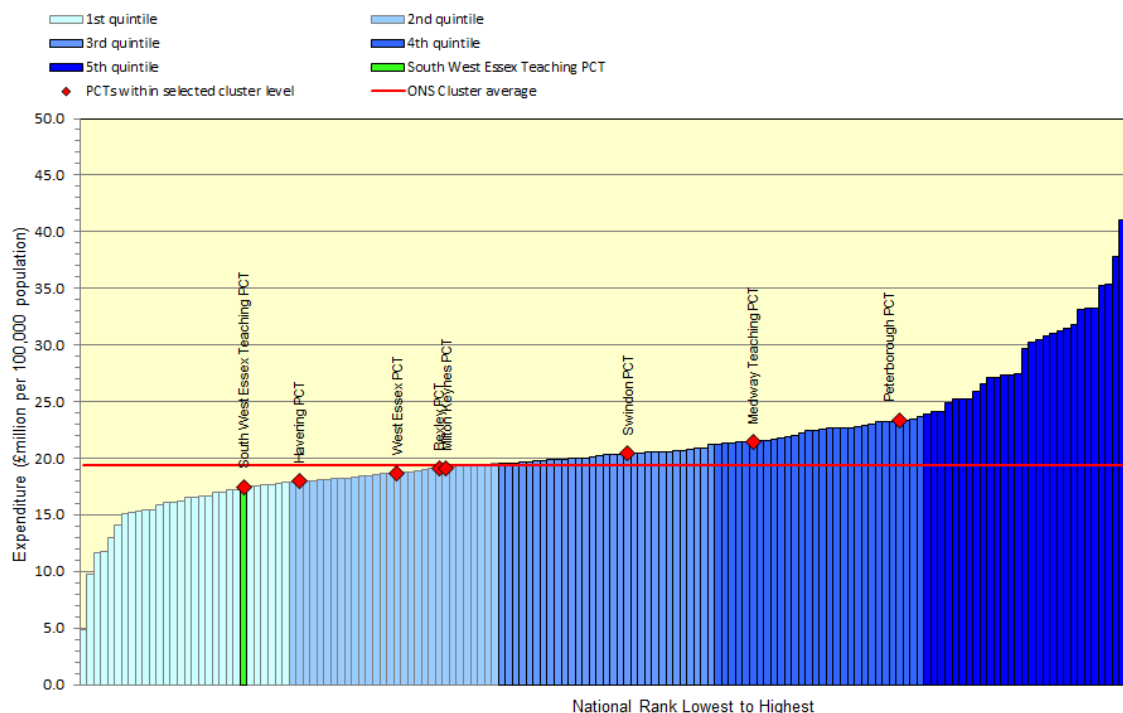


Figure 7.29 shows Programme Budgeting Spend per 100,000 population on Mental Disorders. South West Essex PCT is in the lowest ranking quintile of spend across PCTs in England for this programme and has a rate of spend less than the cluster average.

Figure 7.30 shows some of the key wider determinants of health in Thurrock that can impact on the populations mental health. The percentage of 16-18 year olds who are not in education, training or employment (NEETS) are significantly worse than the England average. This cohort of the population are more likely to have poor health and die prematurely. They are also more likely to have lifestyle factors that impact on health (e.g. smoking and alcohol consumption) and suffer from mental health problems. Thurrock is significantly better than the England average for episodes of violent crime, working aged adults who are unemployed and alcohol attributable admissions which are associated with poor mental health.

Figure 7.30

**Key:**

- Significantly better than England average
- Not significantly different from England average
- Significantly worse than England average
- No significance can be calculated



Indicator	Local Value	Eng Avg	Eng Worst	England Range	Eng Best
1 <b>WIDER DETERMINANTS OF HEALTH</b>					
2 Percentage of 16-18 year olds not in employment, education or training	6.7	6.0	11.4		2.7
3 Episodes of violent crime per 1,000 population	13.7	14.8	35.1		6.4
4 Working age adults who are unemployed, rate per 1,000 population	58.4	64.2	120.4		32.6
5 Directly standardised rate for hospital admissions for alcohol attributable conditions, rate per 1000	13.1	17.4	31.1		8.5
6 Number of people (aged 18-75) in drug treatment, rate per 1,000 population	3.8	5.5	16.3		16.3

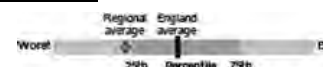
Figure 7.31 shows key indicators for Mental Disorders at PCT level. SW Essex performs well across the majority of indicators compared to other PCTs. Directly Standardised Mortality Rates from suicide in the under 75s and all suicides is significantly lower than the England average. Quality Outcomes Framework (QOF) attainment for mental health care plans is above both the regional and national average. However, QOF performance in patients with dementia and mental health admissions is significantly below the regional and national average.

Figure 7.31: Key Indicators for Mental Disorders

**Key:**

- Significantly better than England average
- Not significantly different from England average
- Significantly worse than England average
- No significance can be calculated

**England Key:**



Indicator	Local Number	Local Value	Eng Avg	Eng Worst	England Range	Eng Best
<b>1 MENTAL HEALTH MORTALITY</b>						
2 Mortality from suicide	46	3.8	5.8	11.2		1.6
3 Mortality from suicide u75 years	44	3.8	5.7	11.4		1.6
<b>4 QOF ATTAINMENT</b>						
5 Comprehensive care plan for patients on mental health register (MH6)	2269	91.1	88.9	80.8		94.8
6 Care review among patients with dementia (DM2)	1177	75.6	79.3	71.9		87.3
<b>7 SECONDARY CARE</b>						
8 Mental Health Admissions (2009-10)	1007	2.4	1.9	4.6		0.0
9 Emergency admissions for neuroses	39	9.7	16.2	64.5		2.2
10 Emergency admissions for schizophrenia	50	12.4	20.4	110.5		0.5

Dementia is a main cause of disability in later life. The prevalence of Dementia increases with age and is estimated to be approximately at 20 per cent at 80 years of age. In a third of cases, Dementia is associated with other psychiatric symptoms such as depressive disorder, adjustment disorder, generalised anxiety disorder and alcohol related problems.

South West Essex is ranked in the fourth worst quintile for Dementia diagnosis across all PCTs in England. Table 7.32 shows an estimated 38.6% of those with Dementia are diagnosed and a potential 2873 people in South West Essex are undiagnosed. However, Dementia diagnosis has increased by 2.1% between 2010 and 2011 putting South West Essex in the third quintile of PCTS ranked by most improved diagnosis rates.

**Table 7.32: Estimated Dementia diagnosis – Mapping the Dementia Gap 2011, Alzheimer's Society**

	No. of people on QOF Dementia register 2011	Estimated no. of people with Dementia (Diagnosed & Undiagnosed)	Percentage of people with Dementia diagnosed	Number of people without a diagnosis
<b>South West Essex</b>	1805	4678	38.60%	2873

Source: Dementia prevalence rates – Dementia UK, 2007, 2008-based Subnational Population Projections, Office of National Statistics

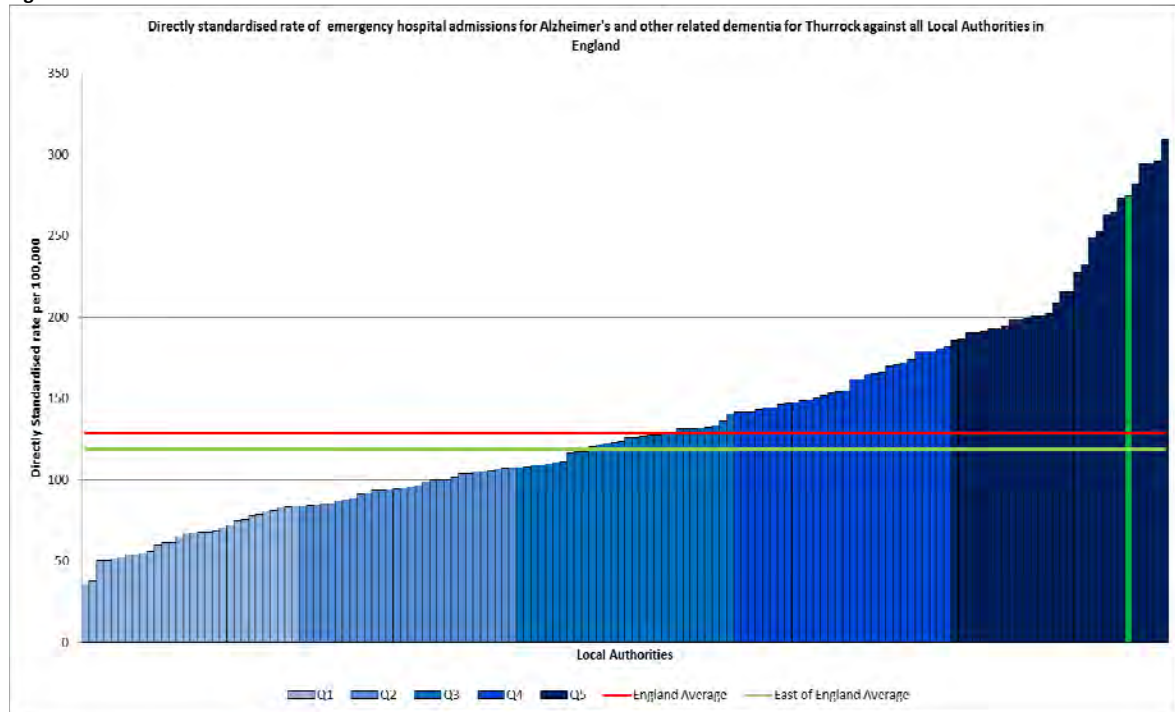
As previously highlighted, Dementia outcomes in respect of QOF performance for patients diagnosed whose care has been reviewed in the preceding 15 months (DEM2) are poor. The impact being that physical and mental health, social care needs and any secondary care communication or arrangements of both patients and their carers are potentially not being met.

Figure 7.33 shows emergency admissions for Alzheimer's and other related Dementia. The Alzheimer's Society estimate Alzheimer's is the most common cause of Dementia, affecting around 465,000 people in the UK. Thurrock is in the highest ranking quintile for emergency hospital admissions relating to Alzheimer's and Dementia.



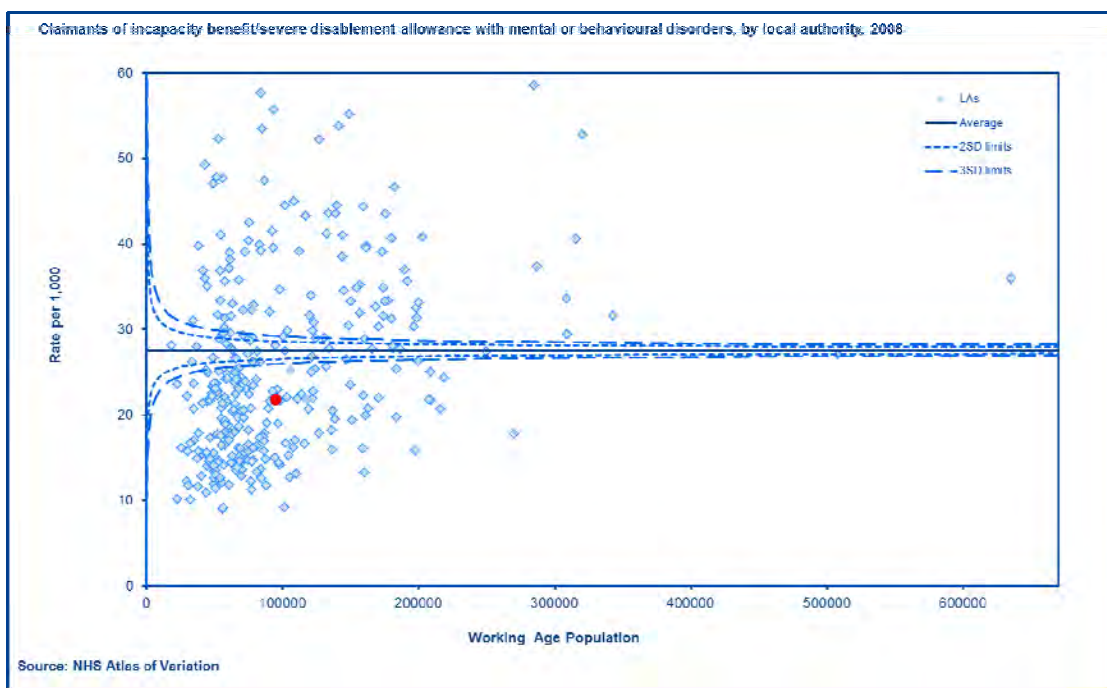
This may reflect the poor QOF attainment for indicator DEM2 and is likely to be the cause of poor performance on the secondary care indicator 'Mental Health Admissions' that is currently significantly worse than the England average.

Figure 7.33



Employment and Support Allowance (Incapacity benefit) can be claimed by working age adults unable to work because of illness. Incapacity Benefit claimants make up the largest group of economically inactive people of working age in Britain and almost 40% are on Incapacity Benefit because of mental illness. Mental illness is the most common reason for claiming health-related benefits and costs the economy between £30 billion and £40 billion through lost production, sick pay, NHS treatment as well as the personal and financial costs that result from being out of work. Figure 7.34 shows claimants of incapacity benefits/severe disablement attributable to mental or behavioural disorders by local authority. Thurrock Unitary Authority has below average incapacity benefit claims in comparison with other local authorities.

Figure 7.34



### Improving Access to Psychological Therapies

The Improving Access to Psychological Therapies (IAPT) programme is designed to support evidence-based psychological therapies, as approved by the National Institute for Health and Clinical Excellence (NICE), for people with depression and anxiety disorders. It was created to offer access to routine first-line services, treatment and where appropriate, medication to people experiencing depression and anxiety disorders from all communities within the local population that traditionally medication would have been the only available treatment. The programme was first targeted at people of working age but in 2010 was opened to adults of all ages.

From 2011, its focus has broadened, following publication of *Talking Therapies: a four-year plan of action*, one of a suite of documents supporting *No health without mental health*, the cross-Government mental health strategy for people of all ages which will see a completed nationwide roll-out of psychological therapy services for adults, initiation of a stand-alone programme for children and young people and development of models of care for people with long-term physical conditions, medically unexplained symptoms and severe mental illness by April 2015.

Expected outcomes of the IAPT programme include:

- Increased health and well-being, with at least 50% of those completing treatment moving to recovery and most experiencing a meaningful improvement in their condition.
- Patient choice and high levels of satisfaction from people using services and their carers.
- Timely access, with people waiting no longer than locally agreed waiting times standards.

- Improved employment, benefit, and social inclusion status including help for people to retain employment, return to work, improve their vocational situation, and participate in the activities of daily living.

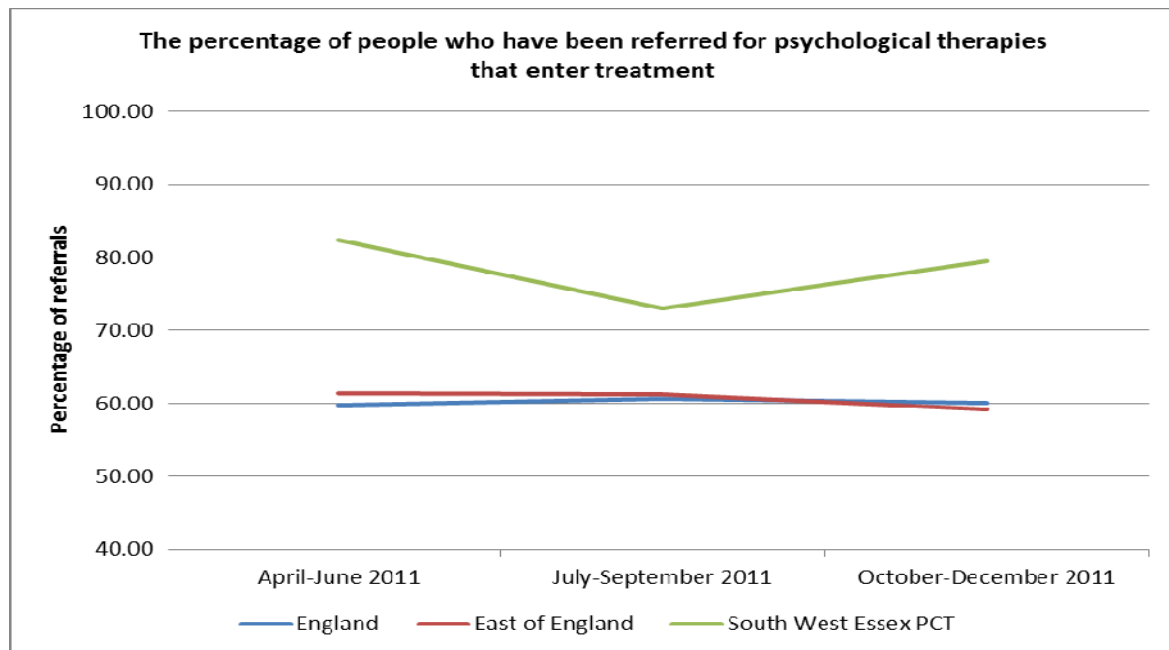
Table 7.35 shows the number of people that have been referred for psychological therapies between April and December 2011 for South West Essex, the East of England region and nationally. The number of referrals for South West Essex has increased each quarter in line with regional and national figures

**Table 7.35: The number of people who have been referred for psychological therapies**

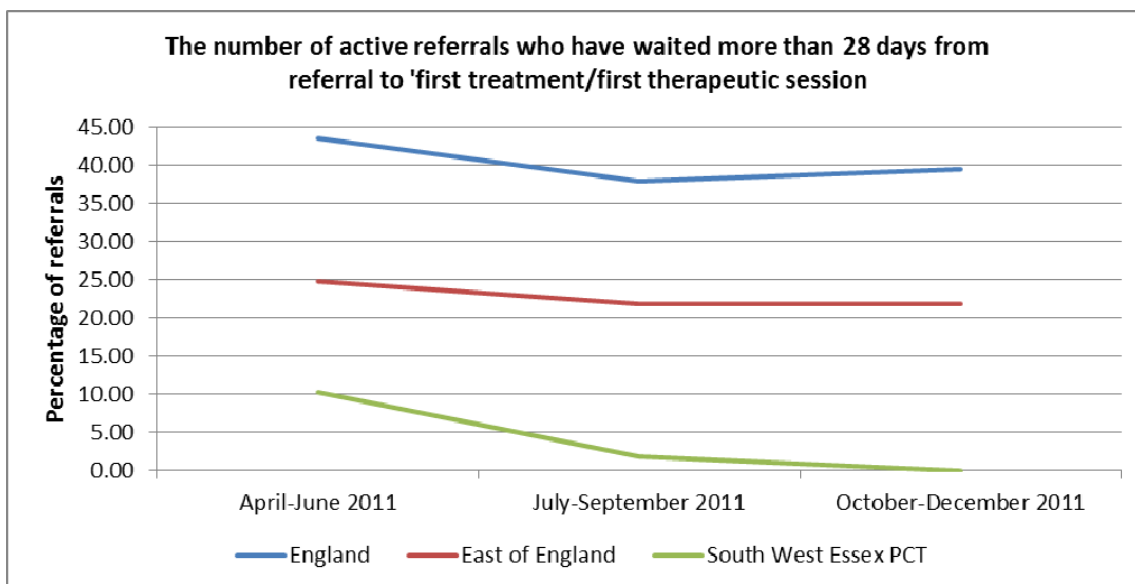
Organisation Name	April-June 2011	July-September 2011	October-December 2011
England	206,918	214,162	218,192
East of England	19,508	20,105	20,628
South West Essex PCT	1,849	1,935	2,011

Figure 7.36 shows that South West Essex has a greater percentage of people that commence treatment following a referral than both the region and nationally. The waiting times from referral to first treatment/first therapeutic session could be impacting on this (Figure 7.47).

**Figure 7.36: Percentage of people referred for psychological therapy that commence treatment**

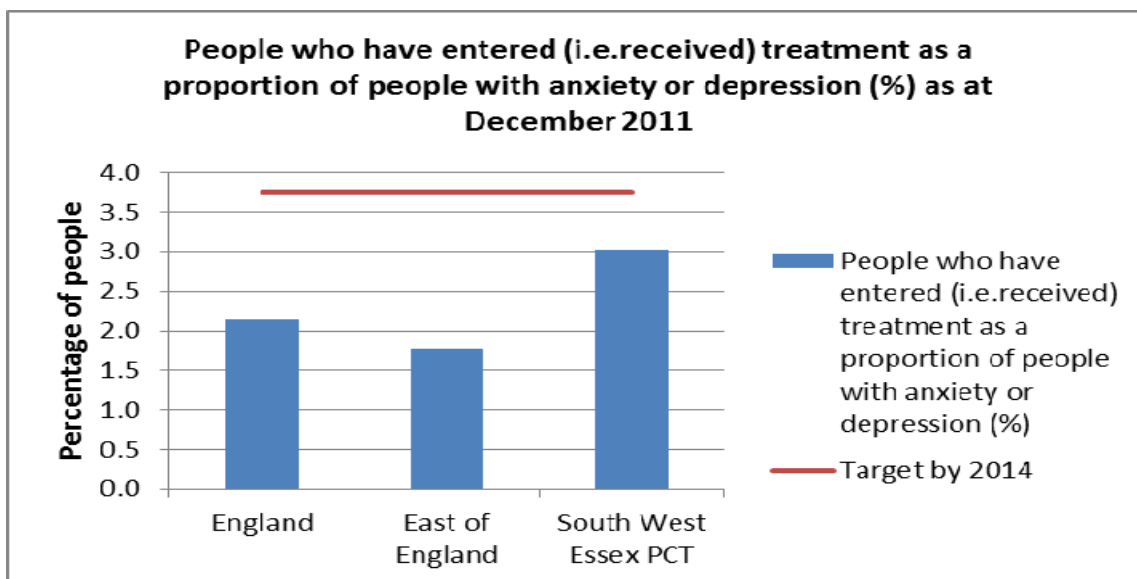


**Figure 7.37: Referral to treatment waiting times**



A key indicator for IAPT is the number of people referred for psychological therapies with depression and anxiety disorders entering treatment and those that move from clinical caseness to recovery. For common mental health conditions treated in IAPT services, it is expected that a minimum of 15% of those in need would willingly enter treatment if available. This is the target set for full roll out in 2014. Figure 7.38 shows as at December 2011 South West Essex is treating 3% of those in need against the 3.75% quarterly target it will be expected to achieve by 2014. This is significantly higher than the achievement for both the region and nationally.

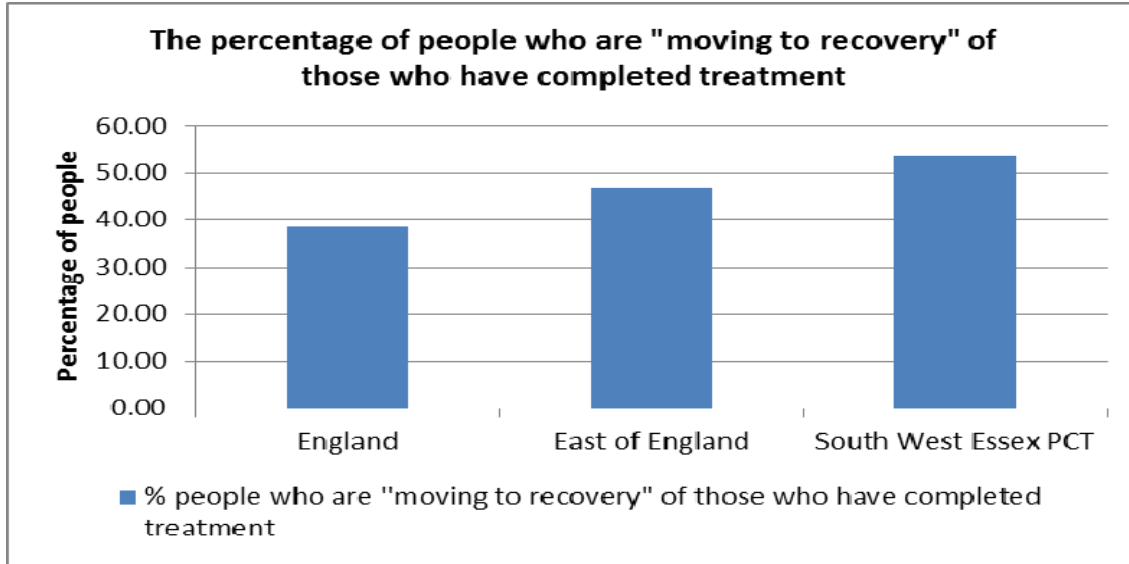
Figure 7.38: People who have entered treatment as a proportion of those with anxiety or depression



Data source: Improving Access to Psychological Therapies (IAPT) Key Performance Indicators (KPIs) Omnibus collection.

Figure 7.39 shows the percentage of people that are moving to recovery after completing treatment through IAPT. South West Essex is achieving a higher recovery rate than both the East of England region and England.

Figure 7.39



Omnibus returns for South West Essex show that 43 people that have completed treatment through IAPT between April and December 2011 have moved off sick pay or ill-health related benefit. This equates to almost 5 people per month. This outcome results in previously mentioned savings to the economy, but more importantly a financial and personal gain to the individuals IAPT has helped.

### Conclusions:

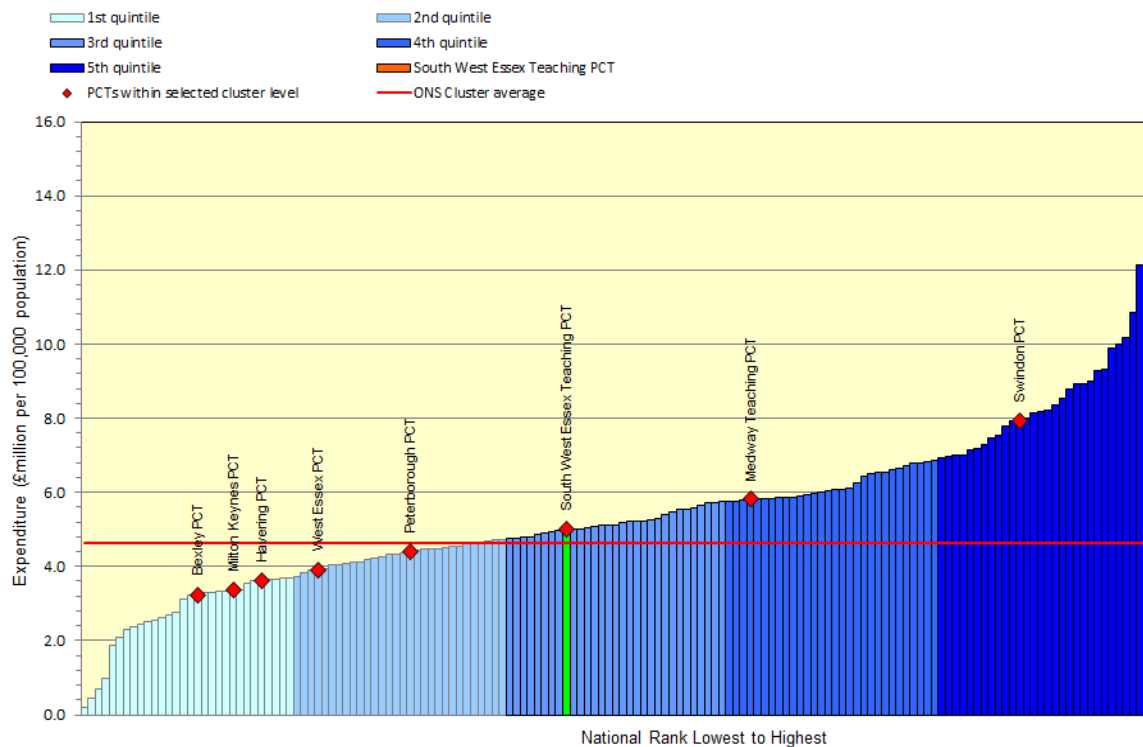
- South West Essex PCT is in the lowest ranking quintile of spend across PCTs in England for Mental Disorders and has a rate of spend less than the cluster average.
- The percentage of 16-18 year olds who are not in education, training or employment (NEETS) are significantly worse than the England average. This cohort of the population are more likely to suffer from mental health problems.
- Thurrock is significantly better than the England average for episodes of violent crime, working aged adults who are unemployed and alcohol attributable admissions which are associated with poor mental health.
- Directly Standardised Mortality Rates from suicide in the under 75s and all suicides is significantly lower than the England average in South West Essex.
- Quality Outcomes Framework (QOF) attainment for mental health care plans is above both the regional and national average. However, QOF performance in patients with dementia and mental health admissions is significantly below the regional and national average.
- South West Essex is ranked in the fourth worst quintile for Dementia diagnosis across all PCTs in England with a potential 2873 undiagnosed. However, South West Essex is in the third quintile of PCTs ranked by most improved diagnosis rates.
- Thurrock is in the highest ranking quintile for emergency hospital admissions relating to Alzheimer's and Dementia. This may reflect the poor QOF attainment for indicator DEM2 and is likely to be the cause of poor performance on the secondary care indicator

- ‘Mental Health Admissions’ that is currently significantly worse than the England average. It warrants further investigation
- Thurrock Unitary Authority has below average incapacity benefit claims in comparison with other local authorities.
- South West Essex PCT has a higher number of people being referred, entering, completing and recovering through the IAPT service than the East of England and England with almost 5 people per month moving off sick pay or ill health related benefits.

## 7.4 Learning Disabilities

Figure 7.40 shows NHS South West Essex spend on learning disabilities. South West Essex has a higher spend than the average for its ONS cluster group. However, spend is average in comparison to all PCTs in England.

Figure 7.40



## 7.5 Neurological Conditions

Figure 7.41 shows Programme Budgeting spend on neurological problems by PCT, with SWE and its ONS cluster PCTs highlighted.

Figure 7.41

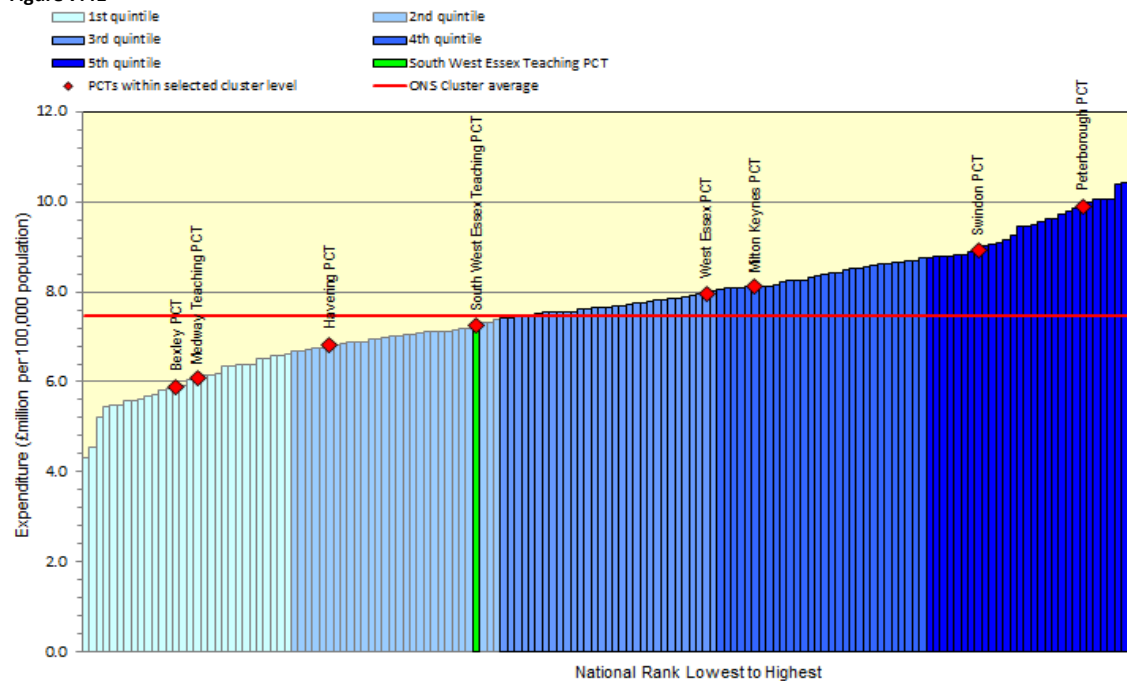
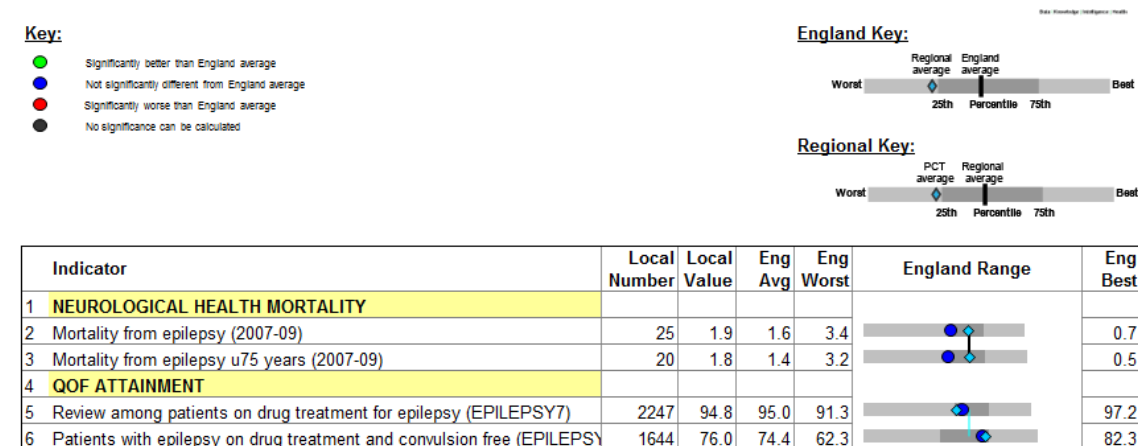


Figure 7.42 shows neurological health mortality and QOF attainment for epilepsy.

Figure 7.42



As figures 7.41 and 7.42 show, SWE PCT's spend on neurological conditions is around average for its ONS cluster group, although in the second quintile nationally. Overall and under 75 mortality from epilepsy is greater than regional and national averages, but not statistically significantly so. There is also no significant difference in QOF attainment between SWE practices and regional and national averages for epilepsy.

Figure 7.43a shows the ratio of observed vs. expected prevalence of epilepsy for all PCTs in England. As figure 7.43a shows, it is estimated that almost 20% of our registered practice

population suffering from epilepsy are unknown to local clinicians. Small numbers of epilepsy patients prevent us from making too many conclusions at a GP practice level, but figure 7.43b does identify some statistical outliers, that is not to ignore the fact that many of the GP practices for which we cannot draw statistical conclusions do have registers which appear to be much lower than expected.

Figure 7.43a

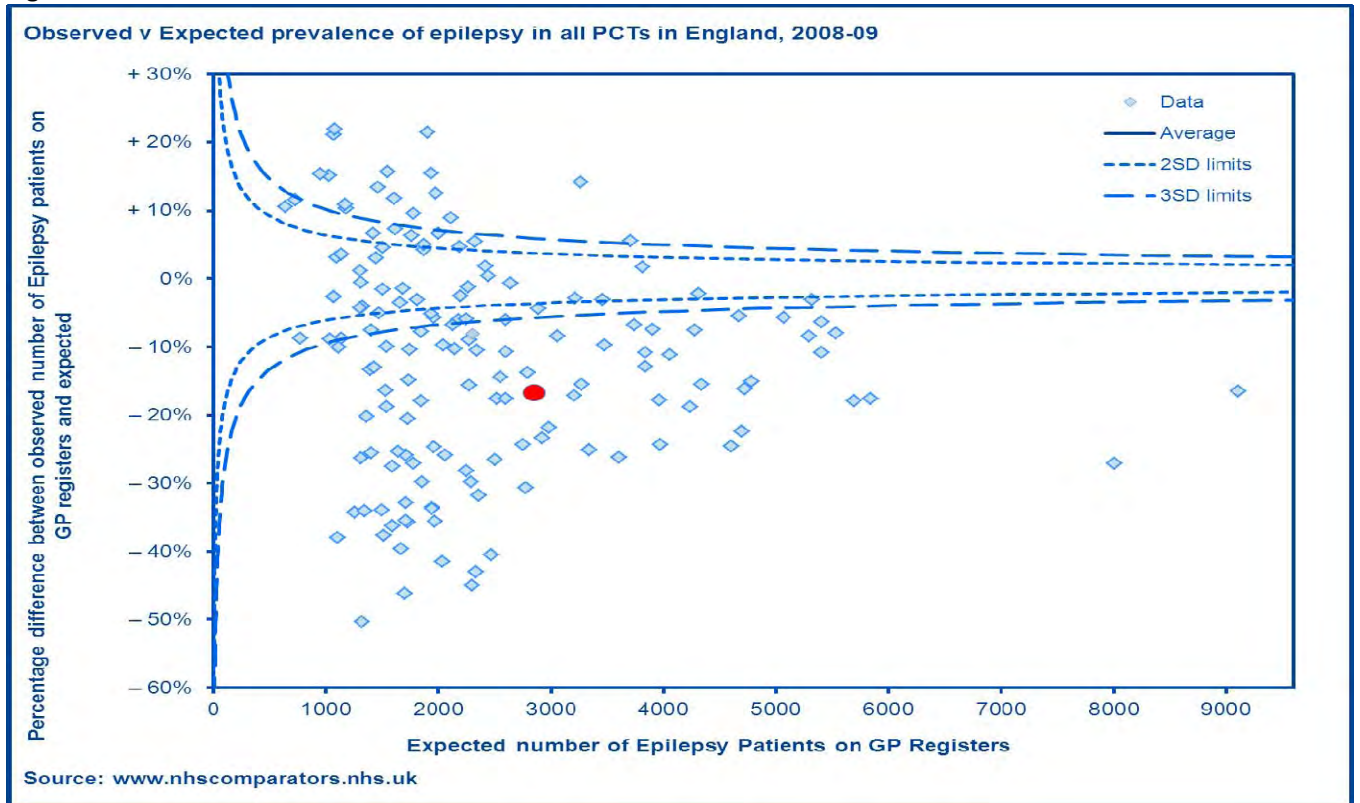


Figure 7.43b



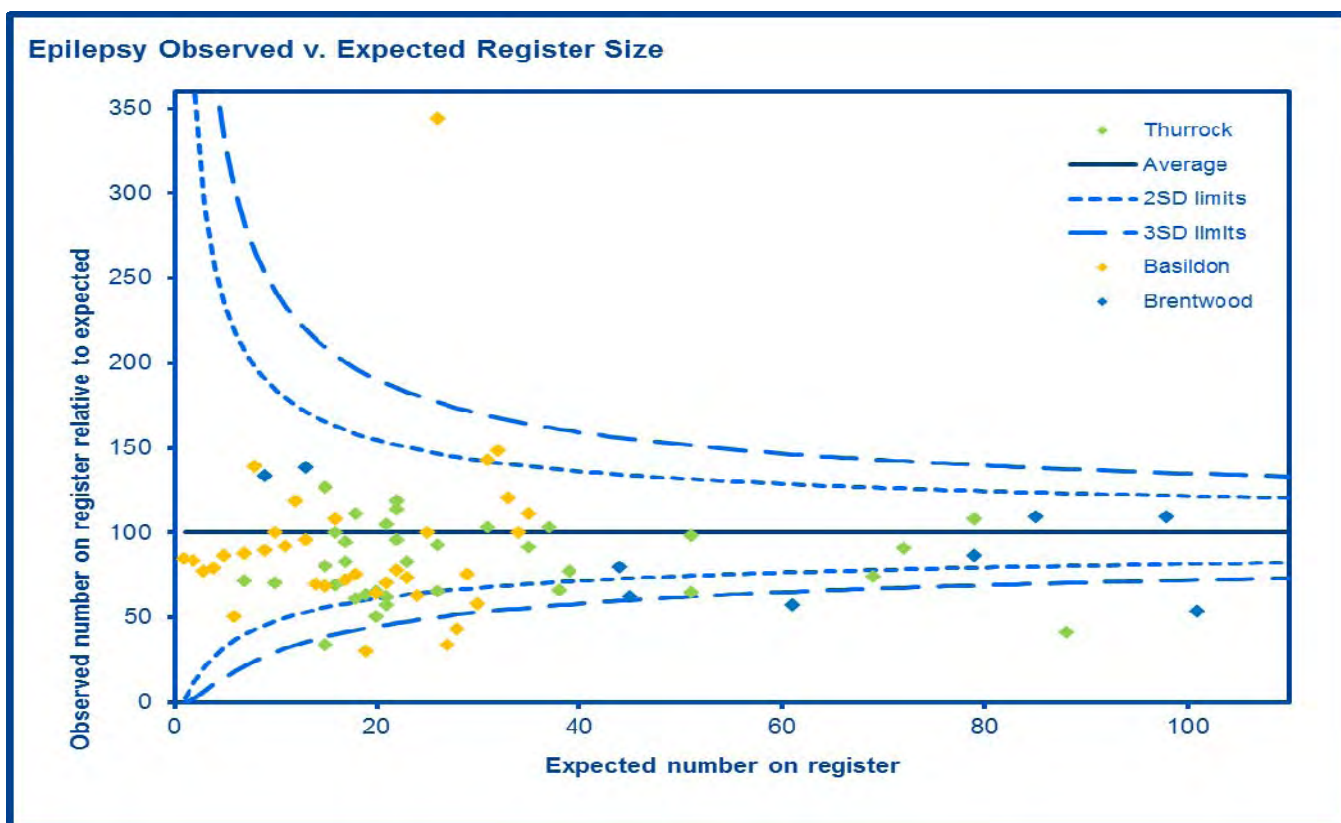
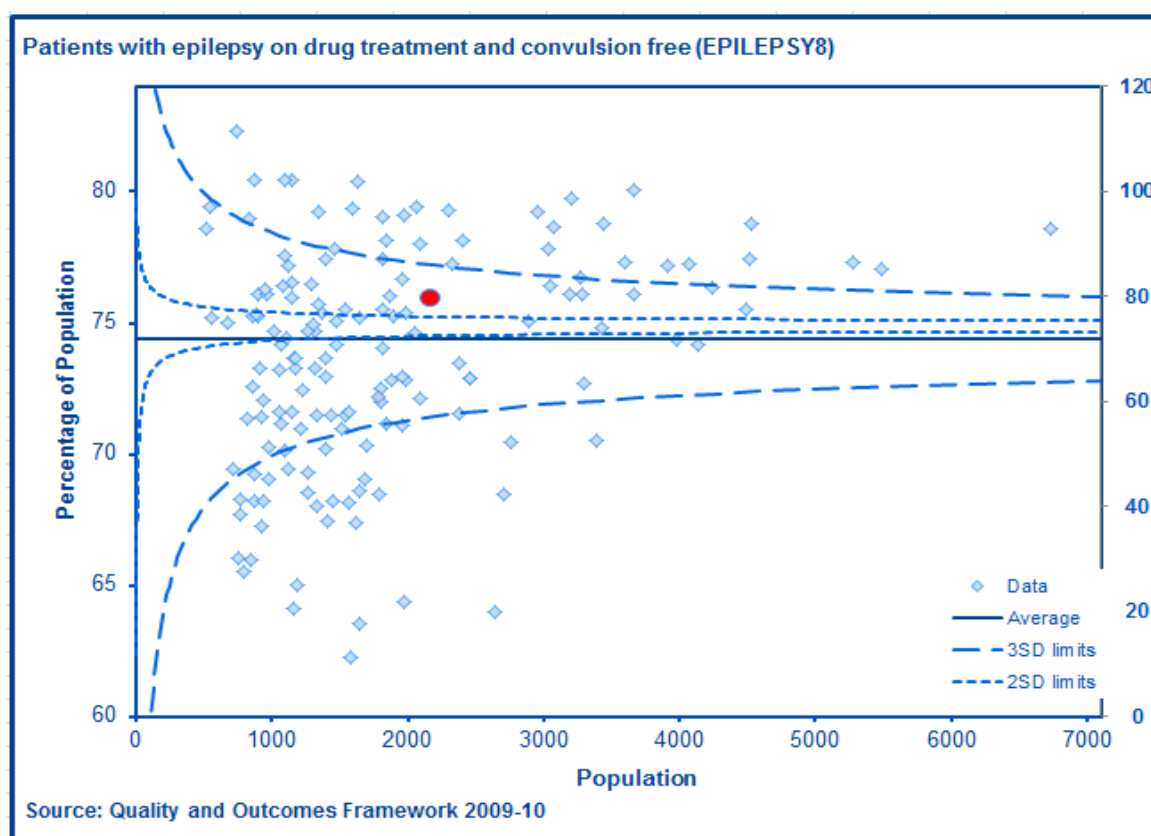


Figure 7.44 shows the percentage of patients with Epilepsy on drug treatment who are convulsion free for SWE and all other PCTs in England. As figure 7.44 shows, SWE's percentage of patients on drug treatment who are convulsion free is greater than both national means and 2SD funnel. This would suggest good clinical care of patients with Epilepsy once they are on the register.

Figure 7.44



## Conclusions

Spend on neurological conditions in SWE is about average for both England and ONS comparator PCTs and there is no significant difference in outcome from epilepsy mortality as a result, although both overall and under 75 mortality is on the poorer side of national averages. The data would suggest that this may be due to inadequate case finding of patients with epilepsy rather than poor clinical care once on QOF registers.

## 7.6 Problems of Vision

Problems with vision cover areas such as low vision and blindness (related to age-related macular degeneration - AMD), cataracts, glaucoma, disorders of the retina and squint. It is important that the NHS aims to delay the average age of onset of loss of visual acuity in patients with hypertension, diabetes and glaucoma.

Figure 6.45 shows programme budgeting spend on problems of vision. SW Essex is in the bottom middle half of quintile two. This level of allocated spend for vision problems was bottom for the ONS Cluster Group and places the PCT in the bottom third of PCTs nationally.

Figure 7.45: Programme budgeting spend problems of vision - compare against all PCTs and ONS cluster neurological disorders, key indicators compared to England.

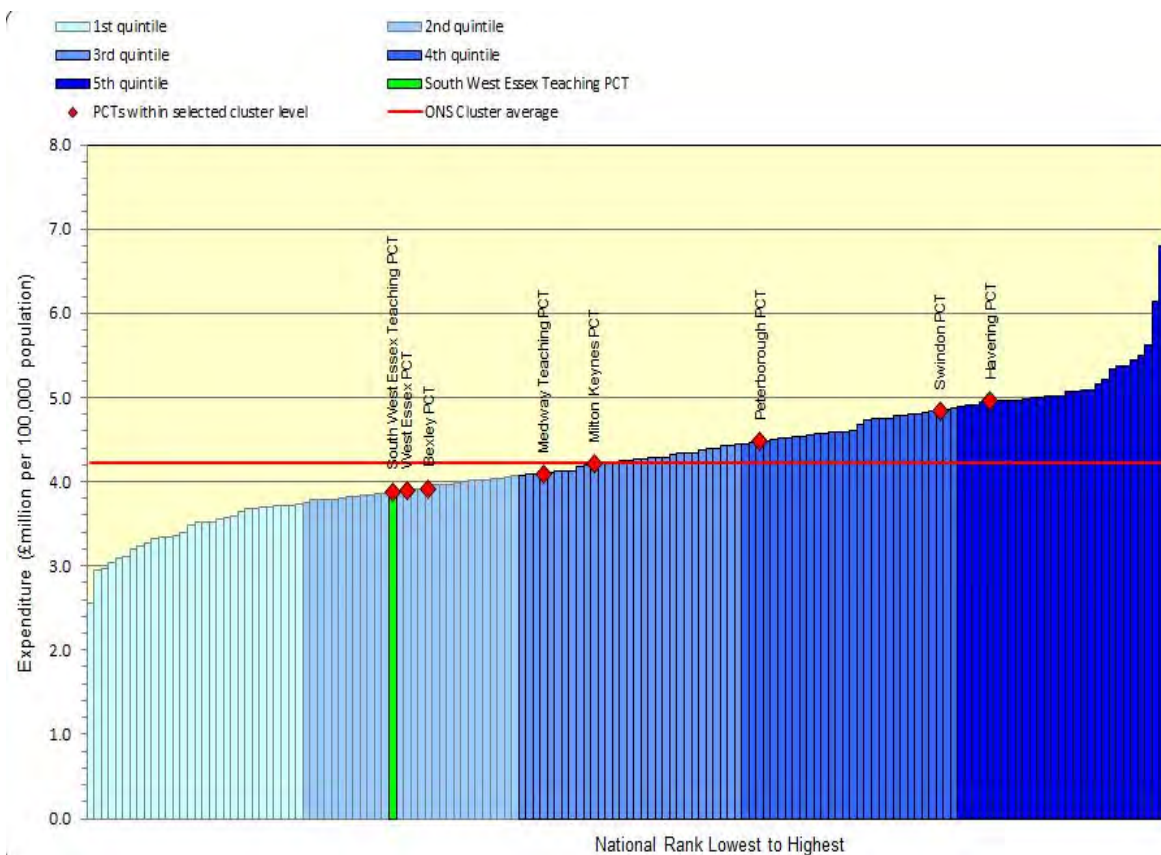
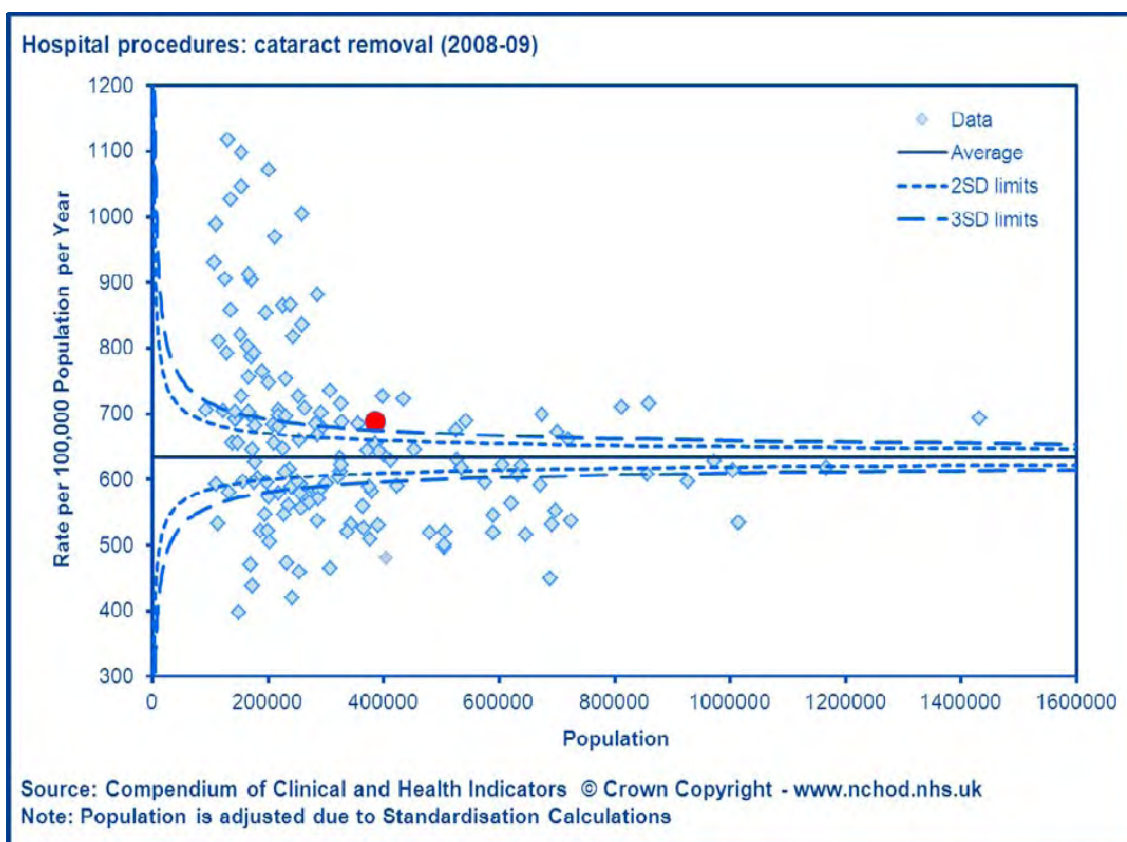


Figure 7.46 shows the rate of cataract procedures within SW Essex compared with all PCTs in England. SW Essex is an outlier for cataract surgery in having a significantly higher rate than the national average. It is estimated that one third of people aged 65 years and over will have cataracts. It is important that the NHS aims to delay the average age of onset of loss of visual acuity in patients with hypertension, diabetes and glaucoma. With a growing ageing population and a continued lack of spend in this area the rate of cataract procedures could increase within SW Essex.

Figure 7.46: Funnel plot – Rate of cataract procedure removal by 100K population



## Summary / Conclusions

SW Essex has an average to low spend in the area of vision (Figure 7.45) despite having a significantly high surgical intervention rate for cataracts (Figure 7.46). A lower than expected diabetic detection rate as shown in figure 7.22 (Endocrine section) could give rise to increased spending with late diagnosis and complications from diabetes.

## 7.7 Problems of Circulation

This area of spend includes all of CVD, including hypertension and is closely linked to the programme covering endocrine, nutritional and metabolic diseases – in relation to diabetes and blood lipids as risk factors.

Figure 6.47 shows programme budgeting spend on problems of circulation. SW Essex is in the top three of quintile five indicating it is the third highest spending PCT nationally.

Age is a key risk factor for problems with circulation. The number of hospital admissions rises sharply at 45 years. It is this cohort of the population that is set to significantly increase in the next 15 years, so unless steps are taken to prevent illness or its complications, it will put increased pressure on hospital beds and more costs on the NHS.

**Figure 7.47: Programme budgeting spend on problems of circulation**

### All PCTs expenditure per 100,000 population

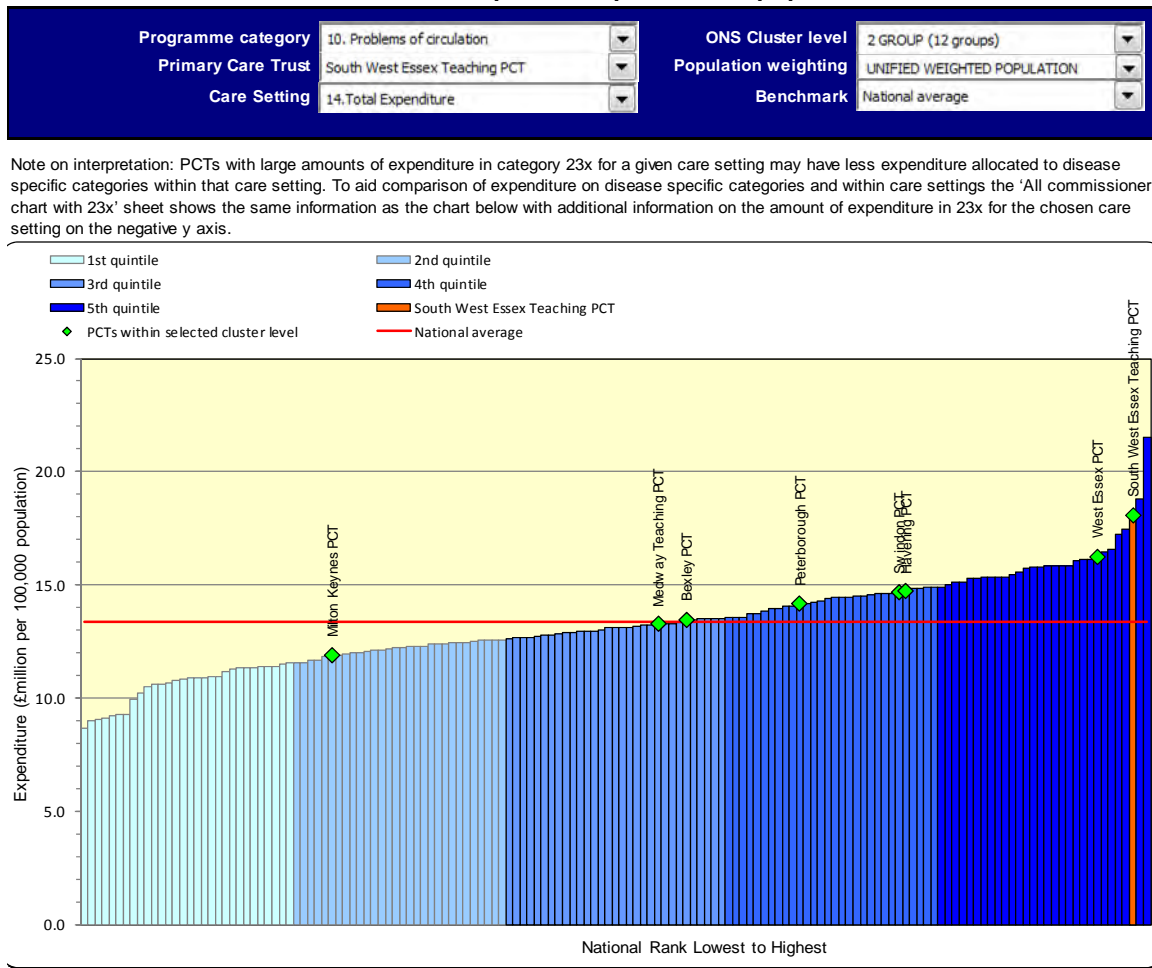


Figure 7.48 shows key indicators for problems of circulation. Problems of circulation mortality contains 10 indicators and of these 10 indicators SW Essex is performing significantly better than the national average in seven of them with no significant difference in the remaining three.

SW Essex is performing significantly worse than the national average in four of the 10 QOF indicators. Particular areas of concern are CHD patients' total cholesterol 5mmol or less and stroke/TIA patients with total cholesterol 5mmol or less. There is no significant difference between SW Essex and the national average in the seven remaining QOF indicators.

SW Essex is performing significantly better than the national average in five of the nine secondary care indicators. There is no significant difference in the remaining four indicators between SW Essex and the national average.

Figure 7.48. Key Indicators for Problems of Circulation

**Key:**

- Significantly better than England average
- Not significantly different from England average
- Significantly worse than England average
- No significance can be calculated

**England Key:**



Indicator	Local Number	Local Value	Eng Avg	Eng Worst	England Range	Eng Best
<b>1 PROBLEMS OF CIRCULATION MORTALITY (DSR)</b>						
2 All circulatory disease	3188	162.4	174.6	247.9		108.7
3 All circulatory disease u75 years	815	64.6	70.5	122.1		46.3
4 Acute myocardial infarction	456	23.6	32.7	61.8		14.0
5 Acute myocardial infarction u75 years	133	10.2	16.3	36.1		6.7
6 Coronary heart disease	1471	76.7	83.7	143.9		45.0
7 Coronary heart disease u75 years	433	33.8	39.5	73.0		21.9
8 Hypertensive disease	112	5.5	4.6	11.1		1.7
9 Hypertensive disease u75 years	22	1.8	1.8	5.8		0.4
10 Stroke	793	38.7	44.7	61.8		24.6
11 Stroke u75 years	152	12.2	12.8	26.2		7.7
<b>12 QOF ATTAINMENT</b>						
13 CHD patient BP 150/90 or less (CHD6)	11814	90.6	89.8	86.9		92.7
14 CHD patient total cholesterol 5mmol or less (CHD8)	9723	78.9	82.1	75.9		86.0
15 CHD patients treated with beta blocker (CHD10)	8426	77.4	73.7	68.6		87.7
16 Patient with history of MI treated with ACE (CHD11)	1285	91.1	89.1	84.7		94.0
17 CHD patients with record of influenza immunisation (CHD12)	10528	91.3	91.9	86.8		94.2
18 Patients with stroke/TIA history with BP 150/90 or less (STROKE6)	5800	88.6	88.1	83.4		93.9
19 Stroke/TIA patients with total cholesterol 5mmol or less (STROKE8)	4486	73.5	77.3	70.4		83.9
20 Stroke/TIA patients with record of influenza immunisation (STROKE10)	4902	88.9	89.0	83.0		92.5
21 Hypertensive patients with BP 150/90 or less (BP5)	47145	80.4	78.7	73.5		83.7
22 HF patients due to LVD being treated with ACE (HF3)	1299	90.3	90.0	84.3		95.4
<b>23 SECONDARY CARE</b>						
24 % of patients who spend at least 90% of their time on a stroke unit	115	81.0	74.6	44.1		100.0
25 No TIA cases with a higher risk of stroke who are then subsequently treated within 24hrs	4	22.2	74.6	0.0		100.0
26 Angiogram - Elective	599	134.5	184.4	336.3		11.4
27 Angiogram - emergency	31	6.7	20.7	86.1		2.9
28 CABG - Elective All Ages	137	28.9	25.2	49.4		8.4
29 PTCA - Elective All Ages	108	26.0	45.0	102.3		13.0
30 AF Emergency admissions per 100 on disease register (2008-09)	356	6.6	7.5	12.6		4.6
31 CHD Emergency admissions per 100 on disease register (2008-09)	964	7.6	7.5	13.0		3.8
32 COPD Emergency admissions per 100 on disease register (2008-09)	545	10.9	13.2	24.1		7.9

Data Sources: 1-11 Nchod, 12-24 QOF (NEEPCT & NHS Information Centre), 25 DH, 26-29 HES Data, 30-32 NHS Comparators

Figure 7.49 shows mortality from Hypertensive disease in persons under 75 years for all PCTs in England and for Basildon, Brentwood and Thurrock LA populations. Mortality from Hypertensive disease in persons under 75 years in SWE, Brentwood and Thurrock is in line with the national average. Basildon is an outlier falling below the 2SD lower limit indicating it is having significantly less deaths from Hypertensive disease compared to the national average.



Figure 7.49: Mortality from Hypertensive disease in the under 75s

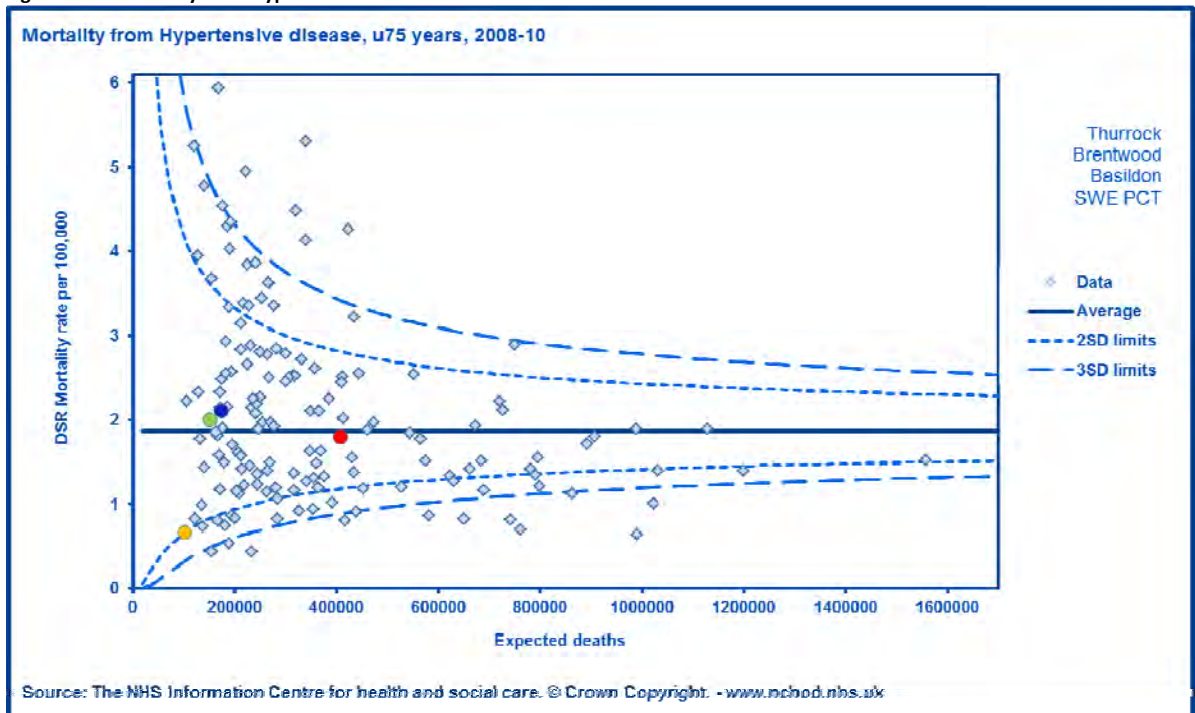


Figure 7.50 shows the percentage of Stroke patients who spend 90% of their time on a Stroke unit. SW Essex is in line with the national average indicating over 70% of patients are spending 90% of their time on a stroke unit.

Figure 7.50: Percentage of Stroke patients who spend 90% of time on a Stroke unit

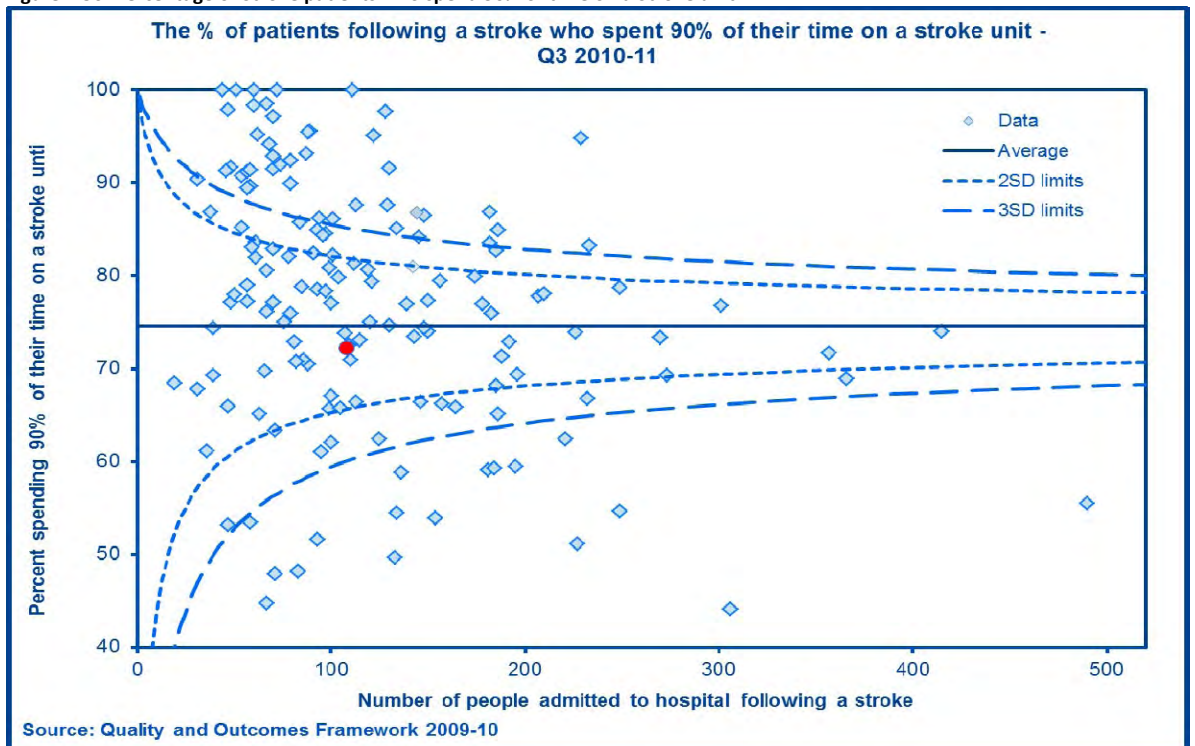




Figure 7.51 shows the rate of elective CABG admissions for all PCTs in England and figure 7.52 shows the rate of elective PTCA admissions for all PCTs in England. The rate of elective CABG admissions within SW Essex is in line with the national average. However, the rate of elective PTCA admissions within SW Essex is significantly below the national average.

Revascularisation (CABG and PTCA) is accepted as an effective intervention in managing patients with coronary artery disease to improve symptoms and/or prognosis. Recent studies have shown that over one year, CABG was more expensive and offered greater survival than PTCA but little added benefit in terms of quality adjusted life years. The costs associated with CABG interventions are around 40% more than PCTA; clinicians need to ensure that the overall benefit for the patients of having a CABG justifies the additional costs.

Figure 7.51: CABG Admissions – Elective (2008/09)

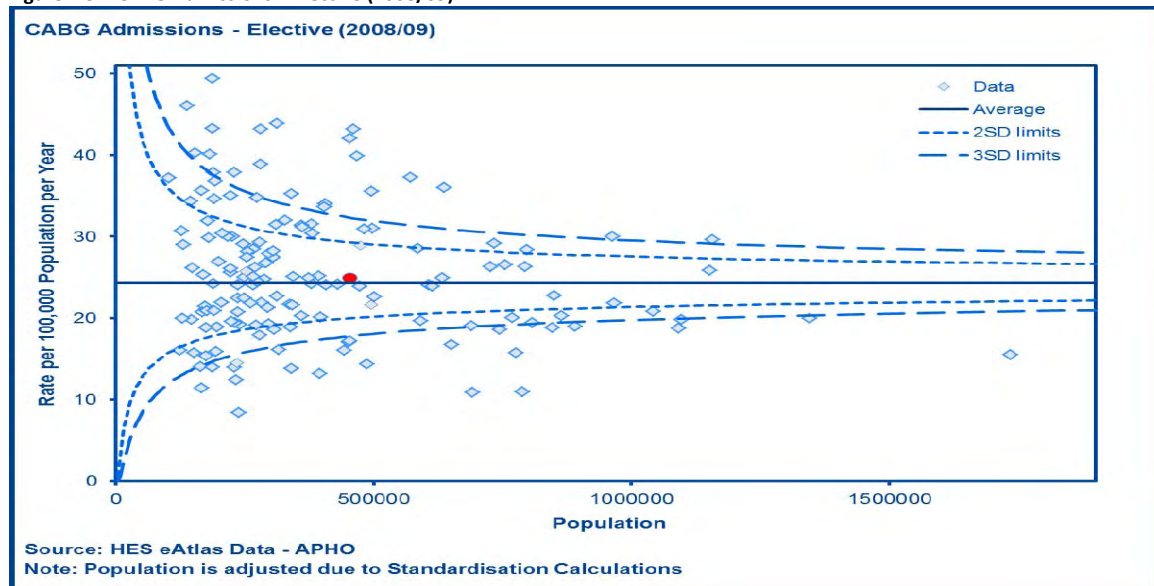


Figure 7.52: PCTA Admissions – Elective (2008/09)

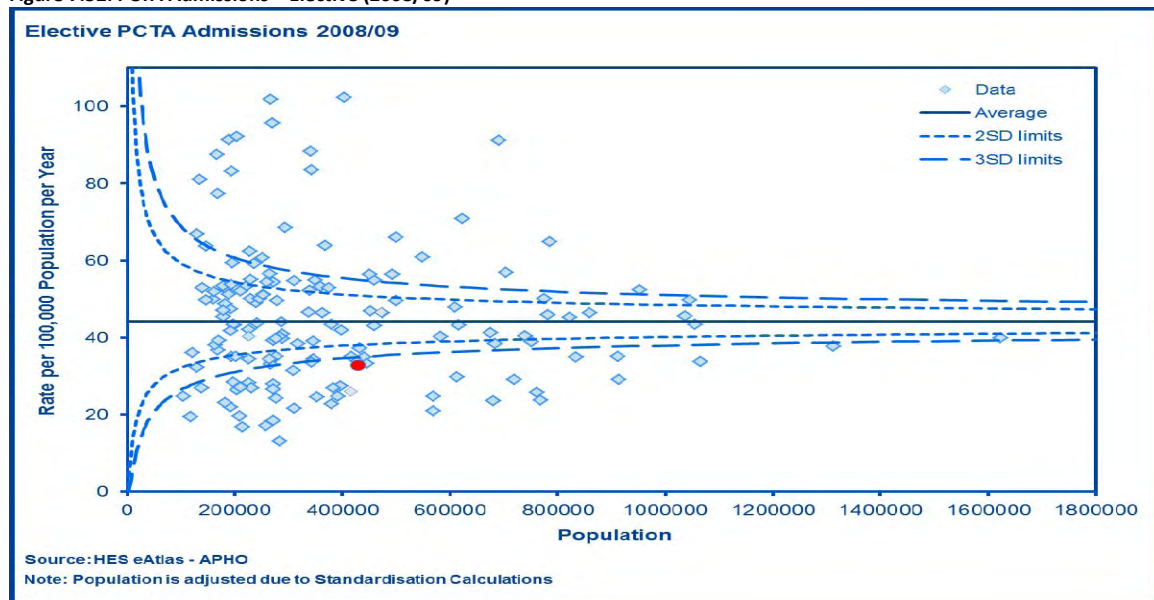


Figure 7.53 shows the percentage of patients with CHD whose last measured cholesterol was 5mmol or less for all PCTs in England. SW Essex falls below the 3SD lower limit on the funnel

indicating SW Essex is performing significantly worse than the national average. It is important to keep cholesterol levels low in CHD patients to decrease the costs associated with further CHD complications.

Figure 7.53: QOF for Cholesterol for CHD Patients

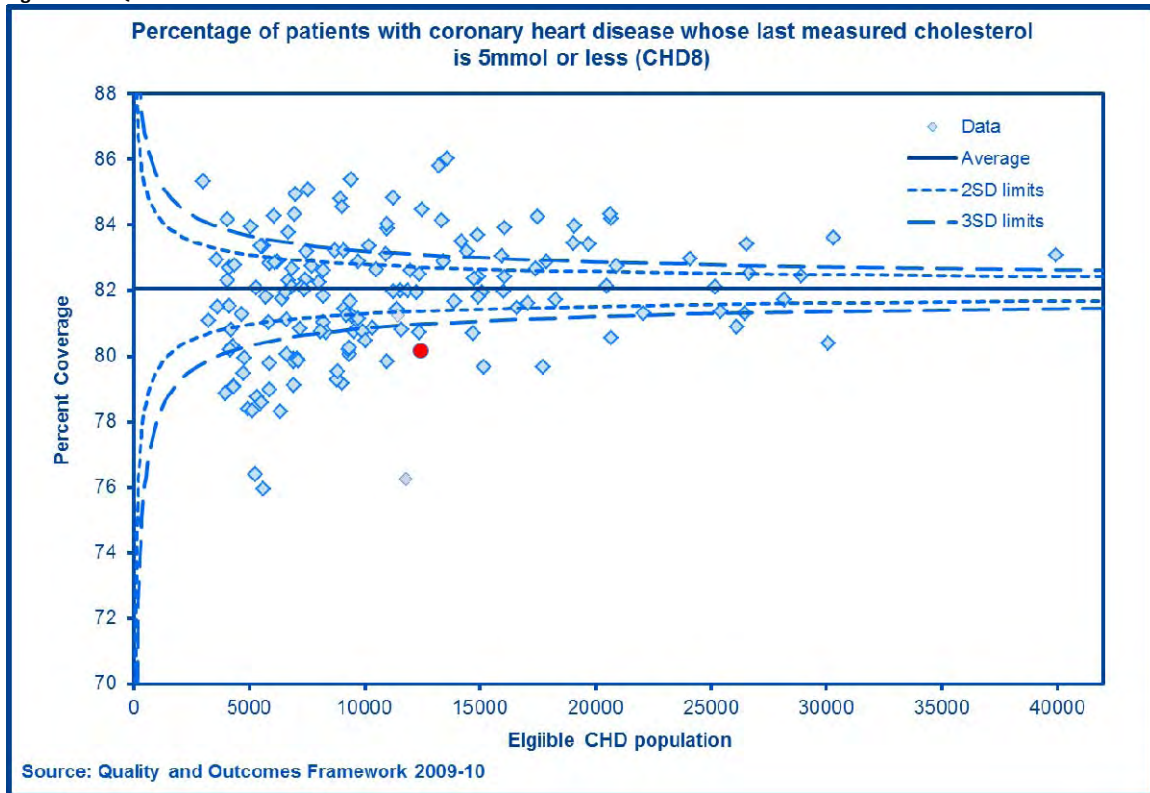


Figure 7.54 shows the percentage of patients with TIA or stroke whose last measured total cholesterol is 5mmol or less for all PCTs in England. SW Essex falls below the 3SD lower limit on the funnel indicating SW Essex is performing significantly worse than the national average.

Figure 7.54: QOF for Cholesterol for TIA/Stroke Patients

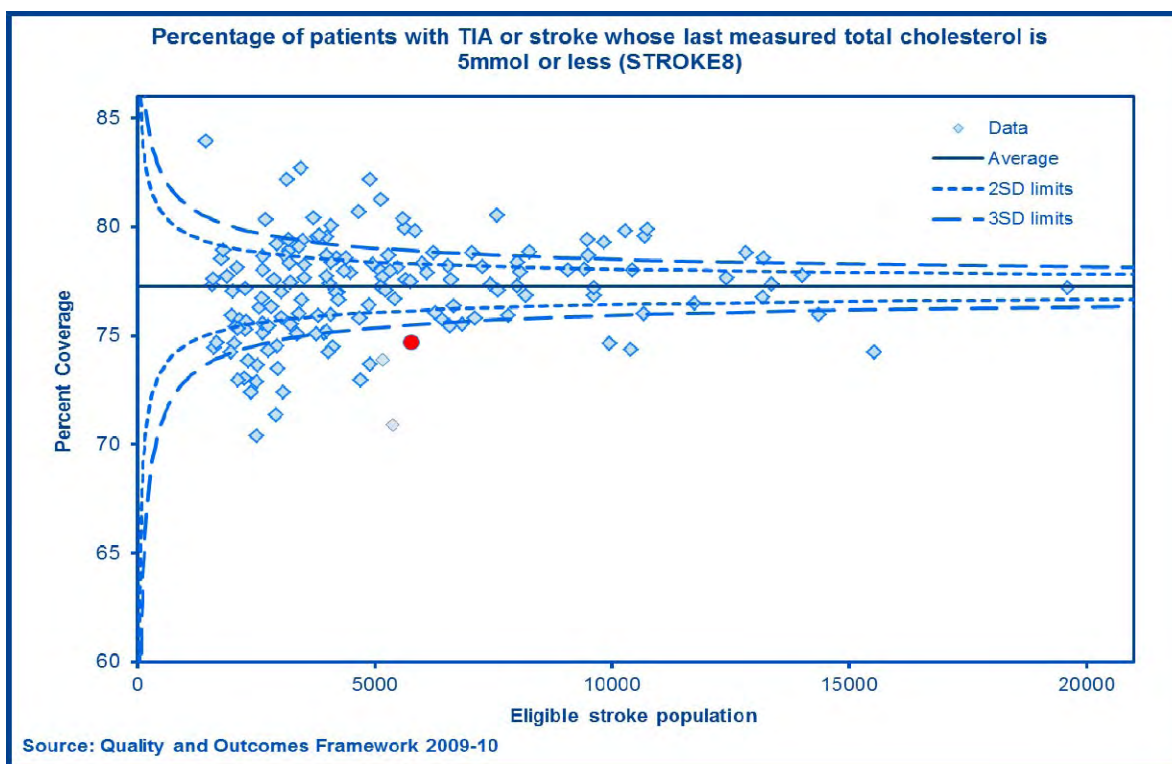
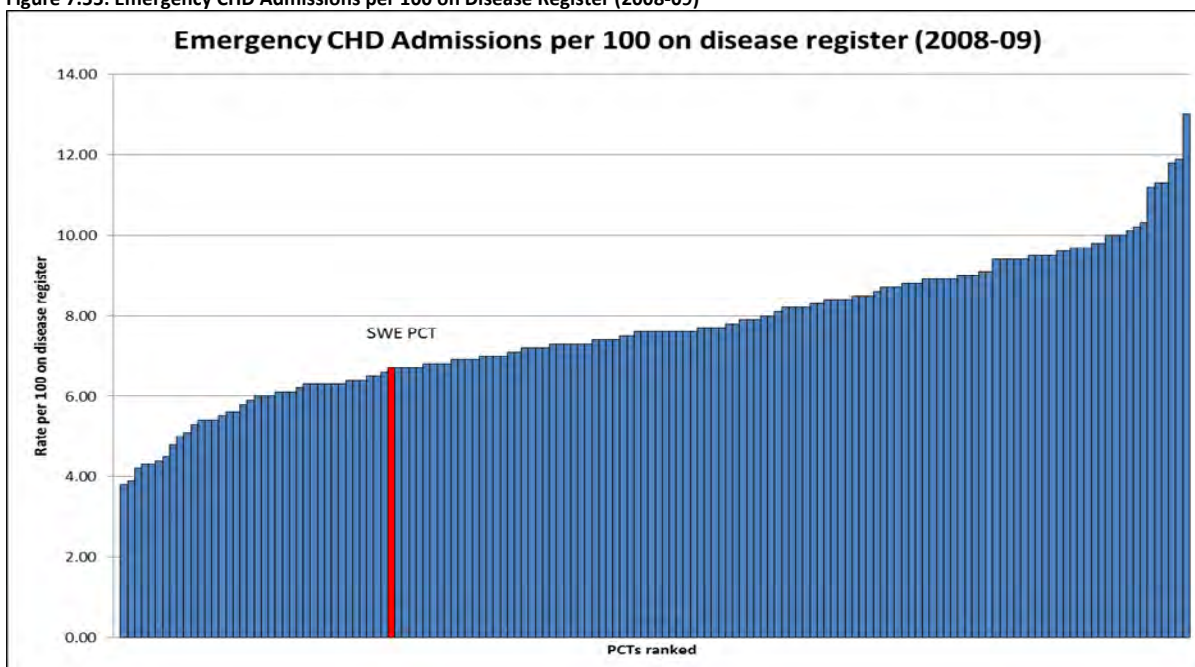


Figure 7.55 shows emergency CHD admissions per 100 on the disease register for all PCTs in England. SW Essex is in the bottom third of PCTs nationally indicating we are performing well in managing CHD patients on the disease register.

Figure 7.55: Emergency CHD Admissions per 100 on Disease Register (2008-09)



Figures 7.56, 7.57, 7.58 and 7.59 show a comparison of the observed versus expected prevalence for CHD, HF, Hypertension and Stroke by PCT for all PCTs in England. Value of 0% means observed= expected; above 0% means observed= greater than expected; below 0% means observed= less than expected.

Figure 7.56 shows the observed versus expected prevalence for CHD for all PCTs in England. In terms of population CHD ascertainment, it is estimated that the majority of PCTs in England have significantly less CHD patients than expected. SW Essex falls below the 3SD lower limit on the funnel indicating the prevalence of CHD is significantly less than expected. We can say with 99% confidence that SW Essex has up to 18% of patients with CHD are not on a disease register with CHD are not on a disease register and therefore may not be getting appropriate clinical care to manage their disease. This may be impacting on the high programme spend in SW Essex compared with other PCTs.

Figure 7.56: Observed Vs. Expected CHD Prevalence

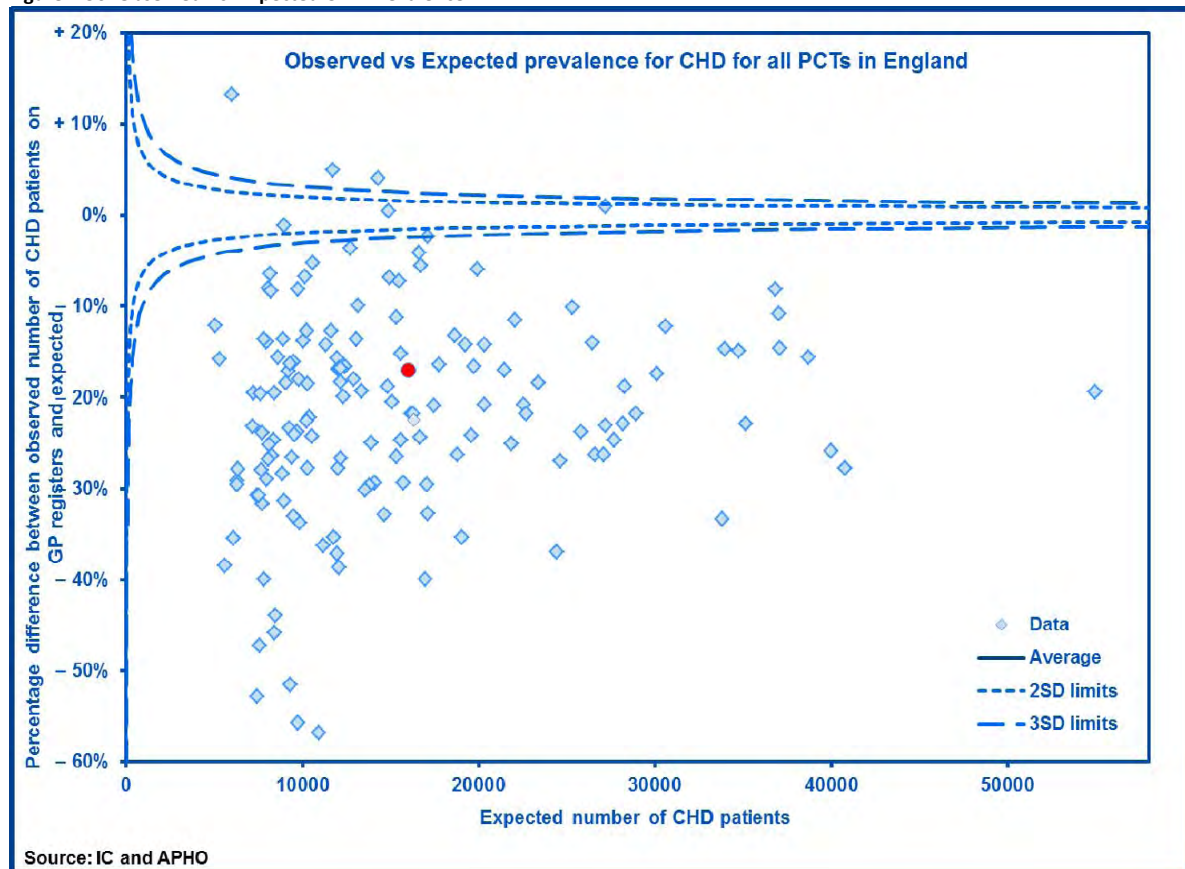


Figure 7.57a shows the completeness of Heart Failure GP practice disease registers for SW Essex compared to other PCTs, by plotting PCTs in England's differences between observed and expected figures on HF registers on a funnel plot. Figure 7.57b shows the completeness of Heart Failure GP practice disease registers for all practices in SW Essex. Both figures indicate that case finding of HF patients is poor and we can say with a high degree of confidence that there are patients with who should be on this register who are not.



Figure 7.57a: Observed Vs. Expected HF Prevalence

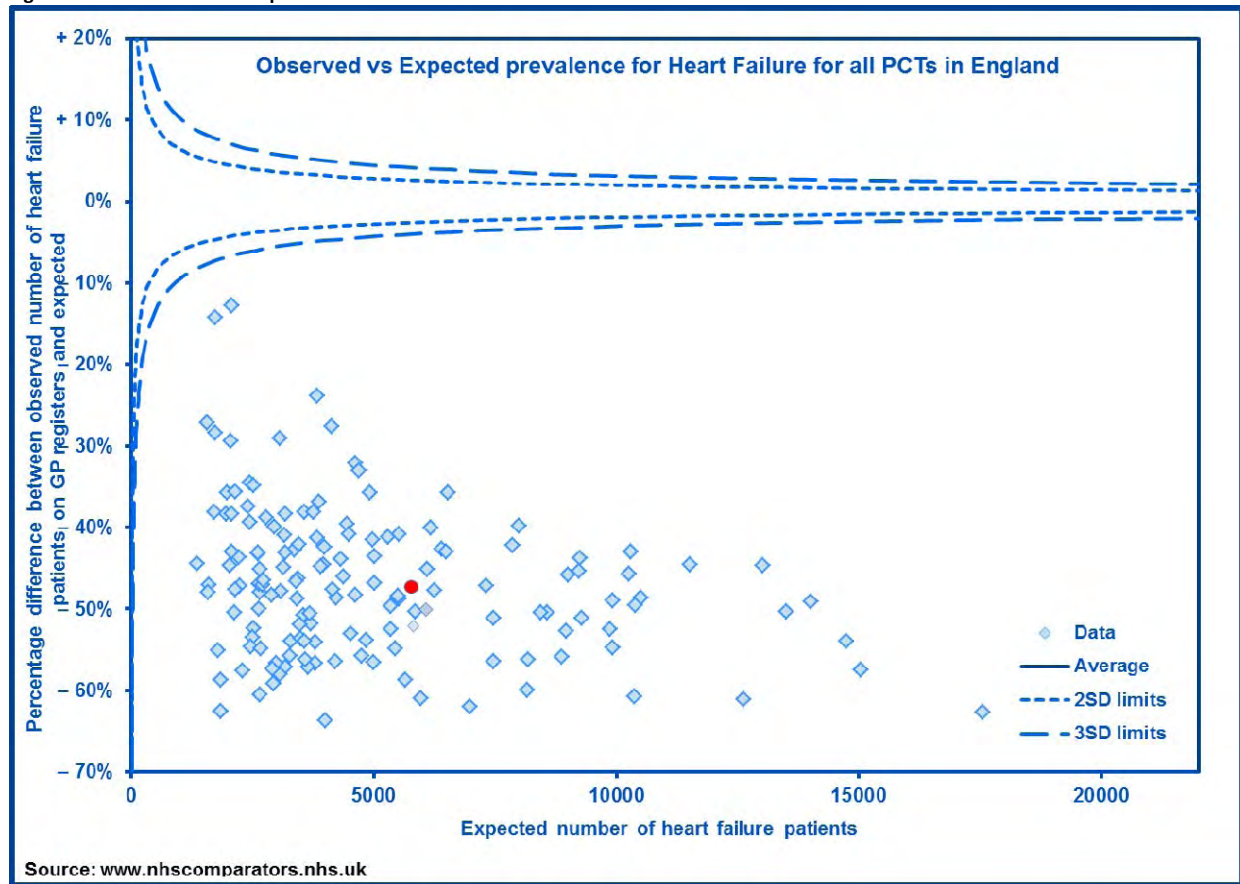


Figure 7.57b: Observed Vs. Expected HF Prevalence

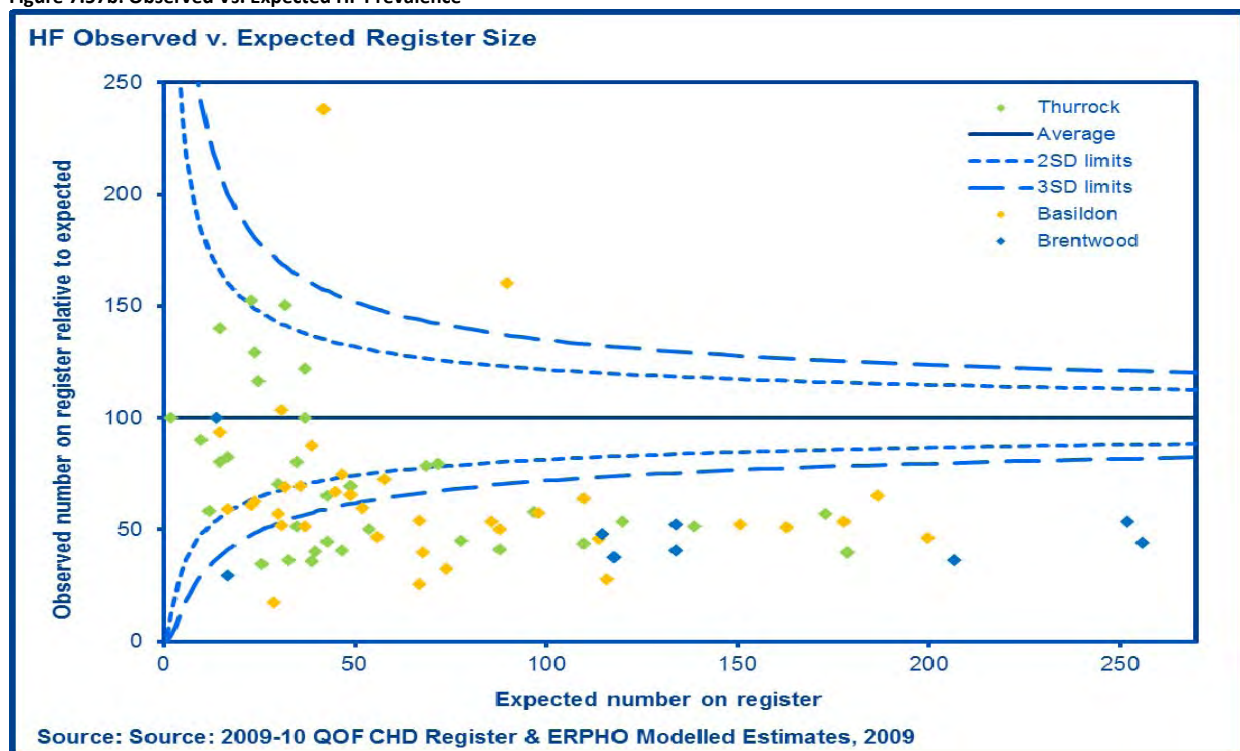


Figure 7.58 shows the observed versus expected prevalence for Hypertension for all PCTs in England. In terms of population Hypertension ascertainment, it is estimated that the majority of PCTs in England have significantly less Hypertension patients than expected. SW Essex falls below the 3SD lower limit on the funnel indicating the prevalence of Hypertension is significantly less than expected. We can say with a high degree of confidence that there are many patients in South West Essex with the disease that are not recorded on the disease register and therefore may not be getting appropriate clinical care to manage their disease.

Figure 6.59: Observed Vs. Expected Hypertension Prevalence

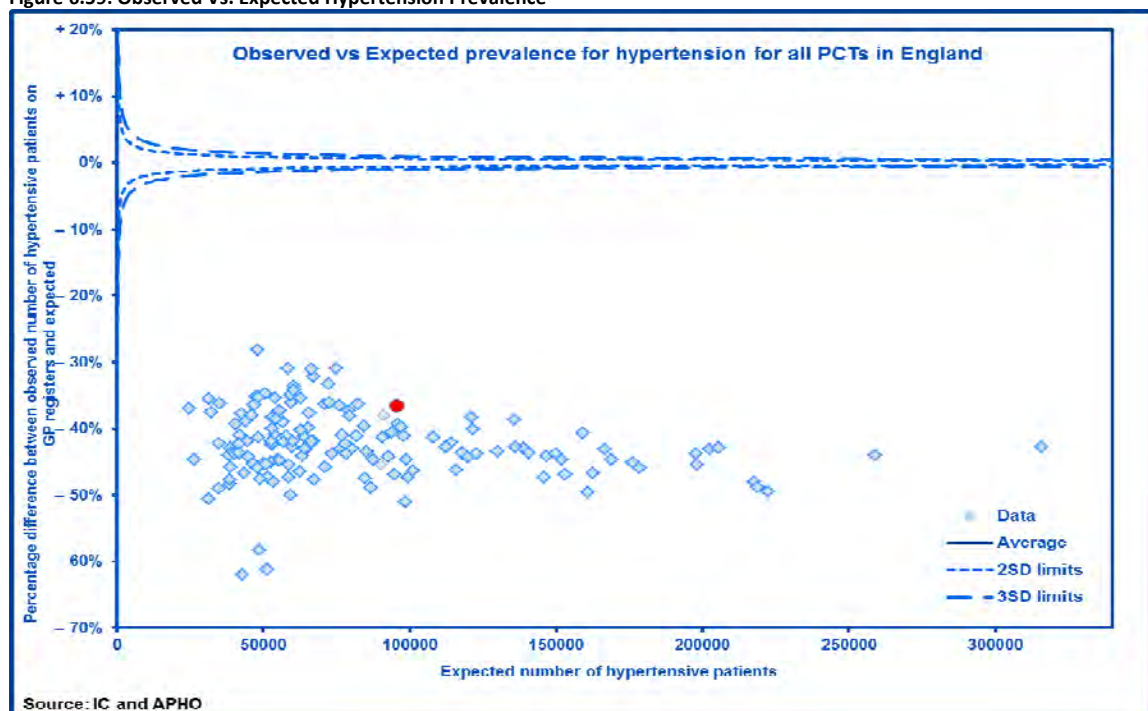


Figure 7.59 shows the completeness of Stroke GP practice disease registers for SW Essex compared to other PCTs, by plotting PCTs in England's differences between observed and expected figures on Stroke registers on a funnel plot. Like all PCTs in England, case finding of Stroke patients is poor and we can say with a high degree of confidence that there are many patients in South West Essex with the disease that are not recorded on the disease register.

Figure 7.59: Observed Vs. Expected Stroke Prevalence

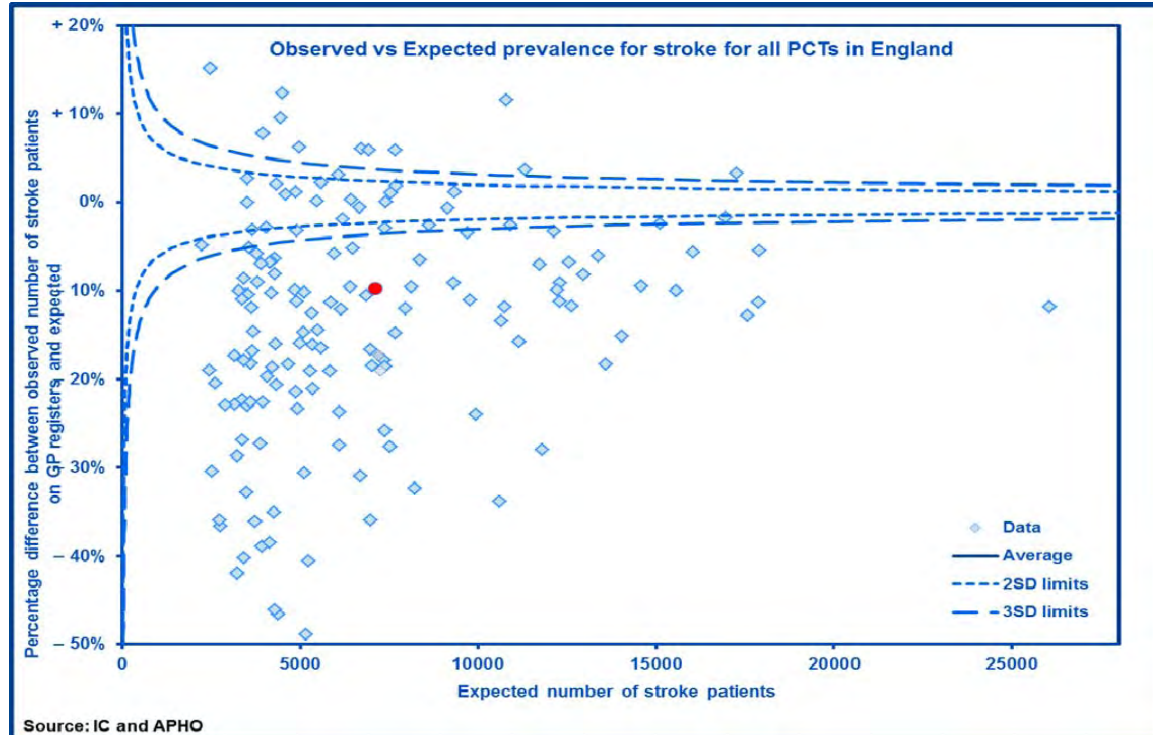
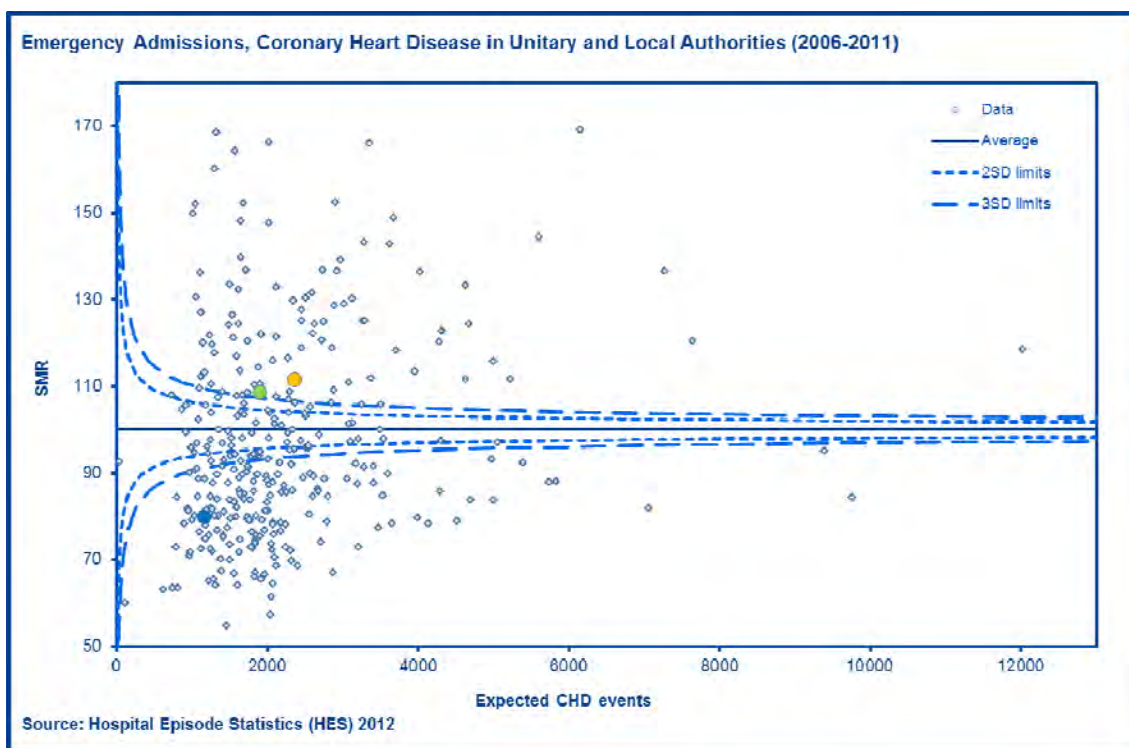


Figure 7.60 shows emergency CHD admissions for all local and unitary authorities in England. Brentwood falls below the 3SD lower limit indicating there have been significantly less CHD emergency admissions than compared with the national average. Both Basildon and Thurrock fall above the 3SD upper limit on the funnel indicating there have been significantly more emergency admissions than the national average.

Figure 7.60: Emergency CHD Admissions in Unitary & Local Authorities (2006-11)





## Summary / Conclusions

Spend on this programme is significantly above average with SW Essex being the third highest spending PCT nationally on problems of Circulation. Mortality rates continue to improve and are significantly better than average. There is marked variation in observed and expected circulatory diseases prevalence rates, and observed rates are much lower than expected rates – the difference for CHD is -18%, hypertension is -38%, HF is -48% and stroke is -10%. The earlier identification of at risk patients will further contribute to the rising circulatory diseases prevalence in SW Essex and expected to further increase demand for CHD services locally. However, early clinical intervention and good clinical management of patients with CHD is likely to reduce overall healthcare costs in the medium term as it will reduce more expensive emergency or complicated procedures. Figure 7.60 (Emergency CHD admissions for all local and unitary authorities in England) shows both Basildon and Thurrock fall above the 3SD upper limit on the funnel indicating there have been significantly more emergency admissions in these areas than the national average.

It could therefore be concluded that although it appears the prevalence of CHD (Figure 7.56) and HF (Figure 7.57) is significantly less than expected, hospital admissions are actually significantly greater than expected meaning that inadequate case finding and early intervention is driving high emergency hospital admissions, which is then driving overall spend.

SW Essex has indifferent performance in the management of patients on the relevant cardiovascular disease (CVD) registers. SW Essex is performing better than the national average with regards to BP and CHD / Stroke or TIA but significantly worse with regards to cholesterol and

CHD / Stroke or TIA. SW Essex needs to improve its performance in maintaining cholesterol levels below 5mmol in CHD and Stroke / TIA patients to decrease the costs associated with further complications. Consistent and effective lifestyle interventions will improve management of these patients. SW Essex has an average rate of coronary artery bypass graphs (CABG) and a rate of percutaneous transluminal coronary angioplasty (PTCA) significantly below average.

As previously mentioned, SW Essex has up to 38% of patients with Hypertension who are not on a disease register and therefore may not be getting appropriate clinical care to manage their disease. Hypertension is one of the leading causes of CHD, HF, Stroke and is a cause of CKD. Given that it can be easily controlled using drugs, it is imperative that more is done to keep it at a safe and healthy level within the population of SW Essex. The health effects from lowering blood pressure can be key in lowering the burden of disease from CVD and decreasing the large associated costs. It should therefore become a priority within SW Essex to find and treat people with hypertension.

SW Essex needs to take further actions to tackle problems of Circulation including:

- Smoking prevention and cessation
- Promotion of physical activity at all ages
- Improve management of cholesterol
- Secondary prevention following angina, myocardial infarction (MI) and stroke
- Dissemination, implementation and monitoring of NICE guidance particularly in terms of identification and treatment of patients with hypertension
- Redeploy resources from lower cost-effectiveness interventions

## 7.8 Problems of the Respiratory System

This programme covers the entire respiratory tract and includes among others, disease of the nose and throat, asthma, emphysema, chronic obstructive pulmonary disease and respiratory failure.

Figure 7.61

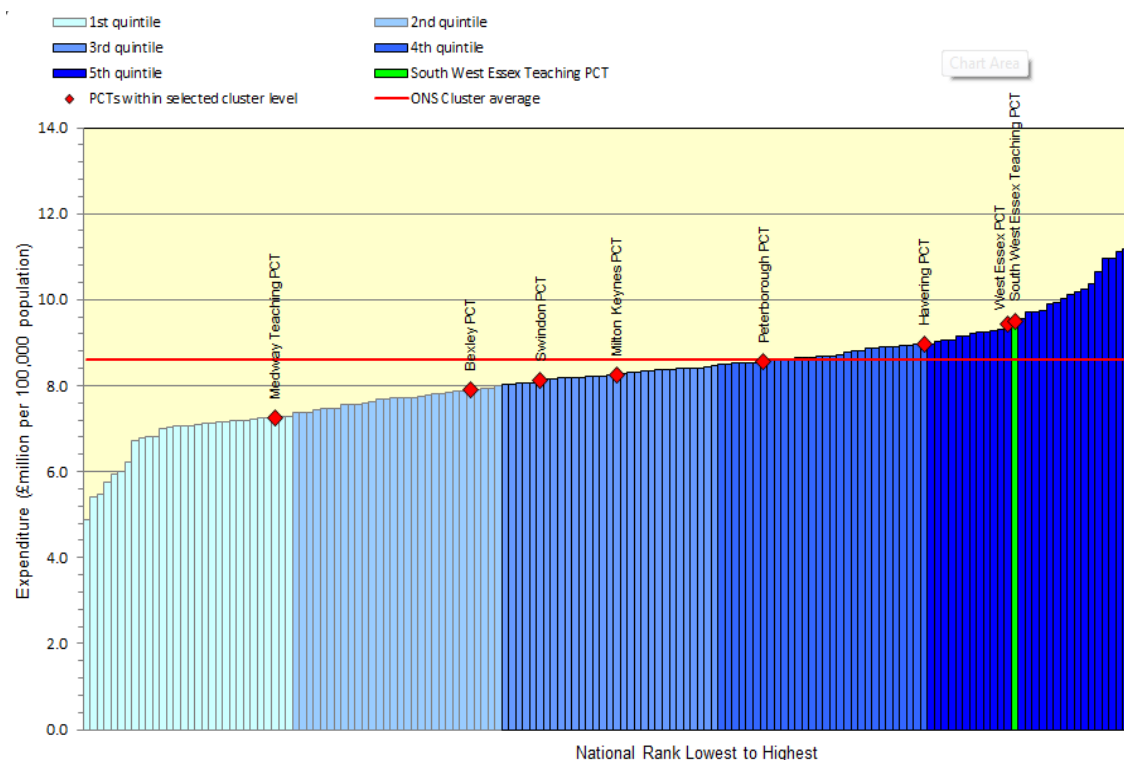


Figure 7.61 shows Programme Budgeting spend (£million per 100,000 population) on respiratory problems by PCT, with SWE and its ONS cluster PCTs highlighted. In SWE, spend on respiratory problems falls within the services is in the fifth quintile nationally making it one of the greatest in the country. Spend on respiratory problems is also greater than all of our ONS Cluster PCTs and the ONS cluster mean. SW Essex's high spend on respiratory problems translates to some good health outcomes as shown in Figure 7.61. Directly Standardised Mortality Rates of Asthma and Bronchitis and Emphysema are significantly better than national averages, although DSR of Bronchitis, Emphysema and other COPD is significantly worse. All other outcome indicators in figure 7.61 show no significant difference to national averages. Our poor performance on COPD may be related to poor case finding of COPD patients highlighted on page 85.

Figure 7.62

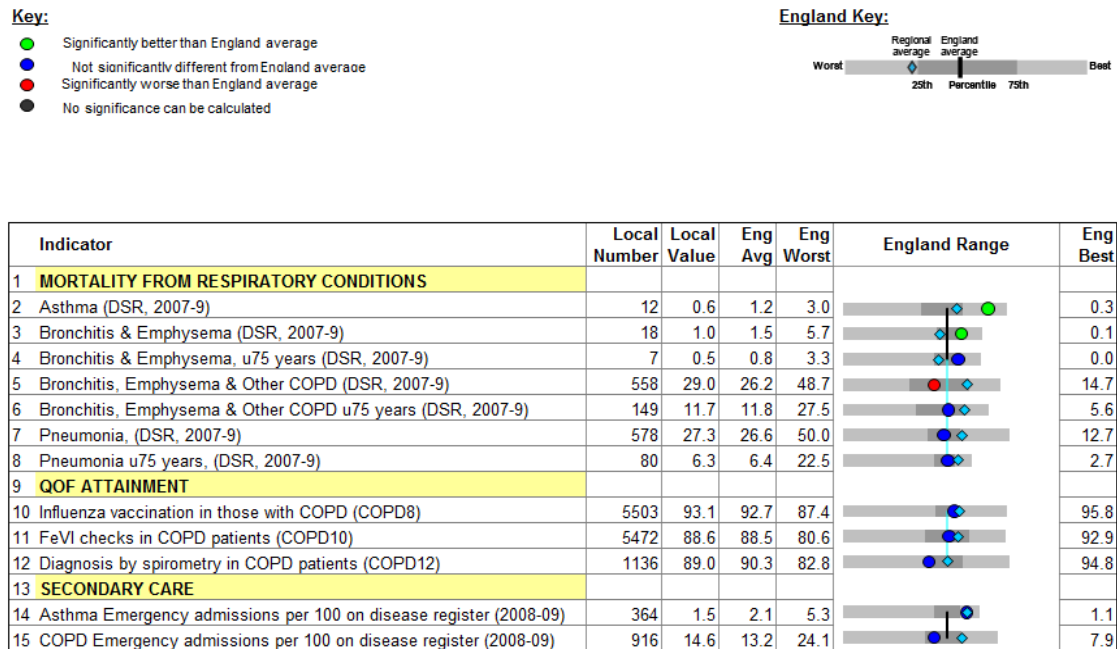
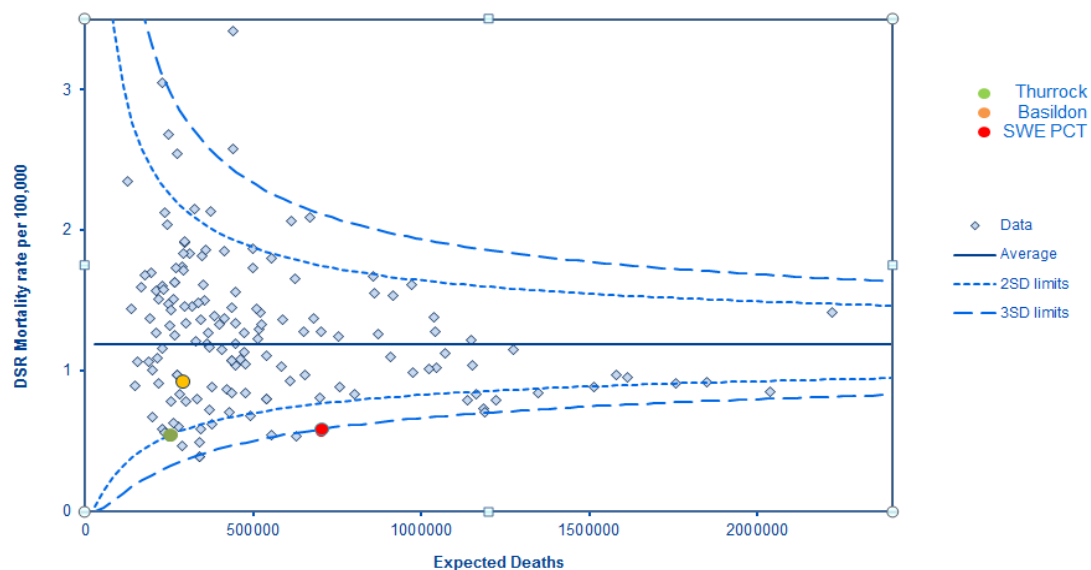


Figure 7.63 shows Directly Standardised Mortality Rate for Asthma as a funnel plot comparing SW Essex and Basildon, and Thurrock LA populations to all other PCT populations in England. South West Essex PCT and Thurrock Local Authority populations lie below the 2SD lower funnel suggesting that asthma mortality rates are significantly lower in than the average for PCTs in England.

Figure 7.63

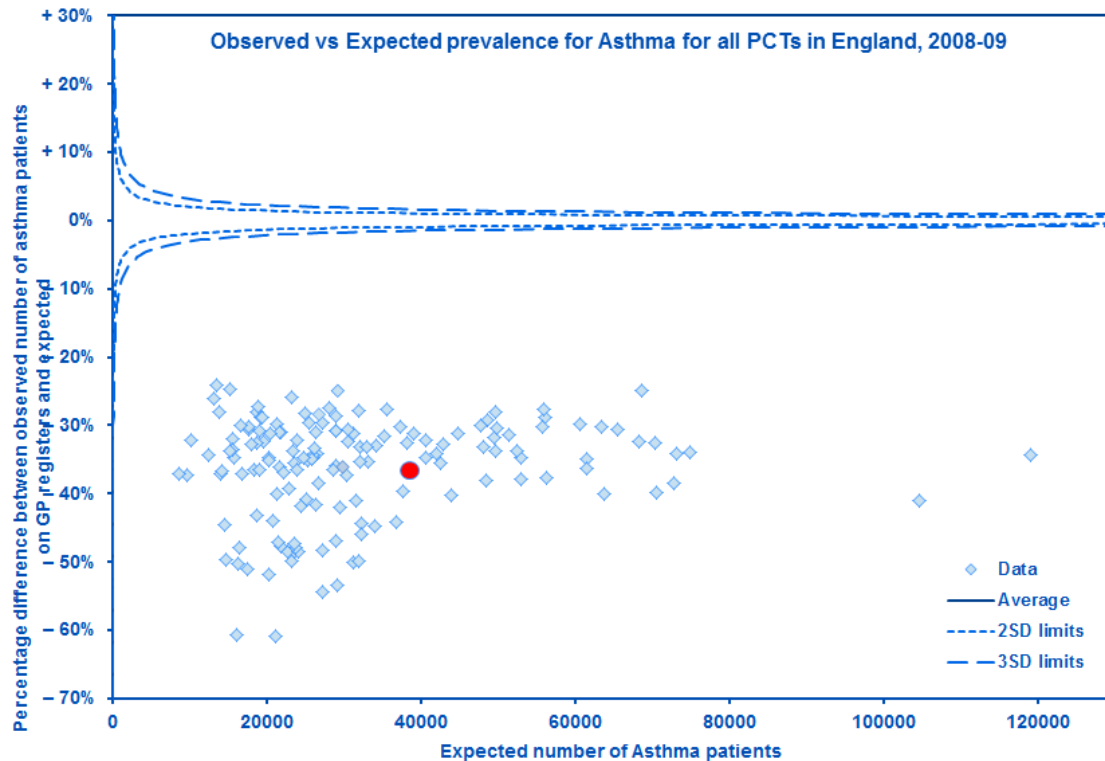
#### Mortality from Asthma 2008-10



Source: The NHS Information Centre for health and social care. © Crown Copyright. - [www.nchod.nhs.uk](http://www.nchod.nhs.uk)  
 Note: Population is adjusted due to Standardisation Calculations

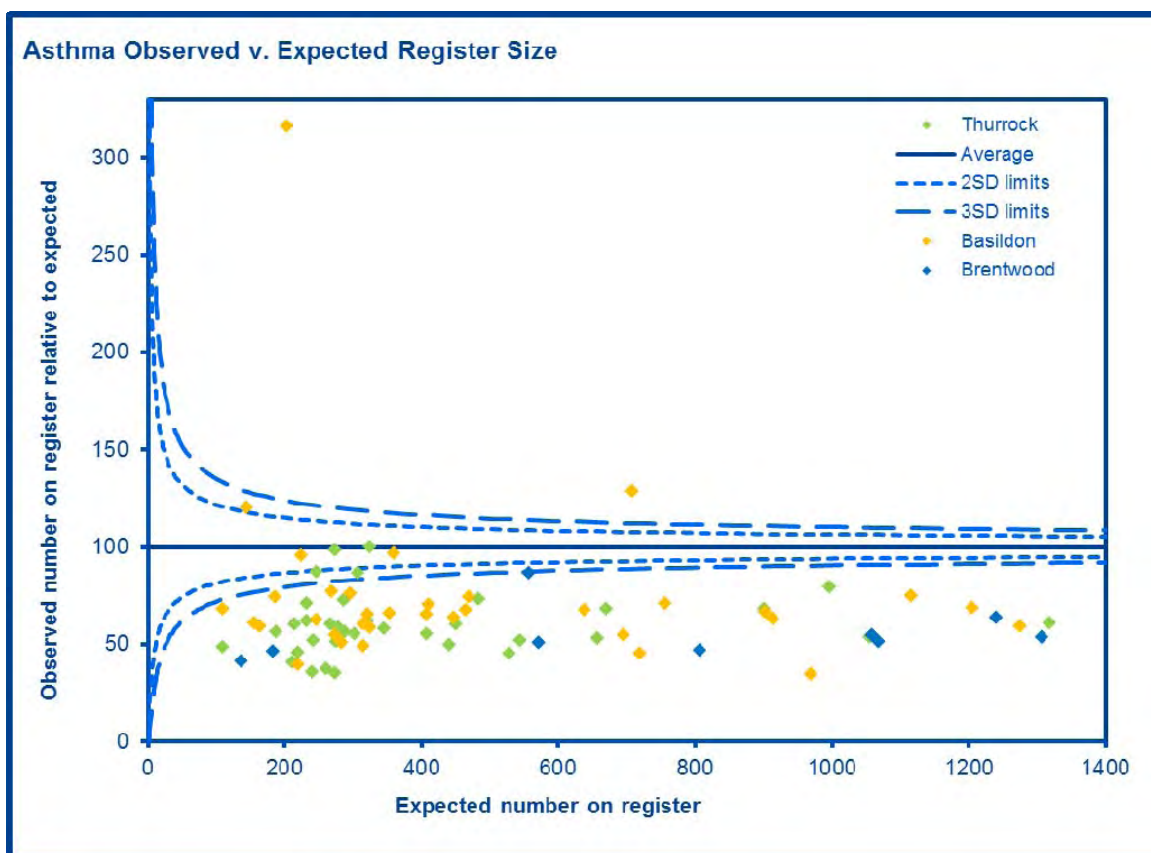
Figures 7.64a and 7.64b show completeness of GP practice asthma registers in terms of observed/expected ratio of patients. We can say with a high degree of confidence that there are patients with who should be on this register that are not and therefore may not be getting appropriate clinical care to manage their disease. This may be impacting on the relatively high programme spend of this programme in south west Essex compared to other PCTs.

Figure 7.64a



Source: [www.nhscomparators.nhs.uk](http://www.nhscomparators.nhs.uk)

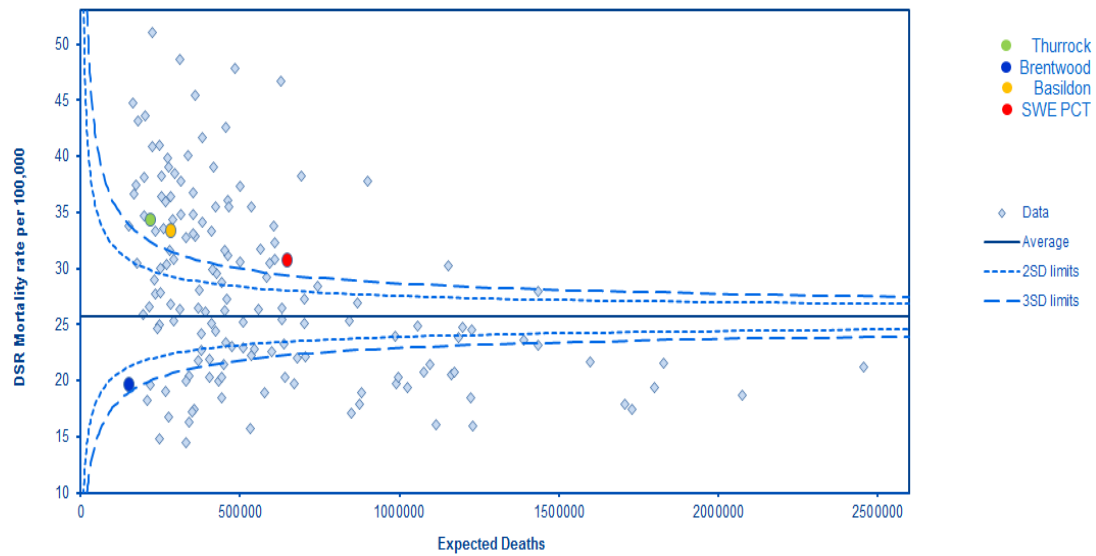
Figure 7.64b



Source: 2009-10 QOF Register & ERPHO Modelled Estimates

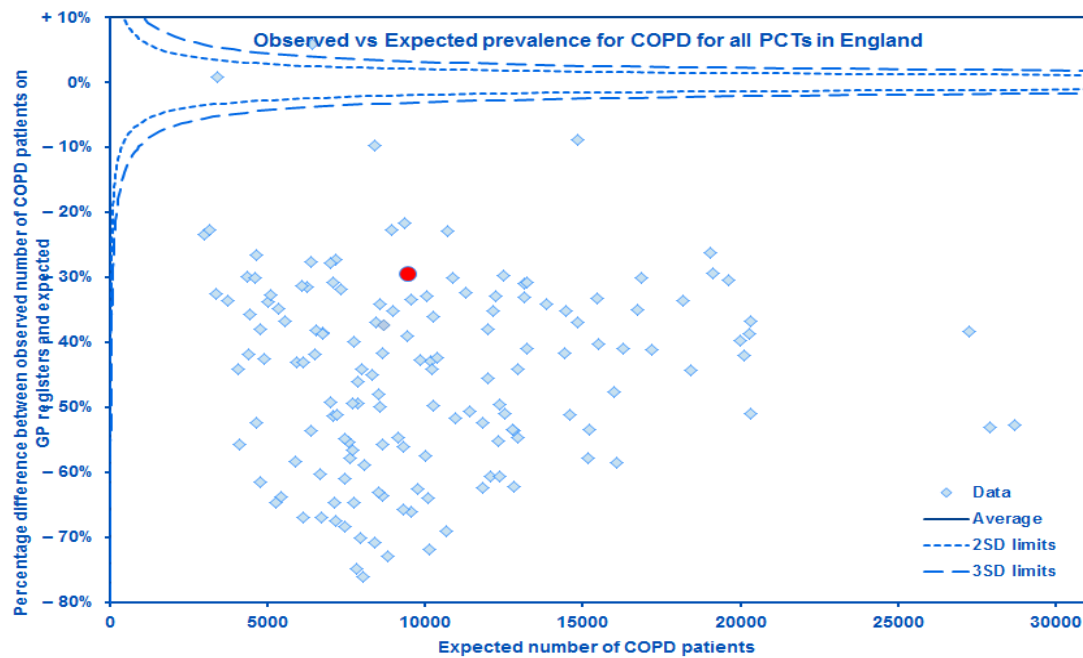
Figure 7.65

# Mortality from bronchitis, emphysema and other COPD



The NHS Information Centre for health and social care. © Crown Copyright. - www.nchod.nhs.uk

Figure 7.66



Source: IC and APHO

Figure 7.65 shows Directly Standardised mortality rate from Bronchitis, Emphysema and other COPD for SWE PCT and Basildon, Brentwood and Thurrock Local Authority populations compared to all other PCT populations in England, presented as a funnel plot. South West Essex PCT and Thurrock Local authorities have mortality rates that are significantly greater than the average for PCTs in England.



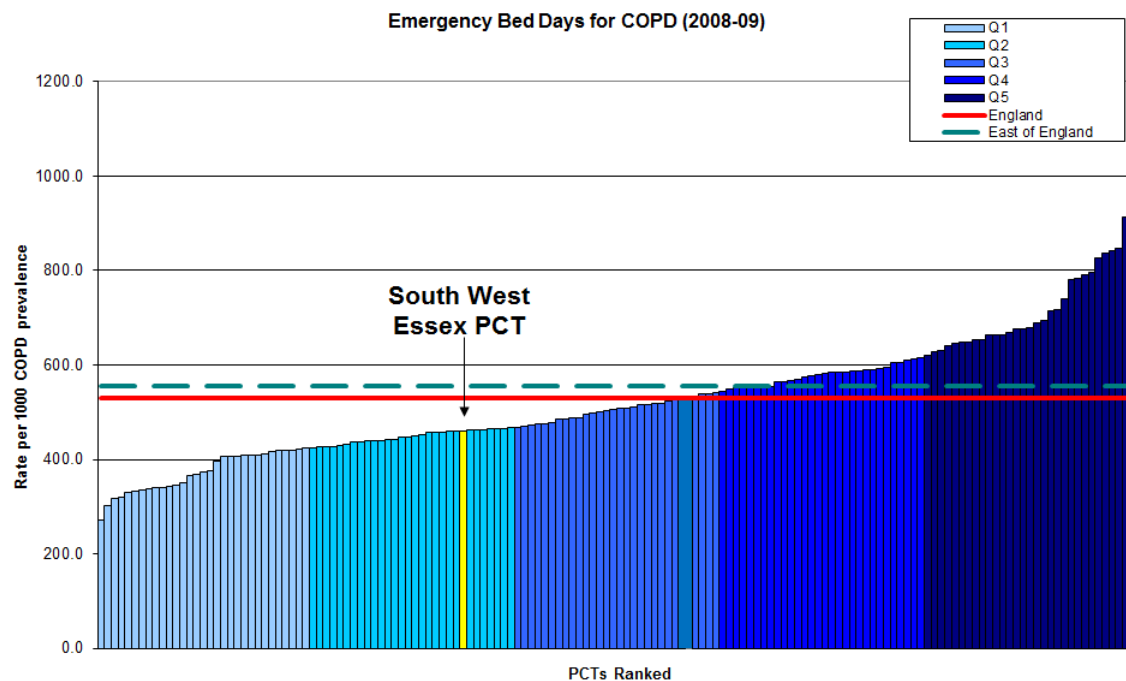
Given that the mortality rate excluding other COPDs for South West Essex is significantly better than the average for England, 'other COPD' appears to be the cause of our poor performance. This is potentially concerning and a QIPP priority given the PCT's high overall programme budget spend on respiratory conditions.

Figure 7.66 shows the completeness of COPD GP practice disease registers for south west Essex compared to other PCTs, by plotting PCTs in England's differences between observed and expected figures on COPD registers on a funnel plot. Like the majority of PCTs in England, case finding of COPD patients is poor and we can say with 99% confidence that up to 29% of patients with COPD are not recorded on a practice COPD register.

This provides further explanation as to our high programme spend and poor health outcome in this disease area.

Figure 7.67 shows Emergency bed-days per 1,000 patients for COPD (2008-9)

Figure 7.67



Despite relatively high directly standardised mortality rates for COPD and high programme budget spend for this area, emergency bed days per 1000 COPD prevalence is in the second best performing quintile in the country.

## Conclusions

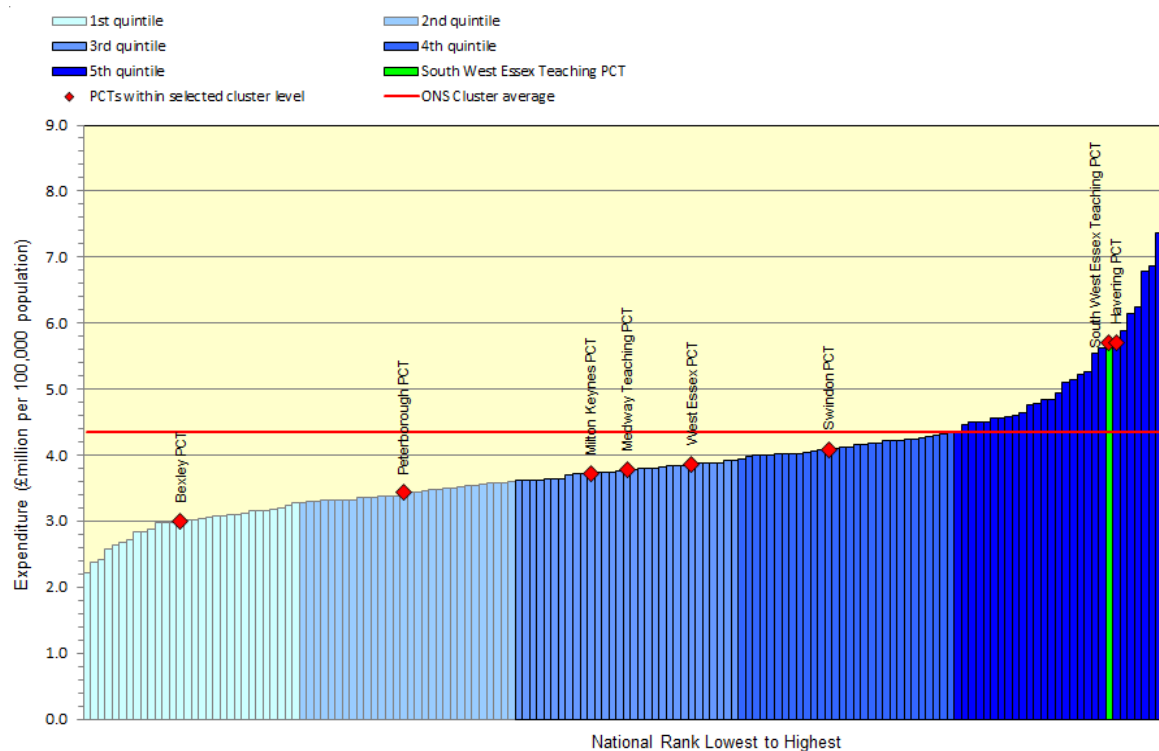
Programme spend rate in south west Essex for respiratory problems are amongst the largest in England, with the PCT falling into the worse performing quintile. Although directly standardised mortality rates for Asthma and Emphysema and Bronchitis are significantly better than national rates, when other COPD is considered, our rates as a PCT and in Thurrock are significantly worse.

Case finding at a practice level for COPD is currently poor and improving this will likely impact positively on both outcomes for patients and overall programme spend. As such it is recommended that the CCG considers developing QIPP schemes to improve case finding, improve clinical management and reduce spend on COPD. Smoking is also the key risk factor for COPD and reducing smoking prevalence across Thurrock should be a key priority for all key agencies

## 7.9 Problems of the Skin

Spend on this programme covers conditions such as eczema, dermatitis, psoriasis, cellulitis, leg ulcers, acne, moles and pigments changes among others. South West Essex has higher than average spend in comparison to its ONS cluster. It is in the fifth quintile of expenditure per 100,000 population against all PCTs in England, particularly for burns where South West Essex is the second highest ranking PCT by spend in England. This high spend warrants further investigation.

Figure 7.68: Programme Budgeting Spend on Problems of the Skin



## 7.10 Problems of Musculo-Skeletal System and Trauma

The spend on this programme covers conditions such as juvenile arthritis, gout, rheumatoid arthritis, auto-immune disease, osteoarthritis, osteoporosis, joint deformities, back pain and other chronic pain of bone, muscle or joints. It excludes healthcare costs due to injuries.

**Figure 7.69: Programme Budgeting Spend on Problems of the Musculo-Skeletal System and Trauma**

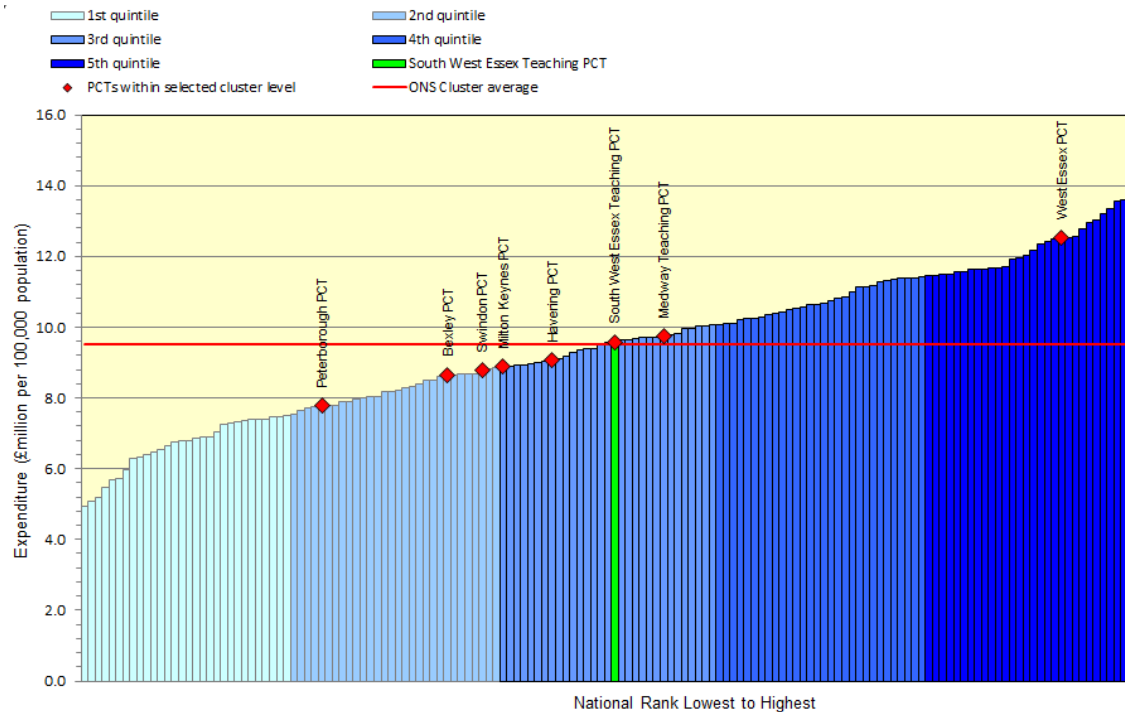


Figure 7.69 shows Programme Budgeting Spend per 100,000 population on Problems of the Musculo-Skeletal System and Trauma. SW Essex PCT is in the middle quintile of spend across PCTs in England for this programme and has a rate of spend approximately equal to its ONS cluster mean.

Figure 7.70: Key Indicators for Musculo-Skeletal System and Trauma

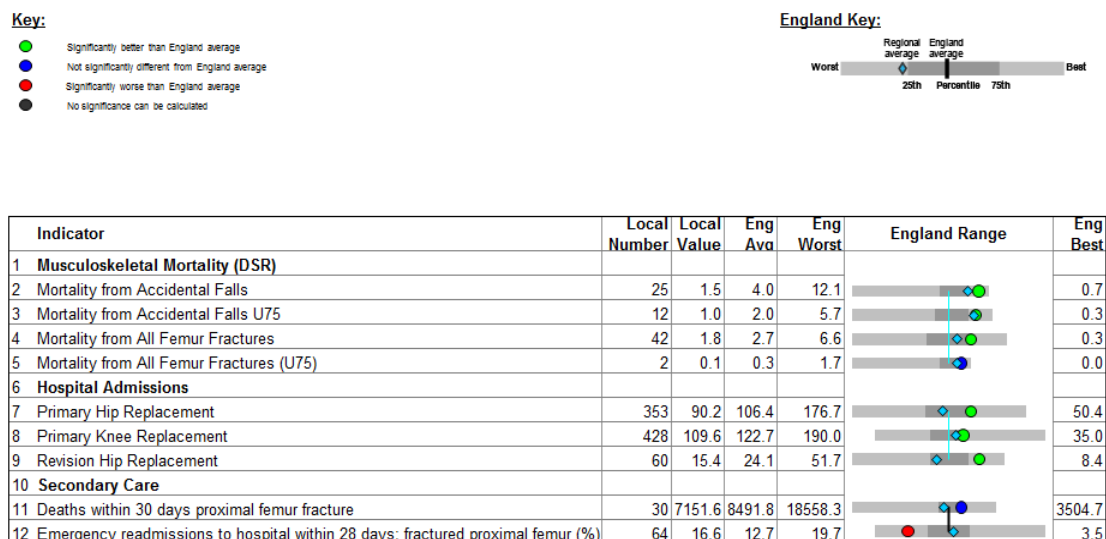
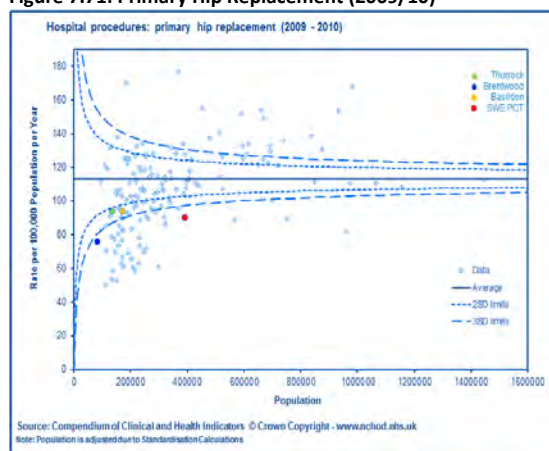
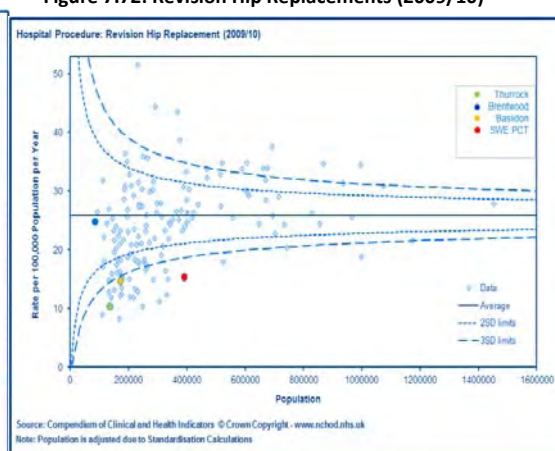


Figure 7.70 shows key indicators for Musculo-skeletal system an trauma at PCT level. SW Essex performs well across the majority of indicators compared to other PCTs. Directly Standardised Mortality Rates from accidental falls, accidental falls in the under 75s and all femur fractures is significantly lower than the England average. Similarly, hospital admissions for primary hip and knee replacements and revision hip replacements are also all significantly lower than England averages. However, the percentage of emergency readmissions to hospital within 28 days for fractured proximal femur in SW Essex is significantly worse than England averages.

**Figure 7.71: Primary Hip Replacement (2009/10)**



**Figure 7.72: Revision Hip Replacements (2009/10)**



Figures 7.71 and 7.72 show funnel plots of Rate of Primary and Revision Hip replacements per 100,000 population for each PCT in England and Basildon, Brentwood and Thurrock local authority populations in 2009/10. Rates of primary hip replacements for both SW Essex and Basildon, Brentwood and Thurrock local authority areas are significantly less than England PCTs. For revision hip replacements, rates are significantly less for SW Essex, Basildon and Thurrock, but not significantly different for Brentwood. This may reflect the fact that life expectancy in Basildon and Thurrock populations is less than that for Brentwood due to the additional health inequalities faced by Basildon and Thurrock populations compared to Brentwood. As such, a smaller proportion of the population in Thurrock and Basildon are living long enough to require revision Hip Replacements compared to Brentwood. It could also suggest that patients in Basildon and Thurrock are more likely to have other health conditions that make surgical procedure for revision hip replacements more risky.

**Figure 7.73: PROMS Pre-Operative Score for Hip Replacement**

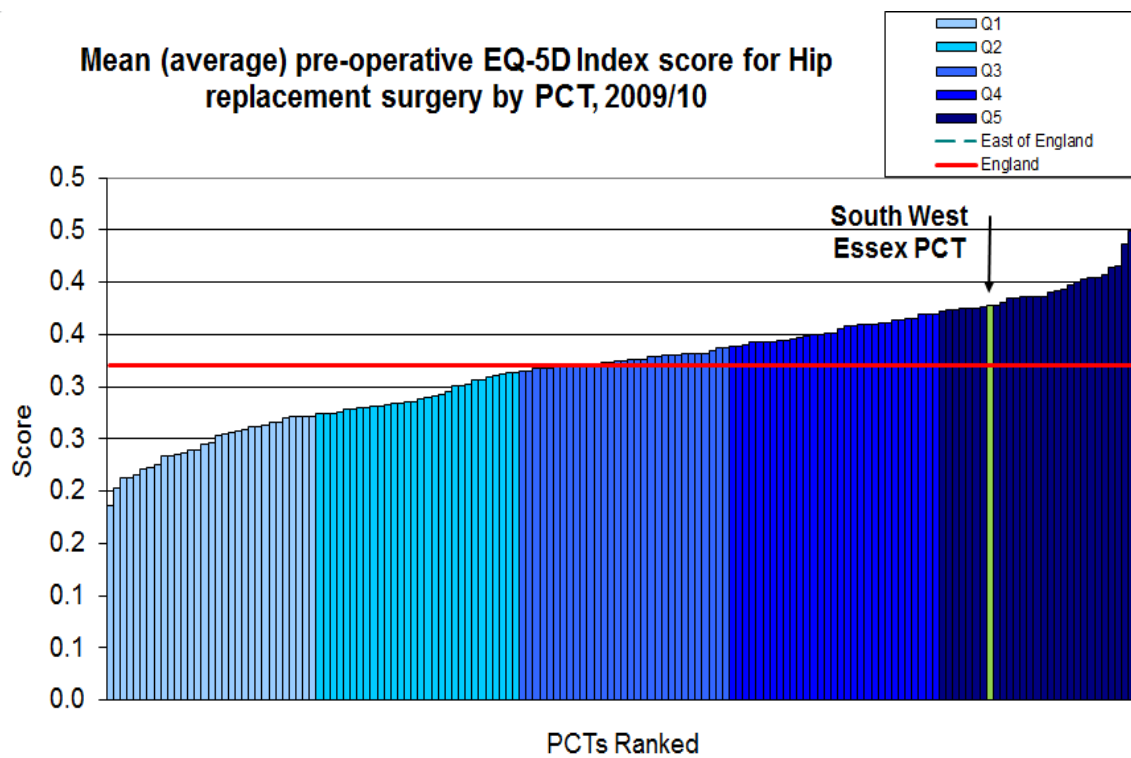


Figure 7.73 shows the Pre-Operative Patient Recorded Outcome Measure Scores (PROMS) (Mean Pre-Operative EQ-5DX Index score) for Hip replacement surgery for all England PCTs in 2009/10. The EQ-5D descriptive system provides two headline measures of general pre and post-operative health, the EQ-5D Index and EQ-VAS. The health gain is the difference between the scores before and after the operation for each measure.

The EQ-5D descriptive system of health-related quality of life states consists of five dimensions - mobility, self-care, usual activities, pain/discomfort and anxiety/depression - each of which can take one of three responses. The responses record three levels of severity - no problems/some or moderate problems/extreme problems - within a particular EQ-5D dimension. These five states are combined using weights to give a single index measure which ranges from -0.594 to 1, where 1 is the best possible state of health.

SW Essex ranked in quintile five for mean PROMS score for Hip replacement surgery, suggesting that patients are having hip replacements at a point where their health has deteriorated less than patients in other PCTs in England.

Figure 7.74: Hip Replacement Emergency Admissions

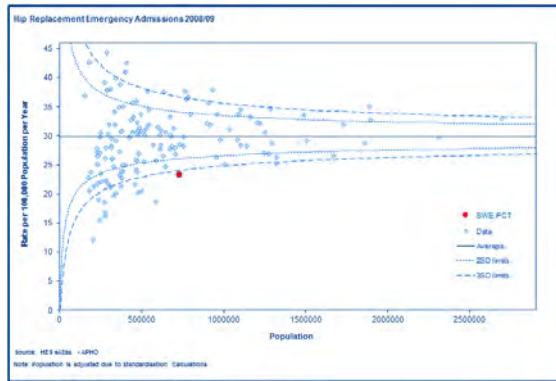
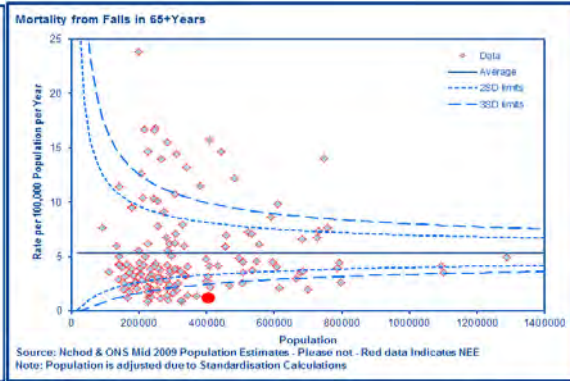
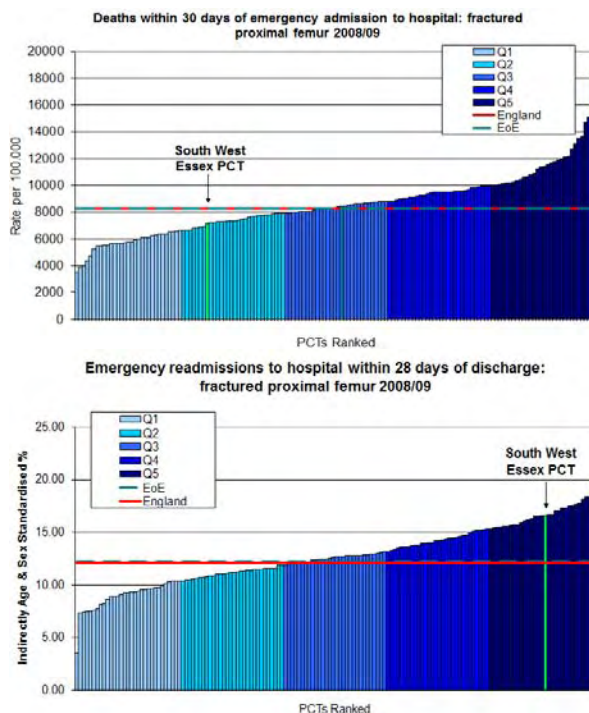


Figure 7.75: Mortality from Falls



Figures 7.74 and 7.75 show rate of emergency admissions for hip replacements and mortality rate from falls in the over 65s for all England PCTs. SW Essex has rates for both emergency admissions for hip replacements and mortality from falls in the over 65s which are significantly less than England PCT averages. This would suggest good falls prevention programmes and possibly good after care following a fall. The latter is supported by the data in figure 7.76 which shows that SW Essex PCT has deaths within 30 days of emergency admission to hospital for fractured proximal femur that are smaller than regional and national averages and are in the second best performing quintile in the country. However, figure 7.77 highlights that SW Essex has some of the greatest emergency re-admission rates to hospital within 28 days of discharge for fractured proximal femur, suggesting that patients may be being discharged too quickly, or that after care in the community is inadequate. This warrants further investigation.

Figures 7.76, 7.77



## Conclusions:



South West Essex generally performs well on this programme. Despite Programme budgeting spend being average for England, outcomes are generally significantly better than for England, specifically in the areas of Primary and Revision Hip Replacements, Knee replacements, Emergency Admissions for Hip Replacements, and mortality from falls in the over 65s.

The PCT has commissioned comprehensive falls prevention programmes since 2005 and these may partly explain our good performance on this programme. The high ranking of the PCT in terms of mean PROMS score for Hip Replacement suggests that our population are having hip replacements at a relatively early stage in terms of their health deterioration compared with other PCT populations.

The very high ranking of the PCT in terms of emergency re-admissions to hospital within 28 days of discharge following fractured proximal femur warrants further investigation.

## 6.11 Problems of the Genitourinary System

This area covers a range of conditions affecting the genitourinary tract (GU).

Figure 7.78 shows programme budgeting spend on problems of the GU for all PCTs in England and the ONS cluster comparators. The spend on this programme covers conditions such as nephritis, acute and chronic renal failure, urinary stones, cystitis, prostate disease, diseases of the testes and ovaries, pelvic inflammatory disease, endometriosis, fibroids, uterine prolapse, menstrual disorders and sexually transmitted infections but excluded infertility. SW Essex is spending less than the ONS cluster average and less than all of the ONS cluster comparators. Furthermore it is in the bottom half of the first quintile indicating it is one of the lowest spending PCTs nationally on problems of the Genitourinary System.

**Figure 7.78. Programme budgeting spend on problems of Genitourinary System**

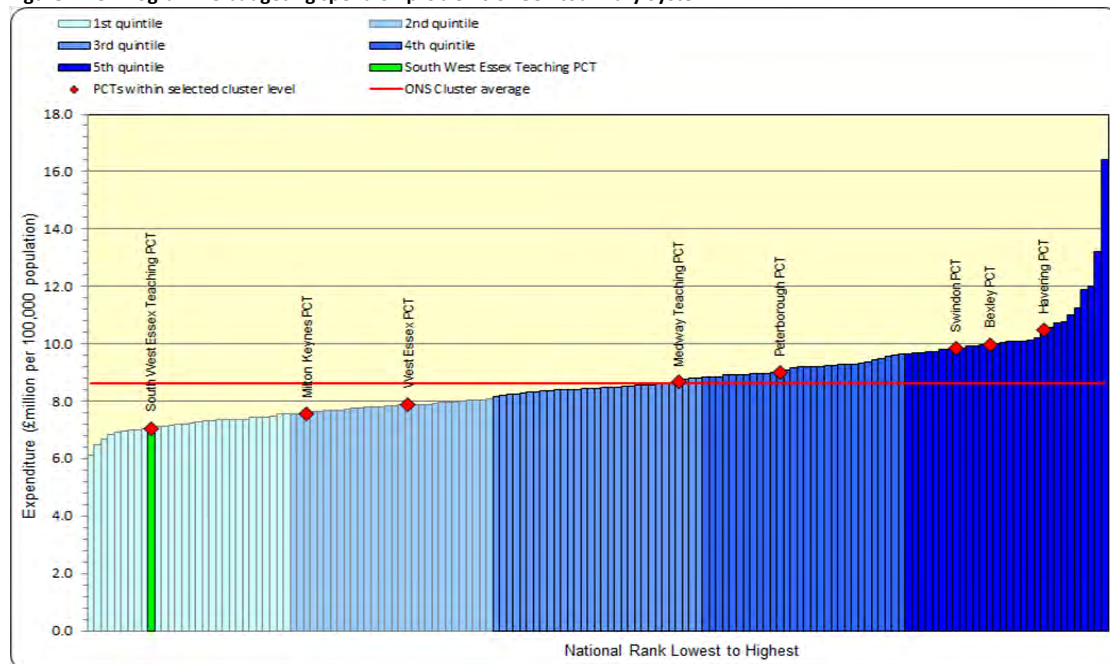


Figure 7.79 shows key indicators for problems of the genitourinary system. There is no significant difference in mortality rates from chronic renal failure in SW Essex compared with

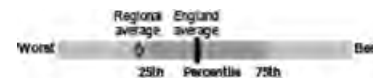
the national average. SW Essex has significantly greater achievement than the national average on kidney function testing which is positive because evaluating how well the kidneys are working means that kidney problems can be diagnosed earlier and therefore treated earlier preventing more serious complications. There is no significant difference in achievement of the remaining QOF indicators (BP 145/85 and ACE/ARB Therapy) in SW Essex compared to the national average.

Figure 7.79: Key Indicators for Problems of the Genitourinary System

**Key:**

- Significantly better than England average
- Not significantly different from England average
- Significantly worse than England average
- No significance can be calculated

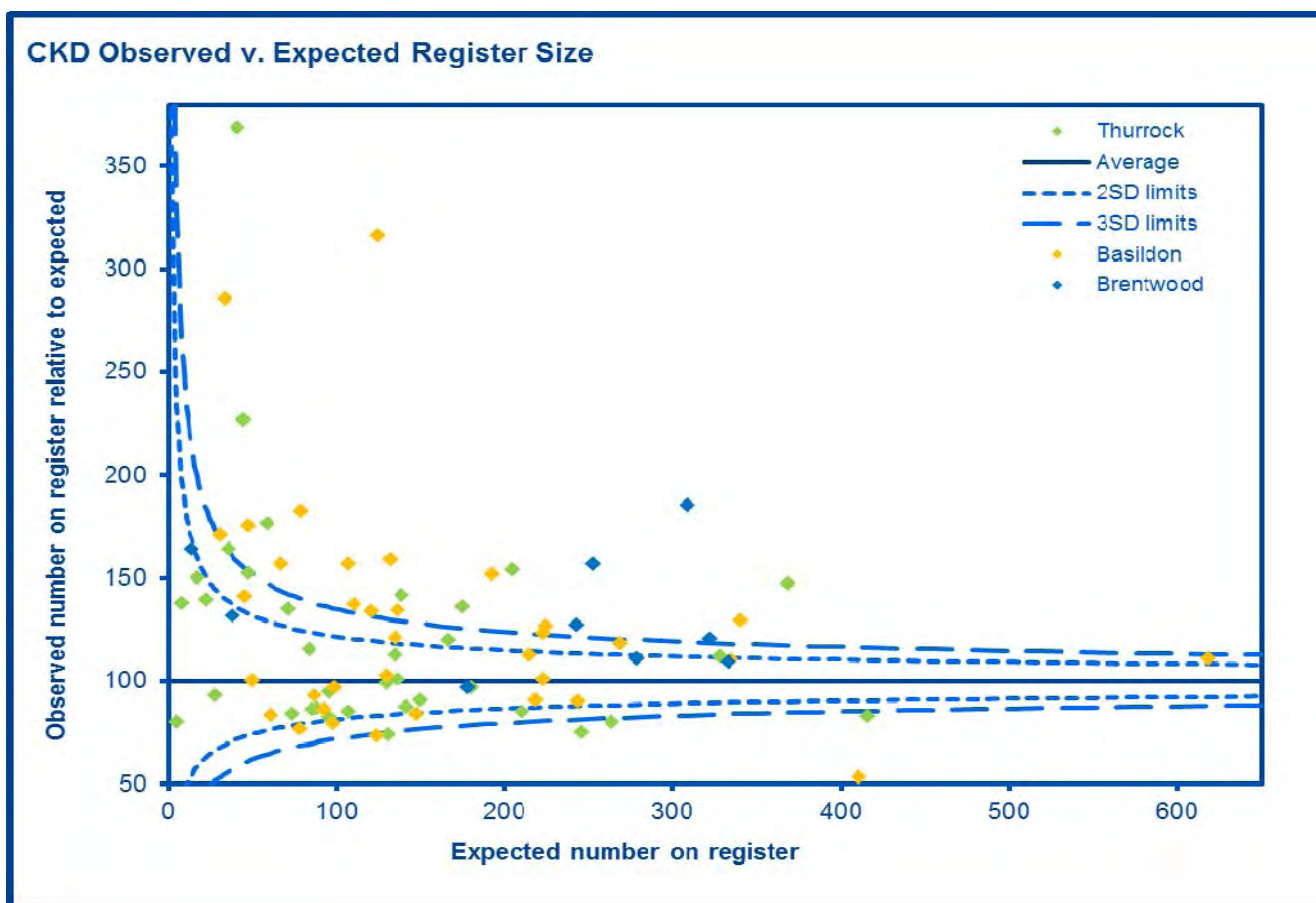
**England Key:**



Indicator	Local Number	Local Value	Eng Avg	Eng Worst	England Range	Eng Best
1 <b>MORTALITY</b>						
2 Chronic Renal Failure	23	1.1	1.5	3.4		0.4
3 Chronic Renal Failure u75 years	3	0.2	0.5	2.5		0.0
4 <b>QOF ATTAINMENT</b>						
5 BP 145/85 (CKD3)	9743	74.6	73.9	69.1		80.5
6 ACE/ARB Therapy (CKD5)	569	90.6	91.8	84.2		96.4
7 Kidney function test (CKD6)	10769	79.4	77.8	59.6		86.1

Figure 7.80 shows the observed versus expected prevalence of chronic kidney disease (CKD) for all GP practices in Basildon, Brentwood and Thurrock. Most GP practices have registers that are not statistically different from expected, however there are a few which may require further investigation.

Figure 7.80. Observed vs. Expected Prevalence CKD by practices in SW Essex

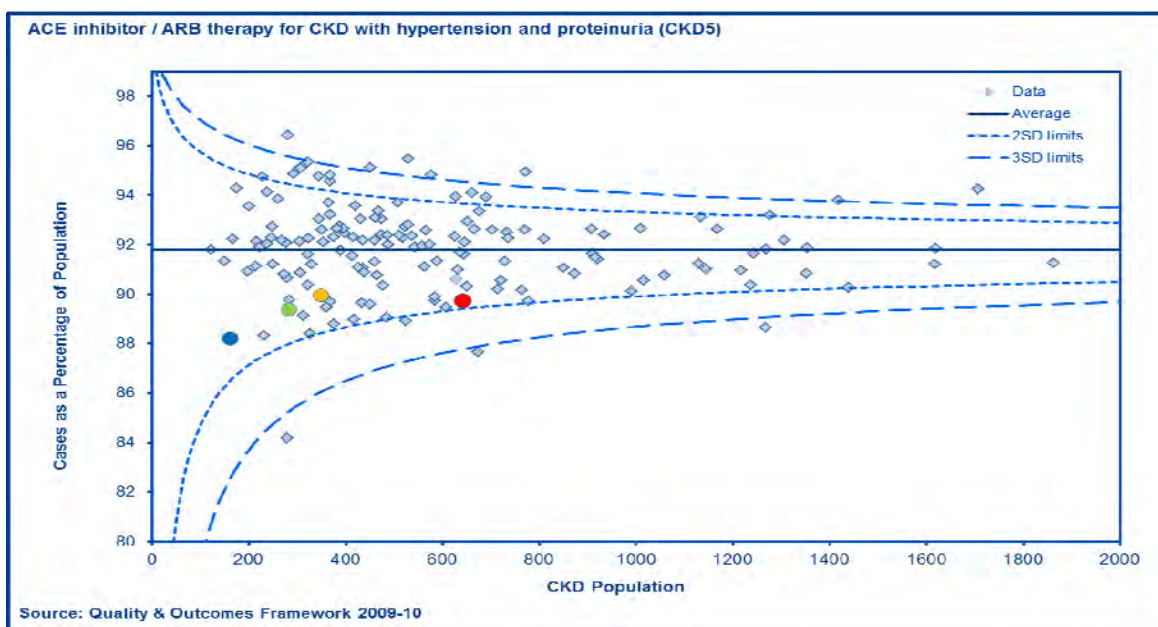


Source: 2009-10 QOF Register & ERPHO Modelled Estimates

Figure 7.81 shows the use of ACE inhibitor and ARB therapy in CKD with hypertension and proteinuria. There is no significant difference in the use of ACE inhibitor and ARB therapy in CKD with hypertension and proteinuria in SW Essex, Basildon, Brentwood and Thurrock compared with the national average.

Figure 7.81: Use of ACE inhibitor & ARB therapy in CKD

● Thurrock  
● Brentwood  
● Basildon  
● SWE PCT



## Conclusions / Summary

SW Essex is one of the lowest spending PCTs nationally on problems of the Genitourinary System. However, SW Essex is performing at a comparable level given the lack of spend on this programme. SW Essex is not performing significantly worse than compared with the England average in any of the areas recorded within this programme. SW Essex is performing significantly better than the national average on kidney function testing, testing more patients relative to the national average.

This said there are still improvements that can be made to the performance of SW Essex within this programme

## 7.12 Maternity and Reproductive Health

Spend on this programme covers infertility services (e.g. IVF), family planning, termination of pregnancy, supporting people through pregnancy to childbirth and parenting.

Figure 7.82: Programme Budgeting Spend on Maternity and Reproductive Health

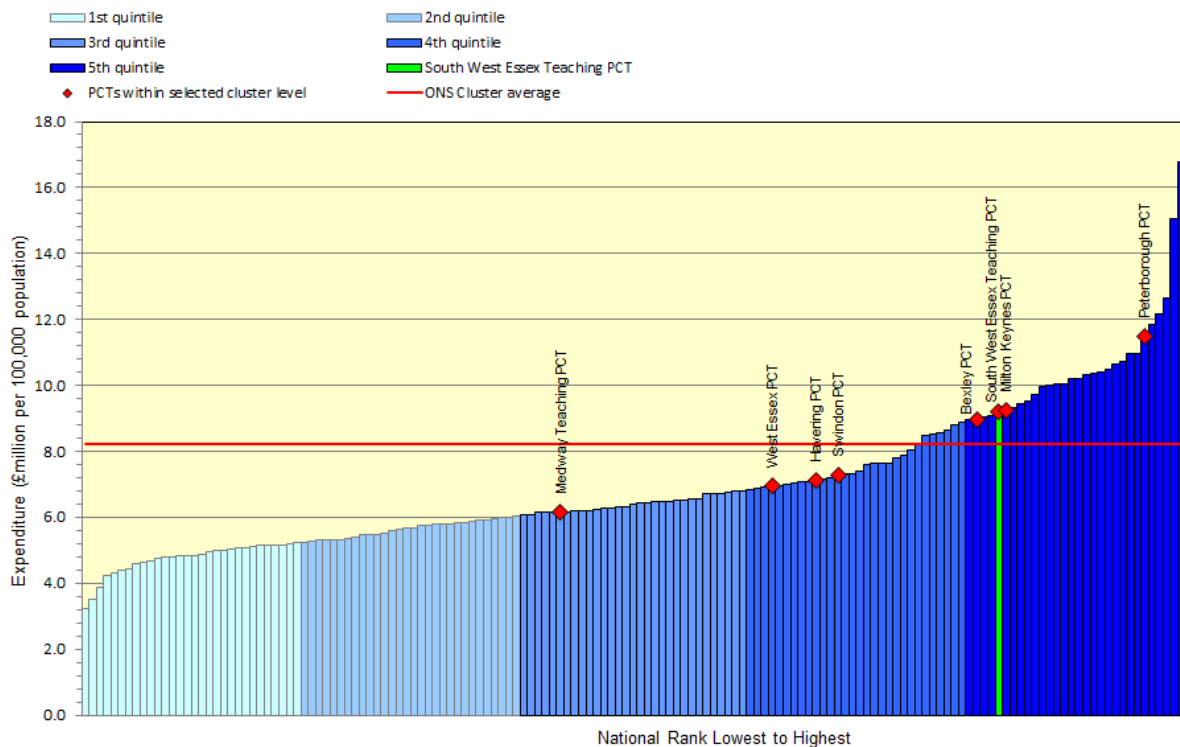
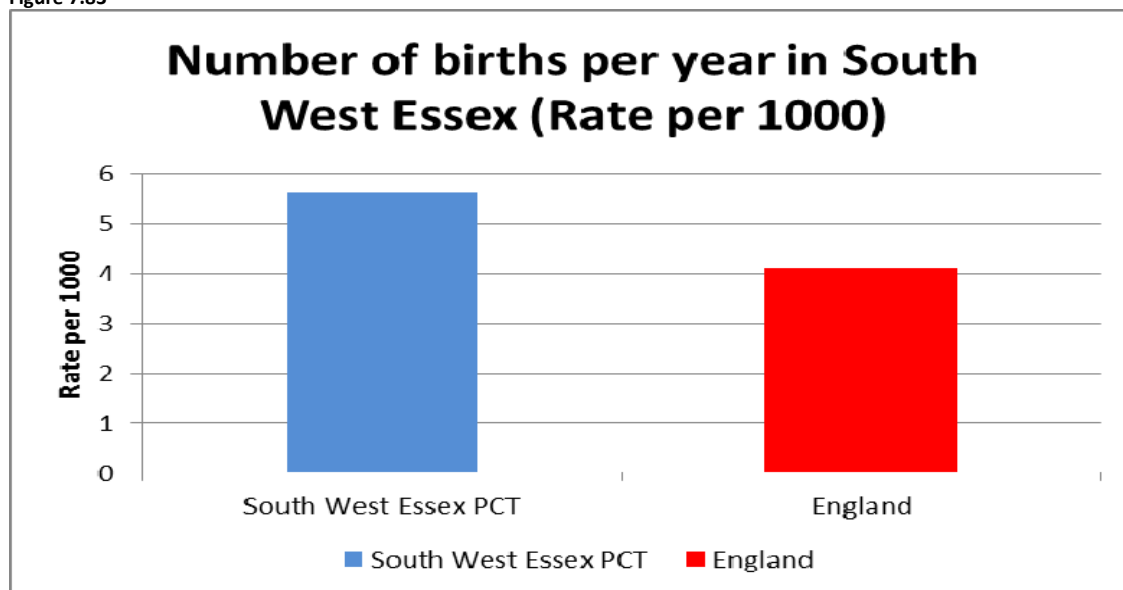


Figure 7.82 shows Programme Budgeting Spend per 100,000 population on Maternity and Reproductive Health. SW Essex PCT is in the highest quintile of spend across PCTs in England for this programme and has a rate of spend that is higher than its ONS cluster. However, outcomes for this programme are above average in comparison to other PCTs. Currently the number of births per year in South West Essex is at 5610 births per year, which is higher than the England rate as shown in Figure 6.93. This is expected to fall to 5400 by the year 2021.

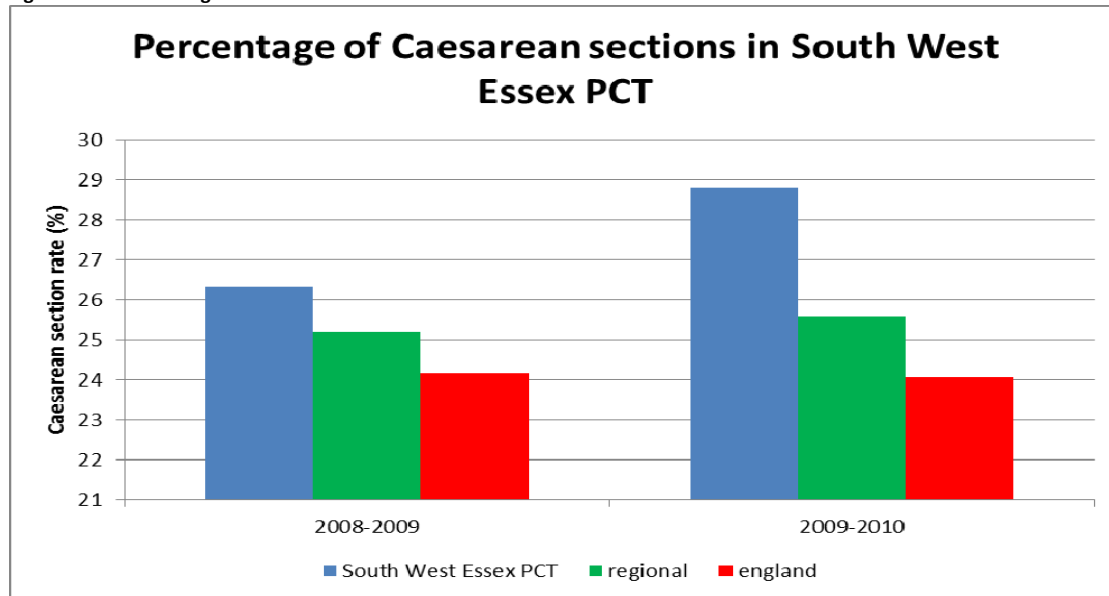
Figure 7.83



The delivery to older mothers aged 35 years and older is less than the rate for the region and England. Deliveries have fallen from 977 in 2008-09 to 896 in 2009-10. The delivery to teenage mother aged less than 20 years is similar to that of the region and England.

Figure 7.84 shows the percentage of caesarean sections for South West Essex. The percentage of caesareans has increased from 26.3% to 28.8% between 2008-09 and 2009-10 respectively and remains significantly higher than that of the East of England and England percentages.

Figure 7.84: Percentage of caesarean sections



The increase in deliveries by C-Section may be unjustified and warrants investigation to determine whether there are potential improvements to be made to care pathways along with associated cost savings.

Teenage pregnancy is a major driver a health inequality, both in terms of poor health and wellbeing outcomes for both parent and child, and because children of teenage mothers are much more likely to become teenage parents themselves, perpetuating inequality across generations.

Figure 7.85 shows the conception rates for females aged 15-17 in Thurrock. Overall the rate of conceptions has declined and at a steeper rate than England. Thurrock rates remain higher than the East of England region. However, Thurrock has started to fall within England rates.

Figure 7.85: Thurrock under 18 conception rates for women aged 15-17

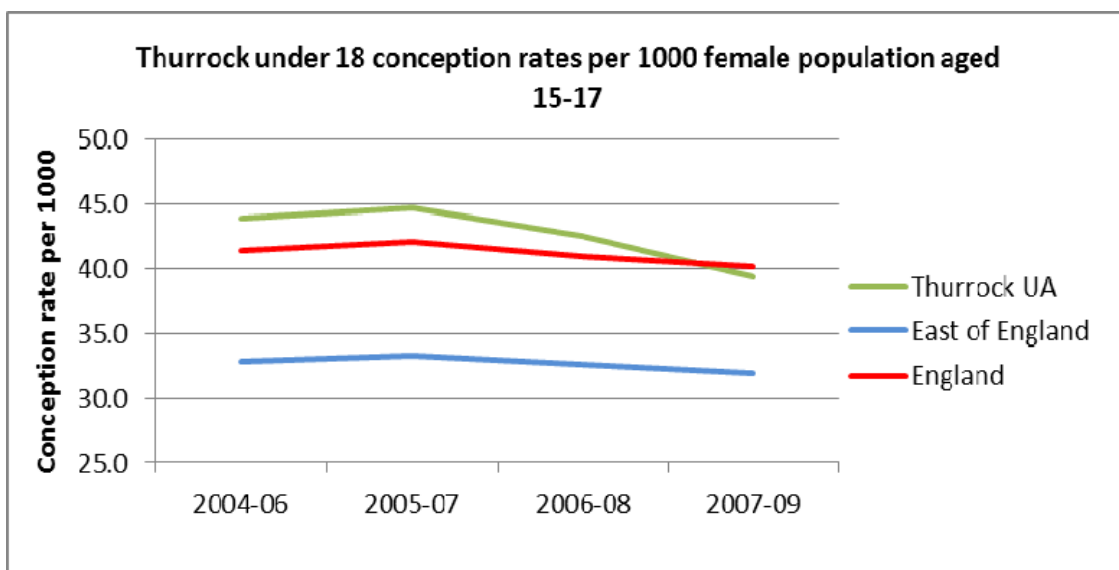


Figure 7.86 shows under 18 conception rates 2007-2009 by Thurrock wards in comparison to England. Belhus, Chadwell St Mary and Tilbury Riverside and Thurrock Park have conception rates significantly higher than that of England. The Homesteads and Stanford-le-Hope West have rates significantly lower than England. The highest conception rates are in wards with high deprivation.



Figure 7.86: Under 18 conception rates (2007-2009) by Thurrock ward

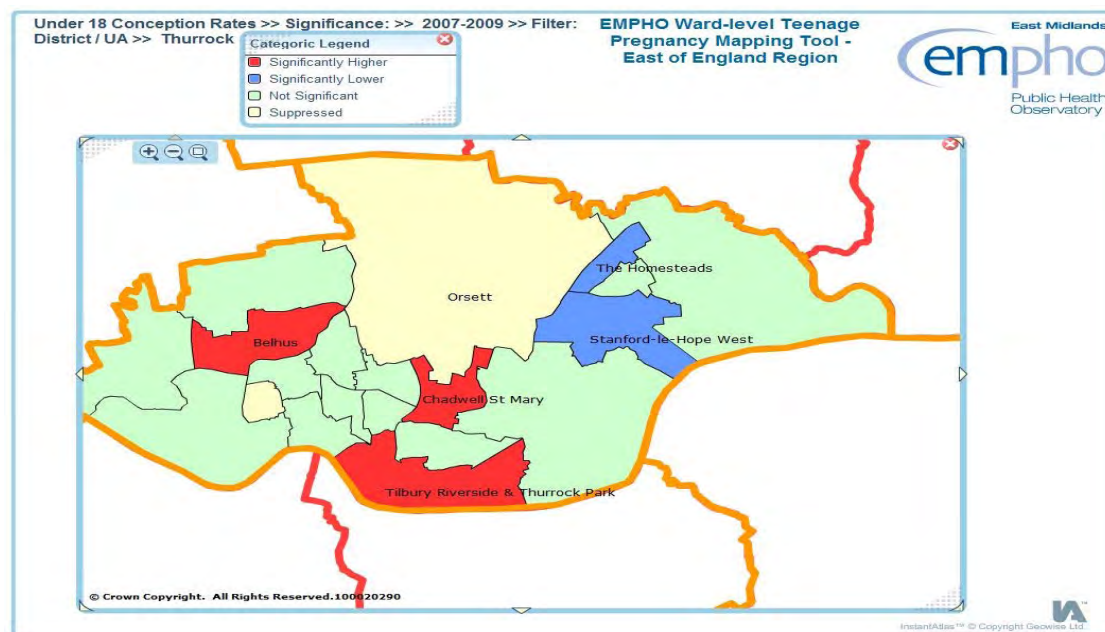
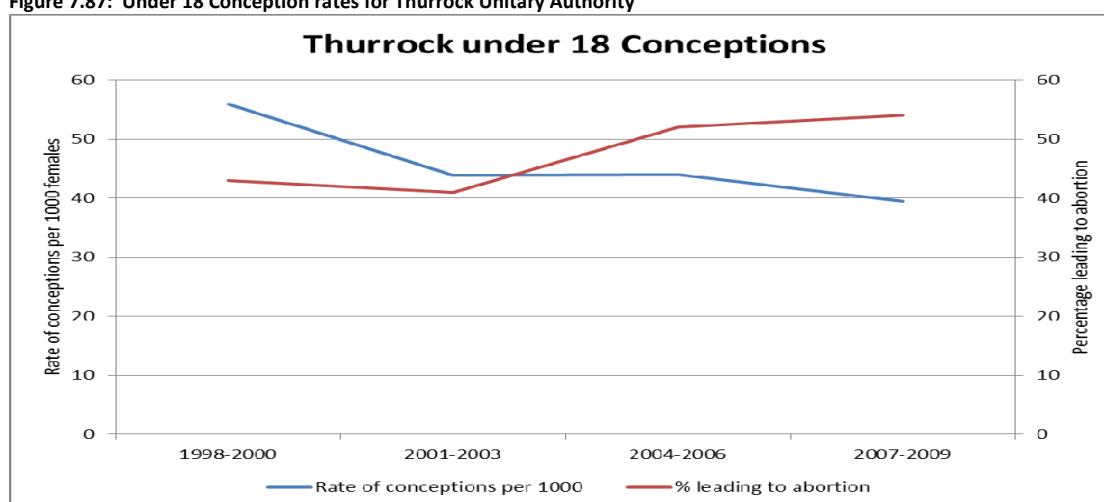


Figure 7.87 shows the under 18 conception rate for Thurrock and the percentage that lead to abortion. The rate of conceptions has decreased and those leading to abortion have increased. Whilst termination has an associated initial cost, it could be argued to be a better result in terms of impact on reducing health inequalities, as a positive driver to reducing teenage maternities. It may also suggest an increase in aspiration within Thurrock young people, as there is strong evidence that the aspirations and life chances of an under 18 year old girl correlates positively with her decision to opt for a termination rather than a birth. That said, primary prevention of under 18 conceptions remains the best possible outcome for both our population and health economy and has clearly been an effective driver of under 18 conception rate reduction in Thurrock during the last decade.

Figure 7.87: Under 18 Conception rates for Thurrock Unitary Authority

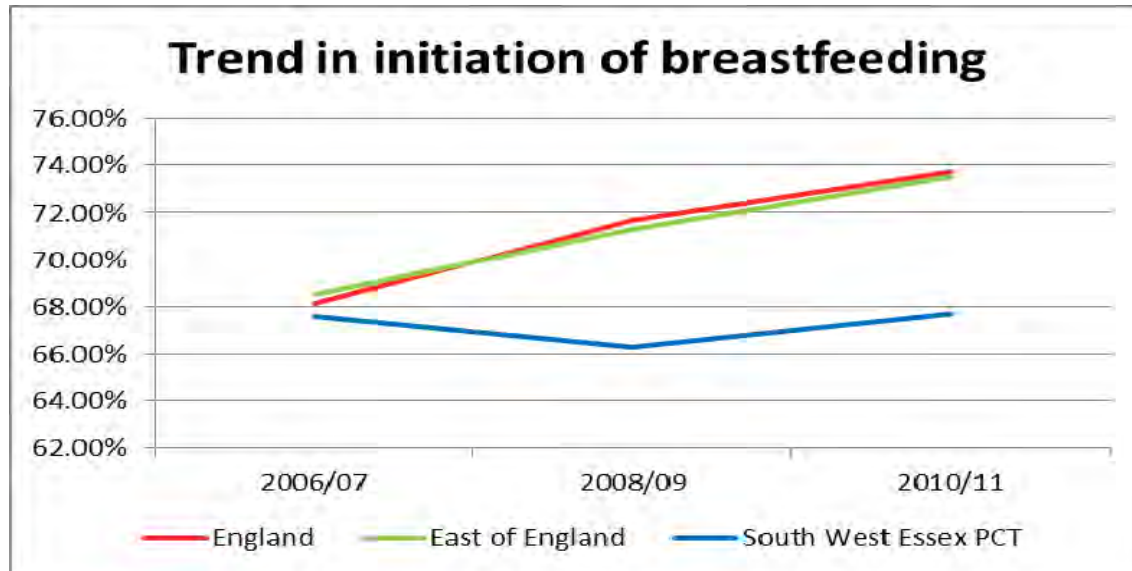


Source: Office for National Statistics and DfE

Figure 7.88 shows breastfeeding initiation from 2006-11 for South West Essex. Initiation rates in South West Essex are consistently lower, with an increasing difference, when compared to

England and the East of England. Evidence suggests that breastfeeding reduces the risk of later consequences (to child in terms of childhood illness and mother in terms of breast cancer prevention), therefore there is potential in the reduction of costs in other areas by encouraging mothers to breast feed.

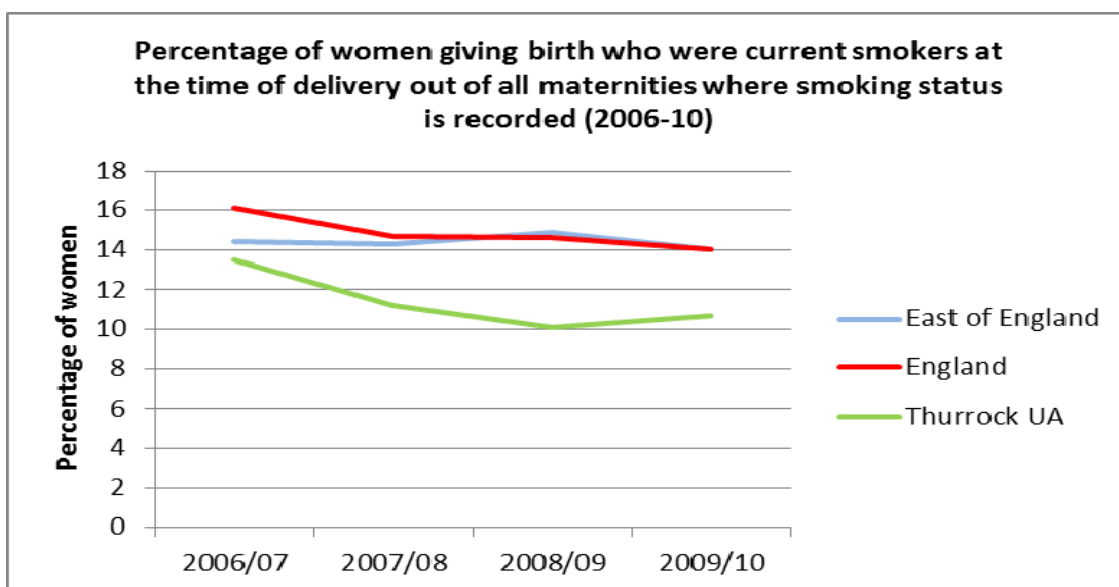
Figure 7.88: Trend in breastfeeding initiation in South West Essex



Smoking during pregnancy is related to many adverse effects on health and reproduction, in addition to the general health effects of tobacco. A number of studies have shown that tobacco use is a significant factor in miscarriages among pregnant smokers, and that it contributes to a number of other threats to the health of the foetus. Smoking nearly doubles the risk of low birth weight babies. Infants born to smokers weigh on average 200 grams less than infants born to women who do not smoke. Premature and low birth weight babies face an increased risk of serious health problems as new-borns have chronic lifelong disabilities such as cerebral palsy (a set of motor conditions causing physical disabilities), mental retardation and learning problems. Overall, they also face an increased risk of death.

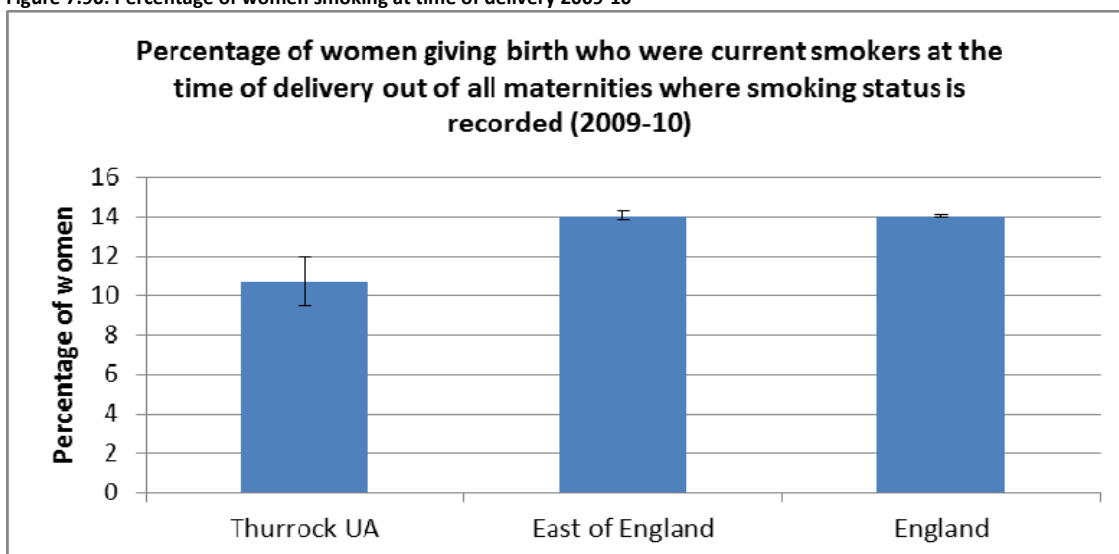
Figure 7.89 shows the percentage of pregnant women with smoking status recorded, still smoking at time of delivery for Thurrock from 2006-10. Women smoking at delivery has decreased in Thurrock, furthermore, at a rate faster than the East of England and England. Overall, Figure 6.89 shows that 10.79% of pregnant women in Thurrock are still smoking at the time they deliver in 2009/10. Thurrock has a statistically significantly lower rate of smoking at time of delivery at 95% confidence compared to the East of England and England.

Figure 7.89: Percentage of women smoking at time of delivery 2006-10



Source: Local Tobacco Control Profiles for England, Public Health Observatories in England.

Figure 7.90: Percentage of women smoking at time of delivery 2009-10

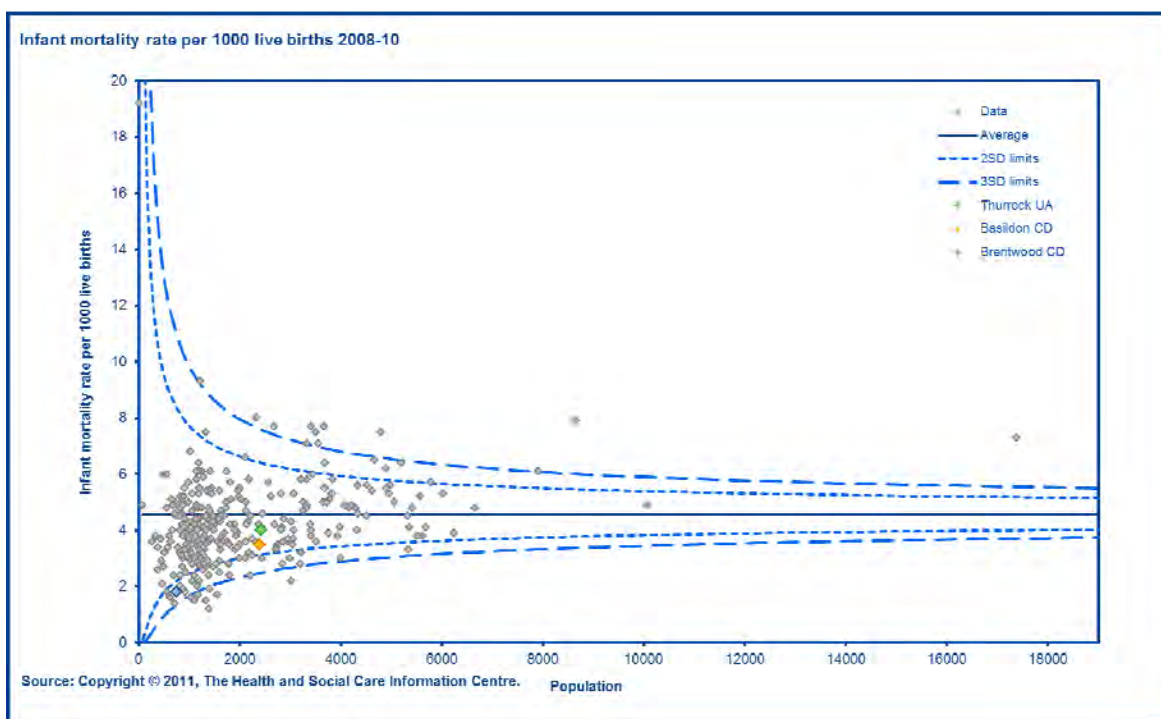


Source: Local Tobacco Control Profiles for England, Public Health Observatories in England.

From a public health point of view, this is highly encouraging, although rates of smoking at time of delivery are likely to vary between different geographical areas of Thurrock and correlate with deprivation levels.

Infant mortality is defined as the ratio of infant deaths to live births. Figure 7.91 shows the infant mortality rate of all local authorities in England. Thurrock has an infant mortality rate that is slightly lower than the average.

Figure 7.91: Infant mortality rate per 1000 live births 2008-10



## Conclusions:

Spend on Maternity and Reproductive Health is comparably high in South West Essex. This is partly explained by the fact that we have a comparably high birth rate. However, the high rate of deliveries by C-Section and the large increase between 08/09 and 09/10 may be unjustified and warrants investigation to determine whether there are potential improvements to be made to care pathways along with associated cost savings.

Overall the rate of conceptions for females aged 15-17 in Thurrock has declined and at a steeper rate than England. Thurrock rates remain higher than the East of England region. However, Thurrock has started to fall within England rates. Teenage pregnancy is a major driver a health inequality, both in terms of poor health and wellbeing outcomes for both parent and child, and because children of teenage mothers are much more likely to become teenage parents themselves, perpetuating inequality across generations.

Belhus, Chadwell St Mary and Tilbury Riverside and Thurrock Park wards in Thurrock have conception rates significantly higher than that of England. The Homesteads and Stanford-le-Hope West have rates significantly lower than England. The highest conception rates are in wards with high deprivation.

The rate of conceptions in Thurrock has decreased and those leading to abortion have increased. Whilst termination has an associated initial cost, it could be argued to be a better result in terms of impact on reducing health inequalities, as a positive driver to reducing teenage maternities. It may also suggest an increase in aspiration within Thurrock young people, as there is strong evidence that the aspirations and life chances of an under 18 year old girl correlates positively with her decision to opt for a termination rather than a birth.

Primary prevention of under 18 conceptions remains the best possible outcome for both our population and health economy and has clearly been an effective driver of under 18 conception rate reduction in Thurrock during the last decade.

There is a large gap between the breast feeding initiation rates in South West Essex compared to England and the East of England. Evidence suggests that breastfeeding reduces the risk of later consequences (to child in terms of childhood illness and mother in terms of breast cancer prevention), therefore there is potential in the reduction of costs in other areas by encouraging mothers to breast feed.

Women smoking at time of delivery has decreased in Thurrock, furthermore, at a rate faster than the East of England and England.

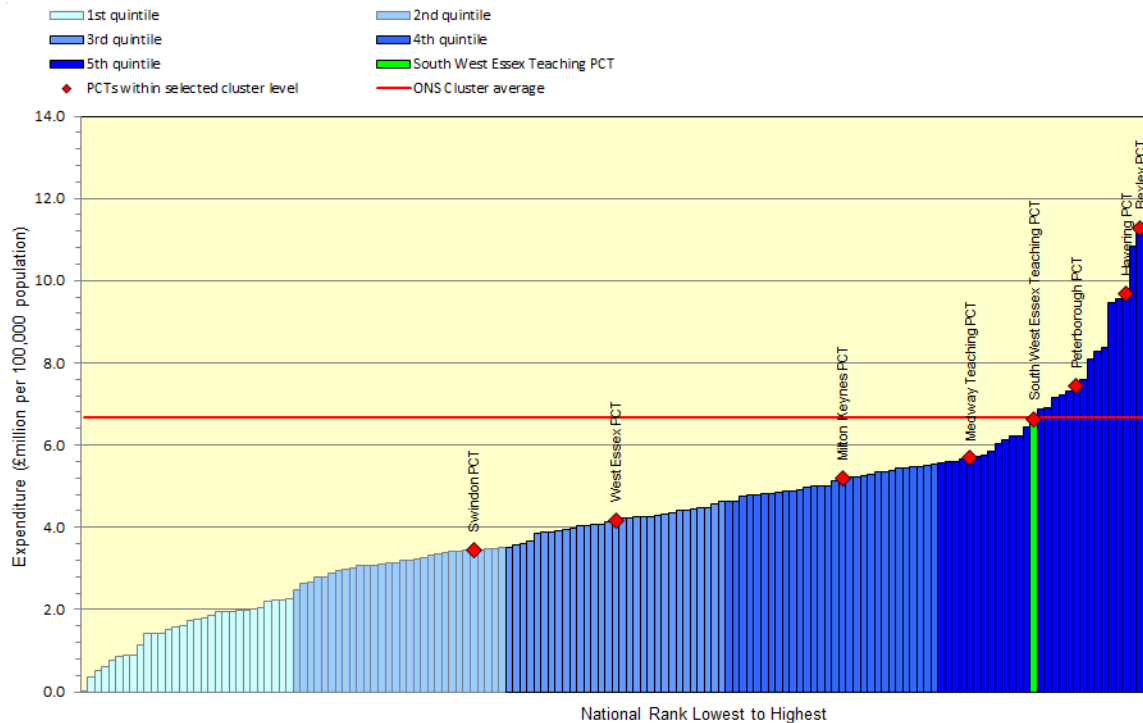
Thurrock has a statistically significantly lower rate of smoking at time of delivery at 95% confidence compared to the East of England and England. From a public health point of view, this is highly encouraging, although rates of smoking at time of delivery are likely to vary between different geographical areas of Thurrock and correlate with deprivation levels.

Thurrock has an infant mortality rate that is slightly lower than the average.

## 8. PREVENTING ILL HEALTH AND IMMUNISATION

This programme includes health improvement and prevention programmes for example commissioned activity that reduces and prevents smoking and obesity, promotes sensible drinking or provides health trainers to deprived communities. It also includes immunisation programmes.

**Figure 8.1: Programme Budgeting Spend on Preventing Ill-health and Immunisation**



Source: [www.erpho.co.uk](http://www.erpho.co.uk)

The most common causes of mortality, premature mortality and morbidity in Thurrock, and areas of biggest healthcare spend - Cardio-vascular disease, cancer, COPD, mental health and diabetes are all driven by one or more of common lifestyle factors; smoking, obesity (linked to nutrition and physical activity), and alcohol consumption. As such, initiatives that improve the lifestyle behaviours of our population will impact positively on both mortality and morbidity rates and healthcare costs. Both smoking and obesity rates in Thurrock are greater than national and regional averages.

Figure 8.1 shows Programme Budgeting Spend on Preventing Ill Health and Immunisation per head of population for all PCTs in England and SW Essex PCT's ONS Cluster. SW Essex PCT is in the highest quintile in terms of spend on preventing ill health per head of population when compared to other PCTs in England. However, given its high levels of deprivation is to be expected. When compared to its ONS cluster of PCTs, SW Essex spend on preventing ill health is average.

## 8.1 Smoking

Figure 8.2

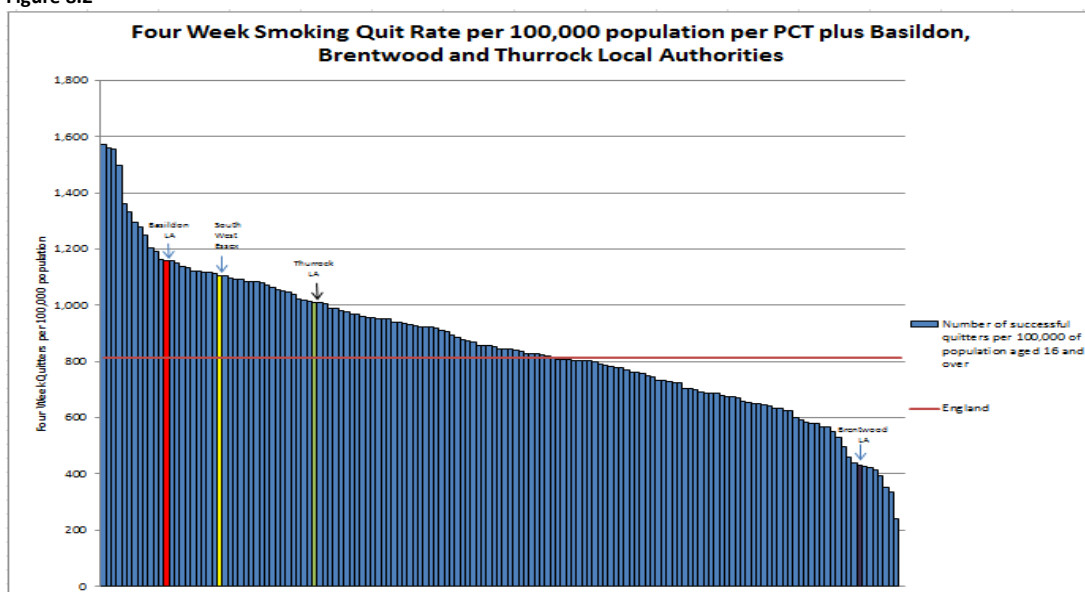


Figure 8.2 shows the four week smoking quit rate (through NHS commissioned services) per 100,000 population for all PCTs in England plus Thurrock, Basildon and Brentwood local authority populations. Thurrock has a smoking quit rate greater than the England average although less than South West Essex as a whole. However, smoking quit rate per 100,000 population will be a product of the overall population of each PCT that smoke as well as the success of commissioned services in helping smokers quit at a population based level, and therefore should be interpreted with caution as a measure in terms of success of reducing smoking prevalence.

Figure 8.3

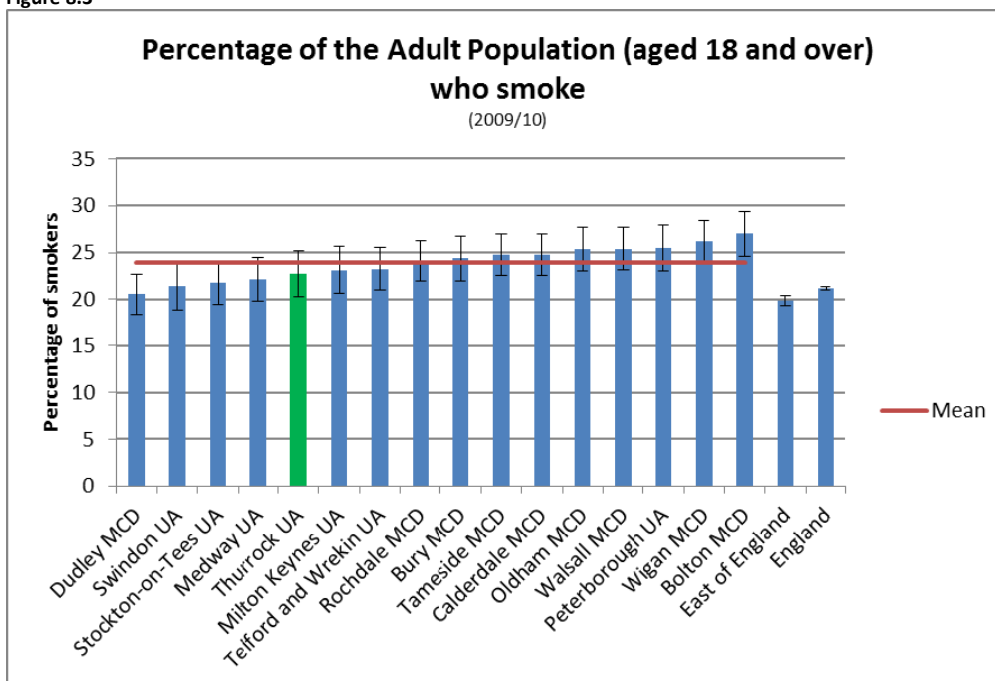
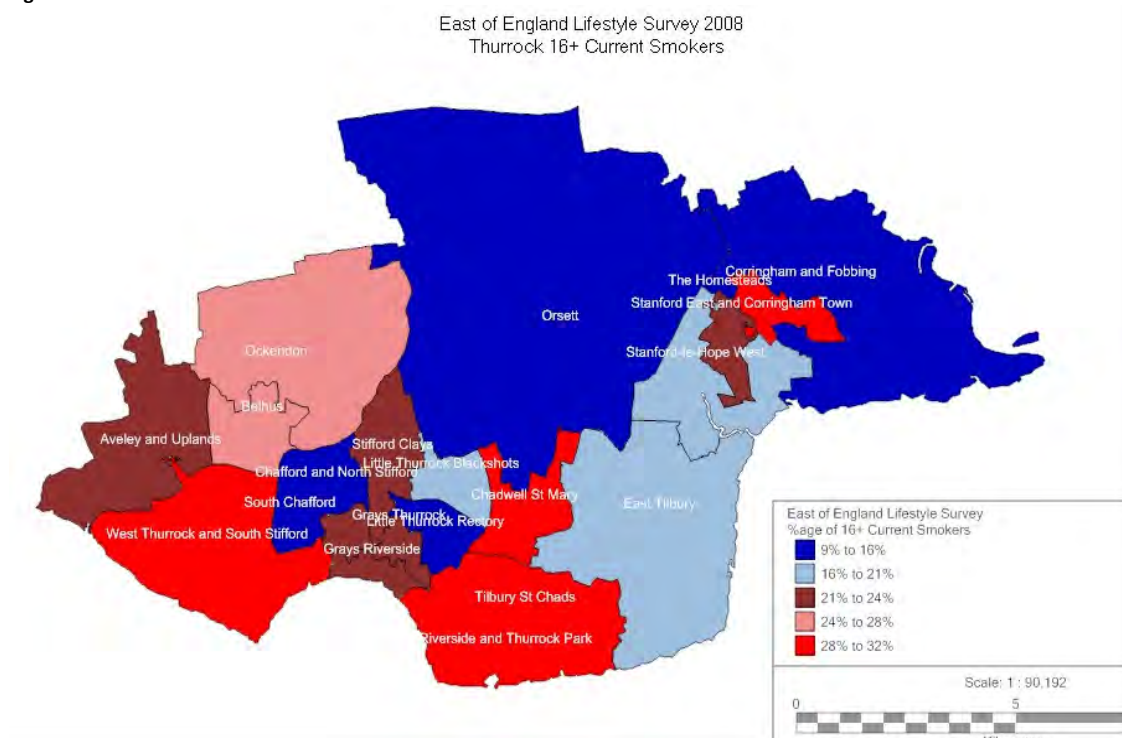




Figure 8.3 shows the overall adult smoking prevalence in Thurrock for 2009/10 compared to the England mean and the CIPFA comparator local authorities. Thurrock's overall adult smoking prevalence is significantly greater than both England's and the East of England. Thurrock has a smoking prevalence slightly lower than the mean for its CIPFA comparator group, however because the 95% confidence intervals for Thurrock's smoking prevalence overlap with all of its CIPFA comparators, we cannot conclude with 95% confidence that Thurrock's smoking prevalence is statistically significantly different to any of its comparator local authorities.

Smoking prevalence is not distributed evenly within Thurrock. Figure 8.4 shows the adult smoking prevalence by Middle Super Output Area (MSOA) for Thurrock, as measured by the 2008 East of England Lifestyle survey. This is the most up to date data that is available for smoking prevalence at this level of geography. The greatest prevalence of smoking is in Grays, Tilbury St. Chads, Tilbury Riverside and parts of Stanford East and Corringham Town.

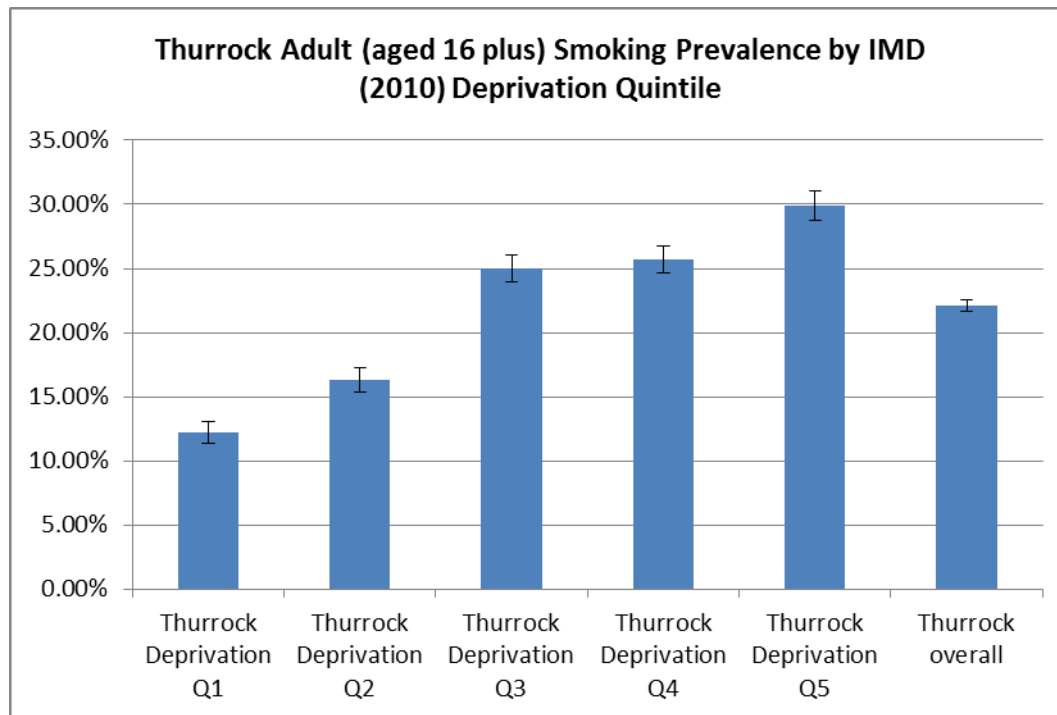
**Figure 8.4**



Source: East of England Lifestyle Survey 2008.

Smoking prevalence is associated with deprivation. Figure 8.5 shows that the prevalence of smoking of the population aged 16 plus in the most deprived quintile (Q5) is approximately two and a half times that the population living in the least deprived quintile (Q1). This is significant, as differences in smoking prevalence between affluent and deprived communities are this single biggest cause of health inequalities.

Figure 8.5

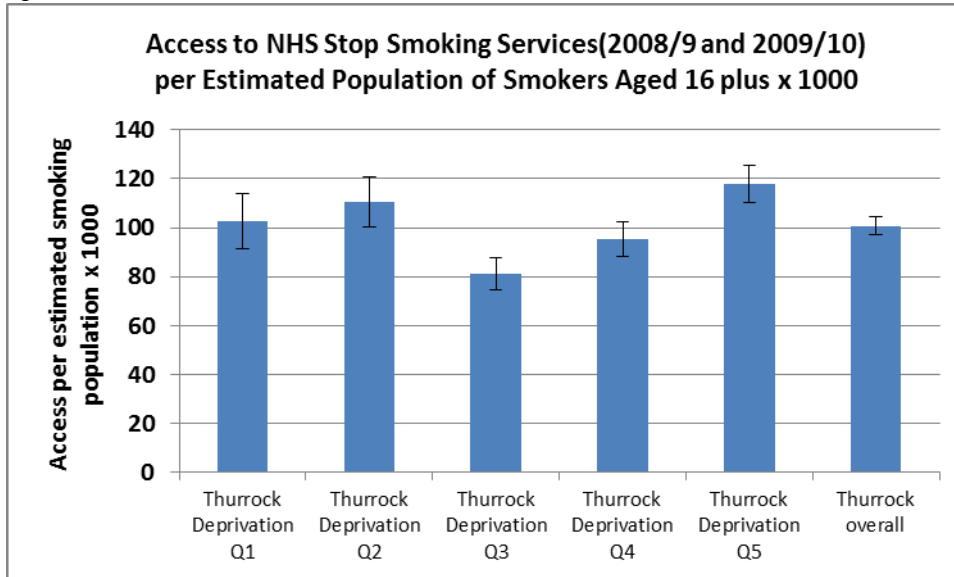


Source: NHS South West Essex Public Health Directorate (2011)

The confidence intervals on figure 8.5 also show that smoking prevalence in the 20% most deprived MSOAs within Thurrock (deprivation quintile 5) are significantly greater than deprivation quintile 4 (the next most deprived) and Thurrock as a whole. Smoking prevalence in deprivation quintiles three and four are not significantly different, but are statistically significantly less than Thurrock's most deprived quintile but significantly greater than Thurrock's overall prevalence. Thurrock's most affluent 40% of adults have smoking prevalence statistically significantly less than Thurrock's overall prevalence, with the 20% most affluent having a smoking prevalence significantly less than the next most affluent quintile. (Deprivation Q2). In order to improve health across the Borough, services need to reduce smoking prevalence in all MSOAs. However, in order to reduce health inequalities within Thurrock, services need to be commissioned that reduce the prevalence of smoking in the more deprived MSOAs at a faster rate than the more affluent ones. This will require a greatest focus of stop smoking service provision on MSA in deprivation quintile 5, with additional support for quintiles 3 and 4.

Figure 8.6 shows the rate of access per smoker to NHS commissioned stop smoking services per estimated smoking population x 1000, by deprivation quintile and for Thurrock over all. 'Access' is defined as accessing an NHS commissioned/provided stop smoking service and setting a four week quit date. This demonstrates how successful our stop smoking services are at attracting individual smokers to make a quit attempt, as a rate of the total population of smokers living in areas of differing affluence and deprivation within Thurrock.

Figure 8.6



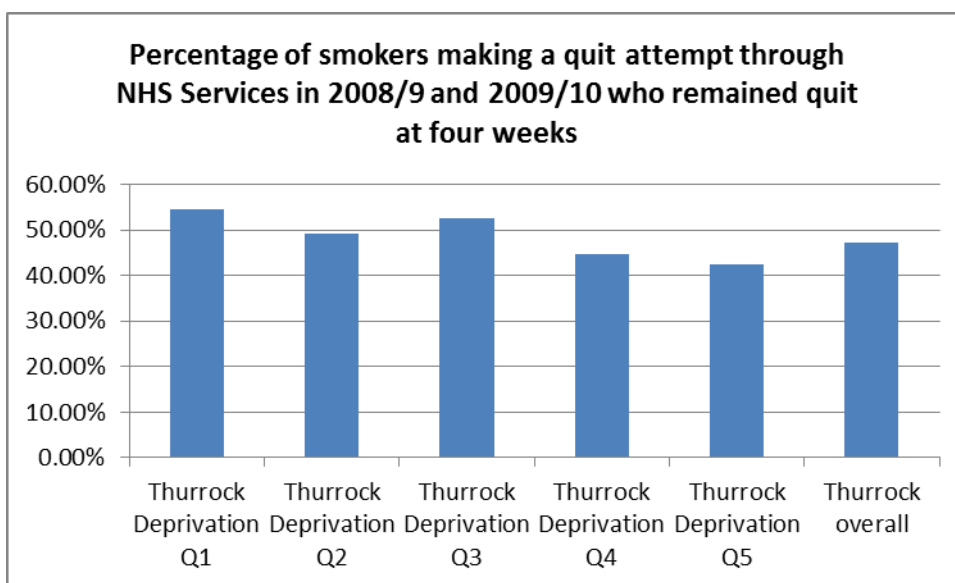
Source: NHS South West Essex Public Health Directorate (2011)

Smokers in the most deprived 20% of MSOAs in Thurrock (quintile 5) access NHS stop smoking services at a rate that is significantly greater than Thurrock's overall rate of access per estimated smoking population and the rate of access of smokers within deprivation quintiles 4 and 3. We can be confident of this with 95% statistical significance. However, the rate of access per smoker in the 40% most affluent MSOAs is also significantly greater than deprivation quintile 3 and not significantly different from deprivation quintiles 4 and 5.

As such current services are failing to target a greater proportion of smokers from the most deprived communities in Thurrock – something that is required if health inequalities are going to be reduced.

Figure 8.7 shows the success rate that smokers from the five Thurrock MSOA deprivation quintiles have in quitting smoking through a Thurrock NHS stop smoking service and remain quit at four weeks. (i.e. the *conversion rate* of smokers setting a quit date to a four week quit).

Figure 8.7

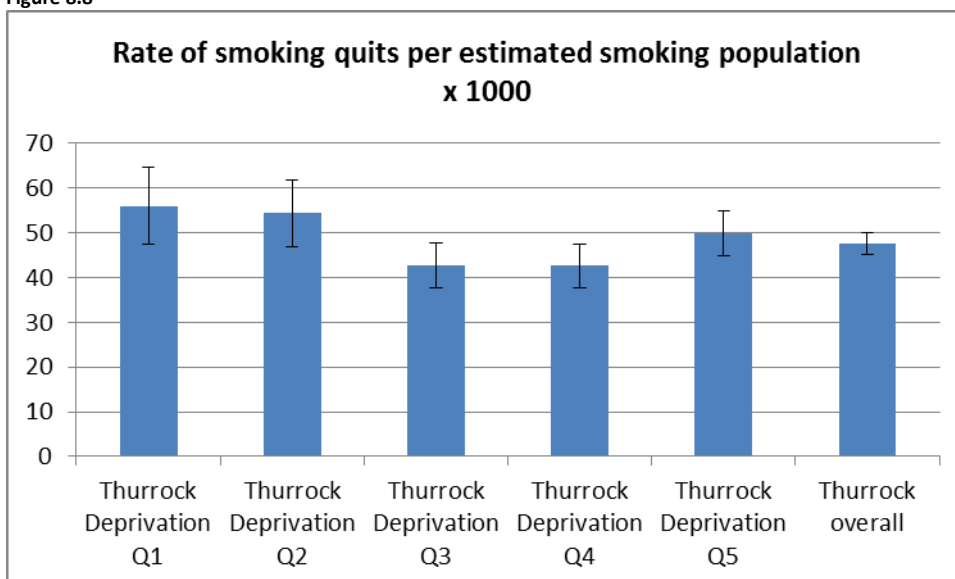


Source: NHS South West Essex Public Health Directorate (2011)

NICE Guidance<sup>i</sup> states that all NHS stop smoking services should achieve a minimum 35% conversion percentage of smokers setting a quit rate to those remaining quit at four weeks, to be considered of adequate quality. As figure B shows, smokers from all five deprivation quintiles achieve a quit success rate at four weeks above 35%, however the success rate of quitters largely decreases as deprivation increases, with smokers in the 40% most deprived MSOAs in Thurrock having a quit success rate less than the Thurrock over all figure, and smokers the 60% most affluent MSOAs having a quit success rate at four weeks greater than the Thurrock over all. This mirrors national research which shows the smokers from deprived communities find it more difficult to quit smoking than those from affluent ones.<sup>ii</sup>

Figure 8.8 shows the rate of smoking quitting at four weeks through NHS commissioned services per estimated total adult (16+) smoking population (x1000) of Thurrock MSOAs across the five quintiles of deprivation, and for Thurrock as a whole.

Figure 8.8



Source: NHS South West Essex Public Health Directorate (2011)

Because the confidence intervals for the quit rates of each deprivation quintile overlap, we cannot conclude with 95% confidence that there is any statistically significant difference in smoking quit rate through NHS commissioned services in Thurrock as a percentage of estimated smoking population between any of the deprivation quintiles. This would suggest that whilst NHS stop smoking services are successful at helping some smokers quit, they are failing to impact on health inequalities in Thurrock, as smokers in our most deprived communities are not quitting smoking at a rate greater than our affluent ones.

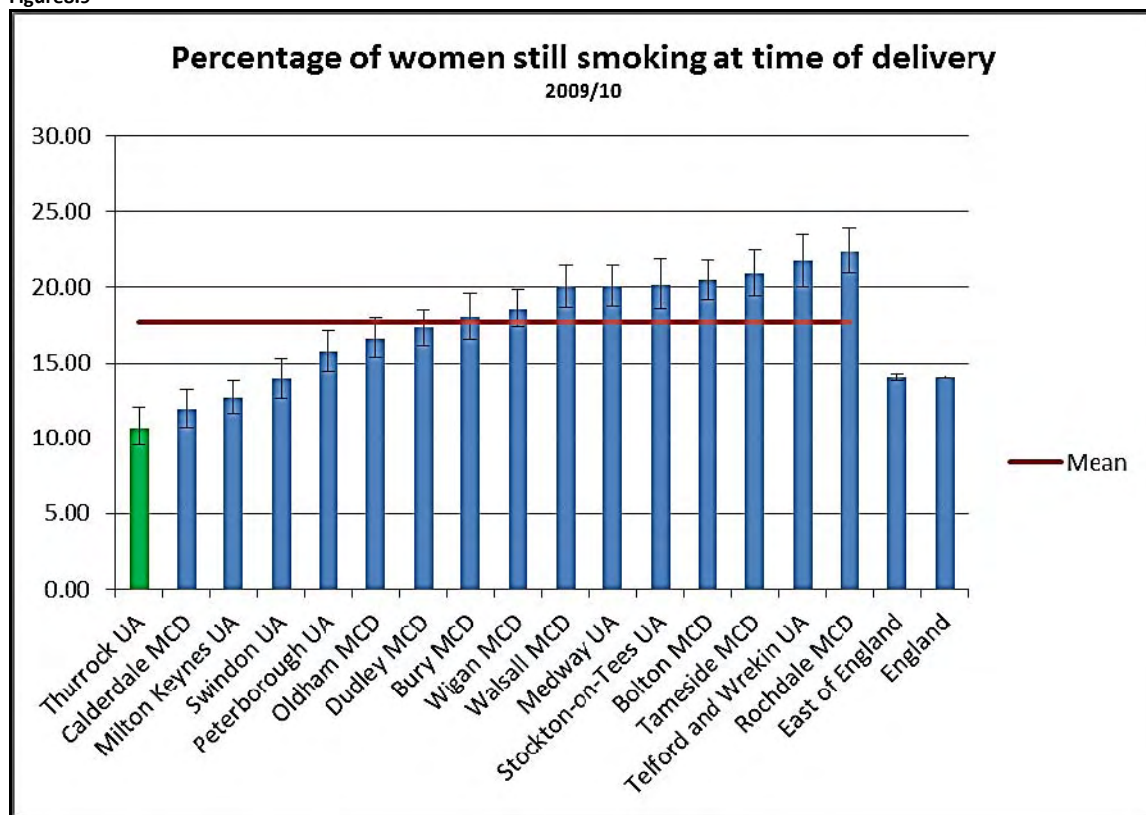
### Smoking in Pregnancy

Figure F shows the percentage of pregnant women with smoking status recorded, still smoking at time of delivery for Thurrock and its CIPFA comparator local authorities. 10.79% of pregnant women in Thurrock are still smoking at time of delivery in 2009/10. Thurrock has the lowest prevalence of pregnant women smoking at time of delivery, when compared to its CIPFA comparator local authorities and lower than both the regional and national rates.

We can conclude that Thurrock has a statistically significantly lower rate of smoking at time of delivery at 95% confidence compared to the East of England, England and all but three of its CIPFA comparator local authorities.

From a public health point of view, this is highly encouraging, although rates of smoking at time of delivery are likely to vary between different geographical areas of Thurrock and correlate with deprivation levels.

Figure8.9



Source: <http://www.apho.org.uk>

## 8.2 Alcohol

Figure 8.10

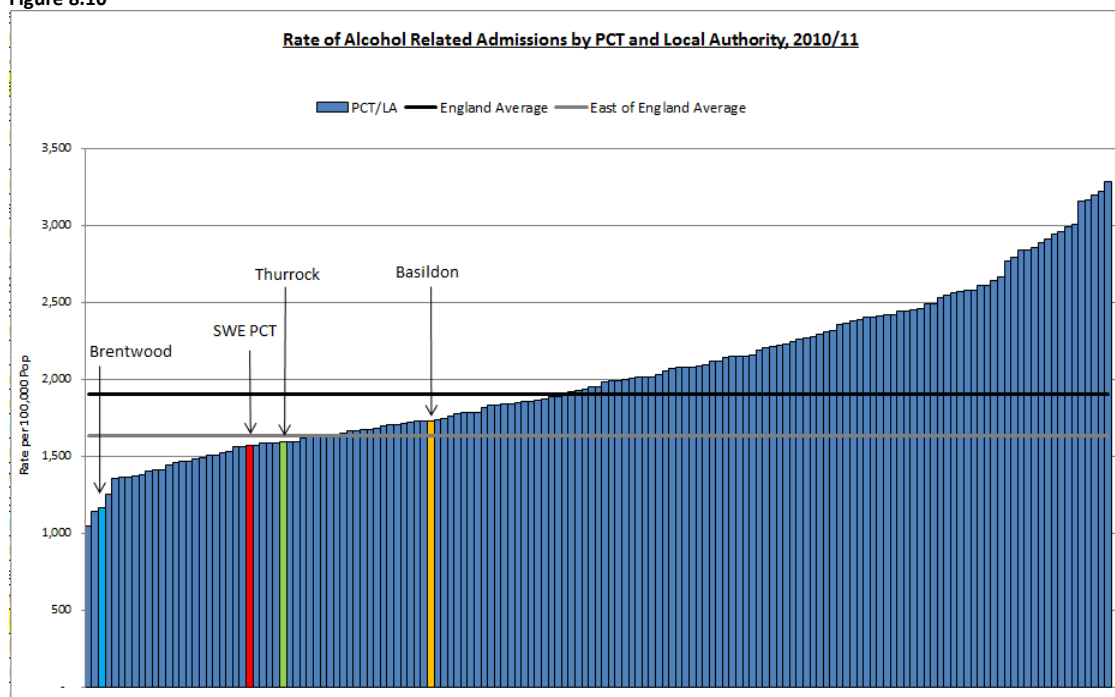


Figure 8.10 shows rate of alcohol related admissions to hospital for all PCTs in England plus for Basildon, Brentwood and Thurrock local authority populations. The rate of alcohol admissions for the Thurrock population is slightly greater than for the SW Essex population but less than both regional and national averages.

Figure 8.11

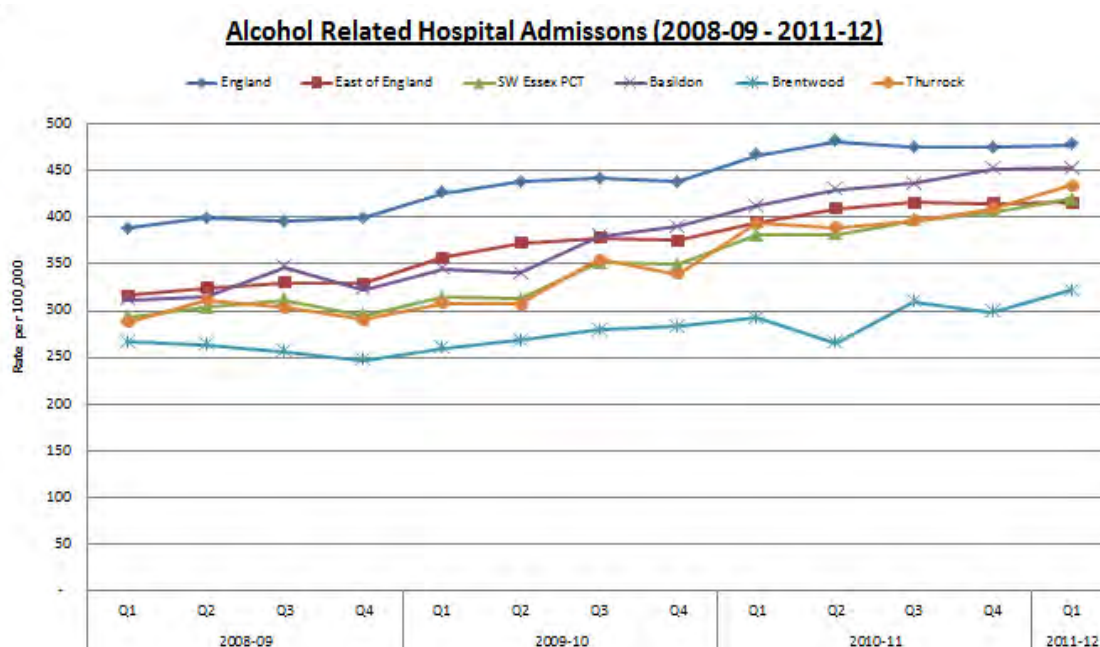


Figure 8.11 shows that alcohol related hospital admission rate from 2008-9 to 2011-12 for Thurrock have trended upwards, in line with England and SW Essex population, although have remained less than the rate for England. However, from 2008-9 to 2011-12, the gap in admission rate between Thurrock and England has narrowed, with admissions in Thurrock increasing at a faster rate than those for England.

There is strong evidence to show both the effectiveness and cost effectiveness of alcohol screening and brief intervention initiatives in terms of identifying and changing the behaviour of patients drinking alcohol at hazardous and harmful levels, in order to prevent alcohol dependence. The estimated return on investment (ROI) for the Alcohol DES has been calculated to be 2.19.<sup>1</sup> A Directed Enhanced Service (DES) for Alcohol Related Risk Reduction was introduced in 2009 to encourage screening of newly registered patients for alcohol use. Patients registering with the GP over the age of 16 were to be screened using FAST, AUDIT C, or AUDIT PC screening tools. If this resulted in a positive screen, as outlined by the trigger points of the test, a full AUDIT would then be carried out. Figure 8.12 shows the performance of GP practices in Thurrock who signed up to the DES and are using the SystmOne computer software in 2010/11 financial year. The DES focused on newly registered patients, and clearly shows a wide variability in the performance.

There could be a limitation on this data due to the data collection process. The extraction of the data is dependent on accurate coding by GP practices. The 2010/11 DES did not give clear direction on the codes to use within SystmOne, so data was extracted using the read codes in the systems that were the ones that matched the enquiry.

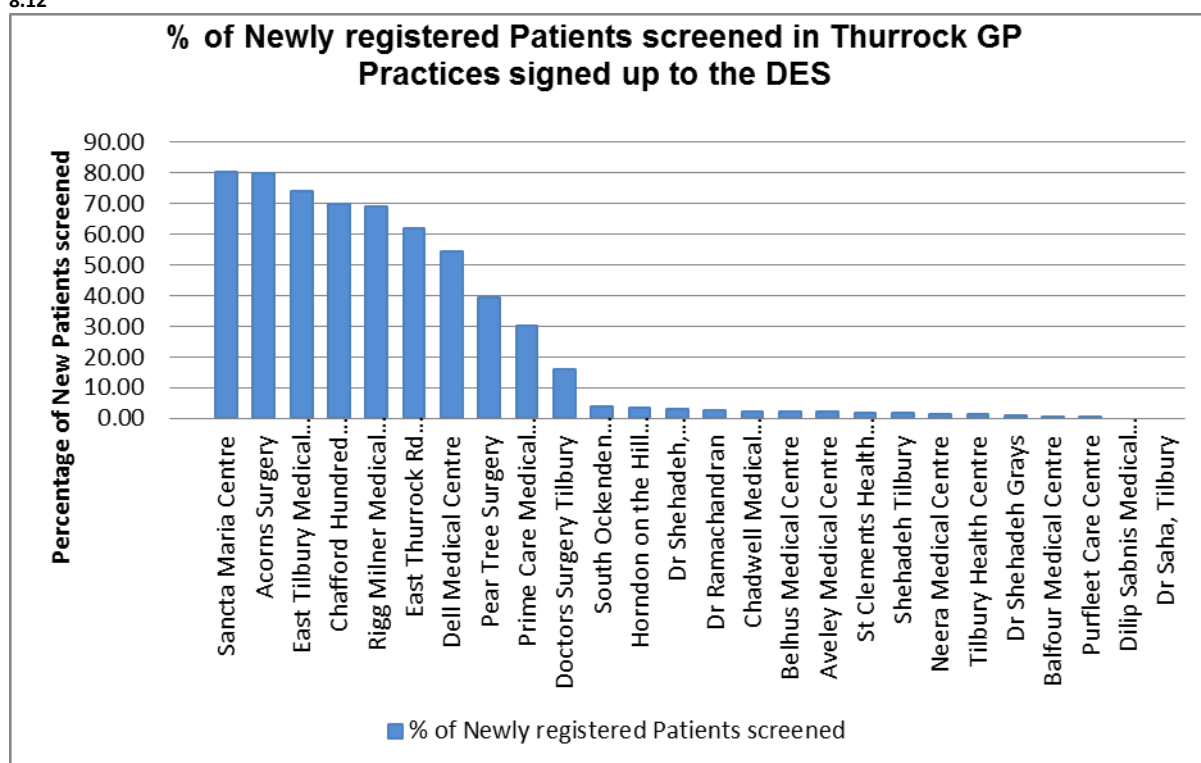
In 2010/11, GP practices signed up the DES in Thurrock screened 29.7% of the newly registering patients. Further, only 11.4% received the full AUDIT screening and less than 0.5% is recorded as having been given brief intervention or referral to specialist services. Increasing the percentage of new patients screened and providing appropriate brief interventions for those

<sup>1</sup> DoH Alcohol Ready Reckoner V5.2 (Updated February 2011)



who screen positive for hazardous or harmful drinking is likely to deliver significant future cost savings in terms healthcare treatment costs attributable to alcohol misuse.

Figure  
8.12



### 8.3 Obesity

The need to tackle the problem of obesity relates to the undisputed evidence that obesity is a risk factor for a range of health problems. The four most common medical problems linked to obesity are coronary heart disease, hypertension, type 2 diabetes and osteoarthritis. The incidence of all these conditions increases with increasing body weight<sup>23</sup>.

#### Childhood Obesity

Childhood obesity is a complex public health issue that is a growing threat to children's health. If the number of obese children continues to rise, today's children and future generations could have shorter life expectancies than their parents. Tackling childhood obesity requires changes in the behaviour of individual children, their parents and of society in general and reflects recent trends across most developing countries to greater fat and sugar consumption and reduced physical activity. There is also evidence to suggest that babies who are breastfed are less likely to be obese in adulthood.

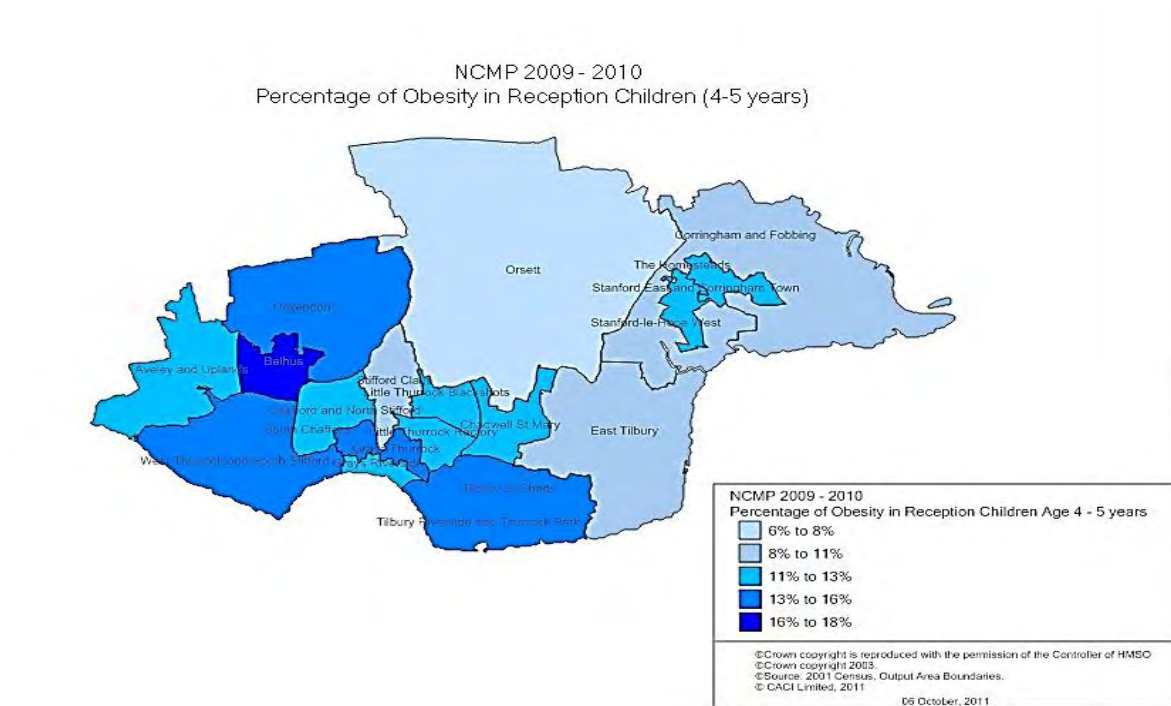
<sup>2</sup> Jung, D. Obesity as a Disease, British Medical Journal, 53(2), 307-21.

<sup>3</sup> NHS Centre for Reviews and Dissemination, Systematic review of interventions in the treatment and prevention of obesity, 1997

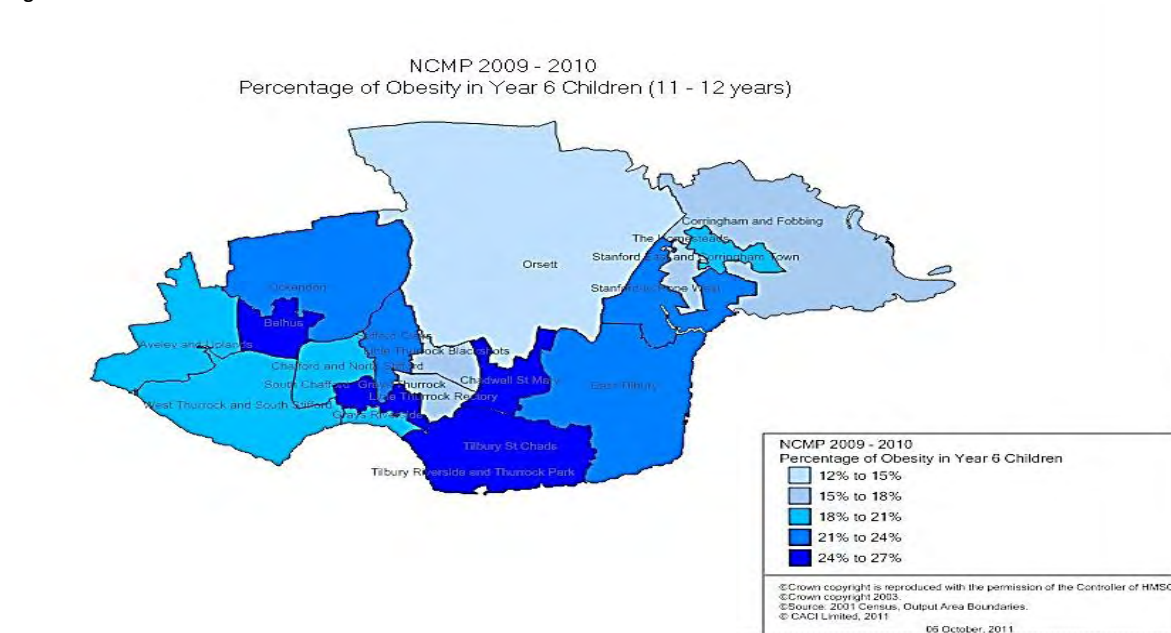
Since 2005, PCTs have been required to collect height and weight data for BMI on all primary school children in reception year (ages 4/5) and year 6 (ages 10/11) through the National Childhood Measurement programme (NCMP).

Figures 8.13 and 8.14 show the percentage of obese children in Thurrock by MSOA for reception and year 6 children as measured through the NCMP.

**Figure 8.13**

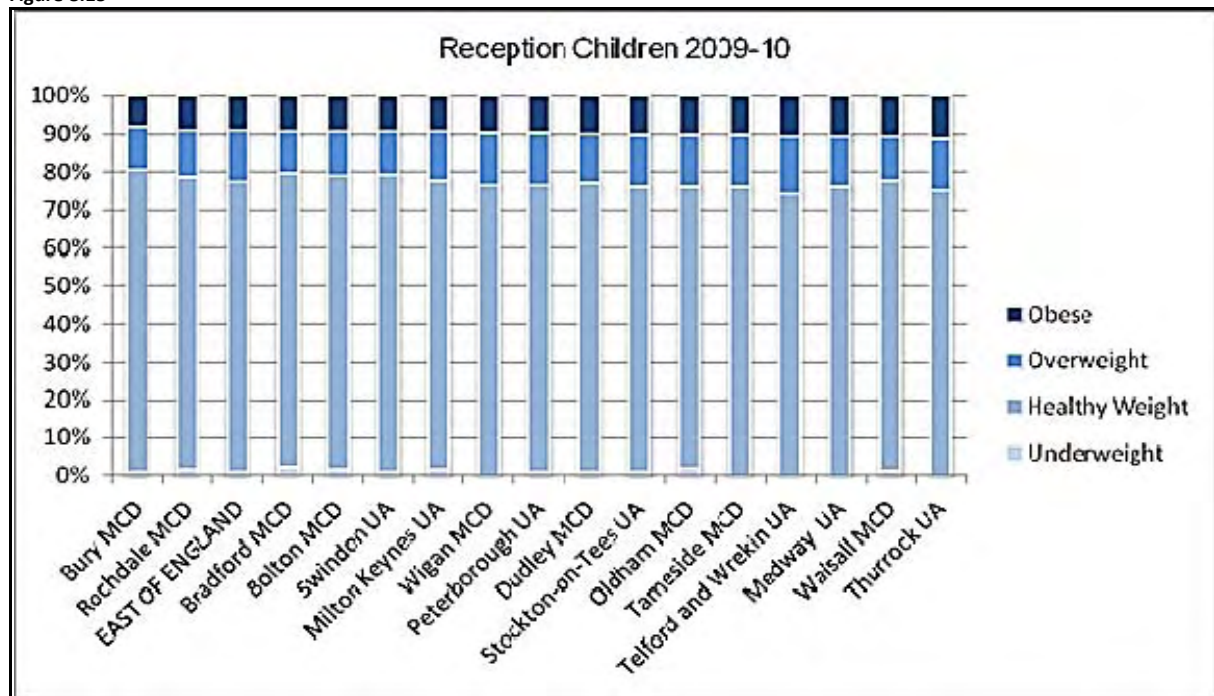


**Figure 8.14**



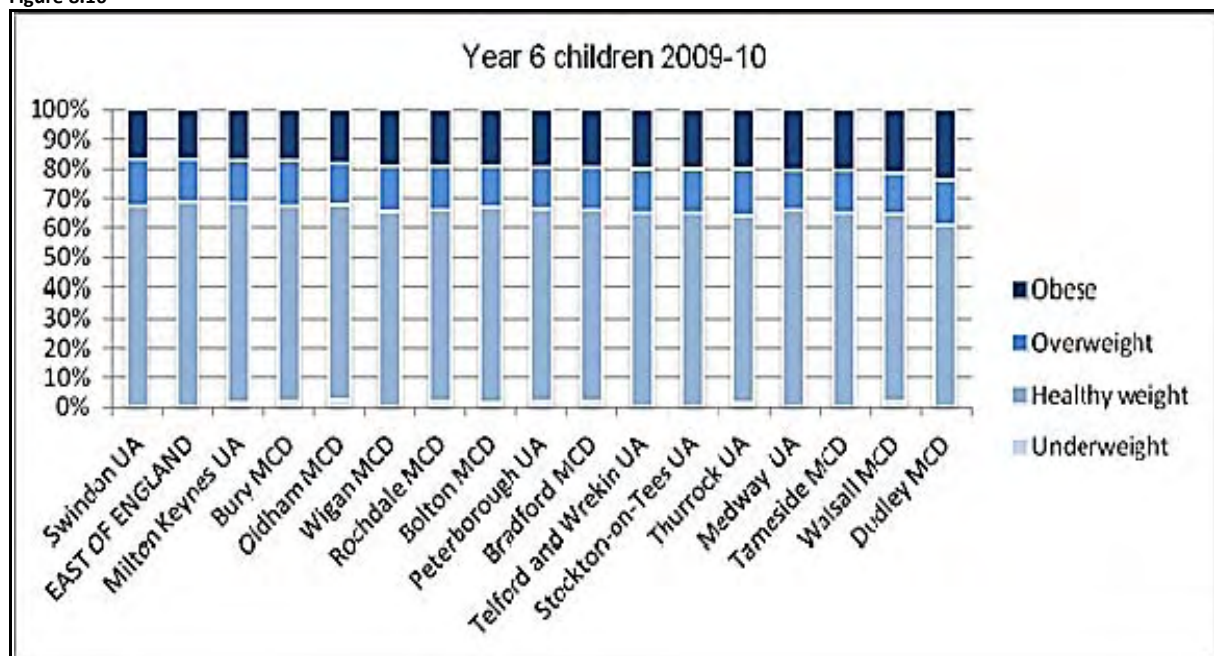
The darker blue areas have the greatest percentage of obese children as measure by the NCMP. The graph of reception children (age4-5) shows a higher prevalence of obesity in the more deprived areas of Thurrock which is mirrored in the year 6 children (age 10-11) and increased greatly from a maximum of 18% to 27%.

Figure 8.15



Source: The Health and Social Care Information Centre/ lifestyle statistics / Department of Health Obesity Team, NCMP dataset  
[www.ic.nhs.uk/ncmp](http://www.ic.nhs.uk/ncmp)

Figure 8.16

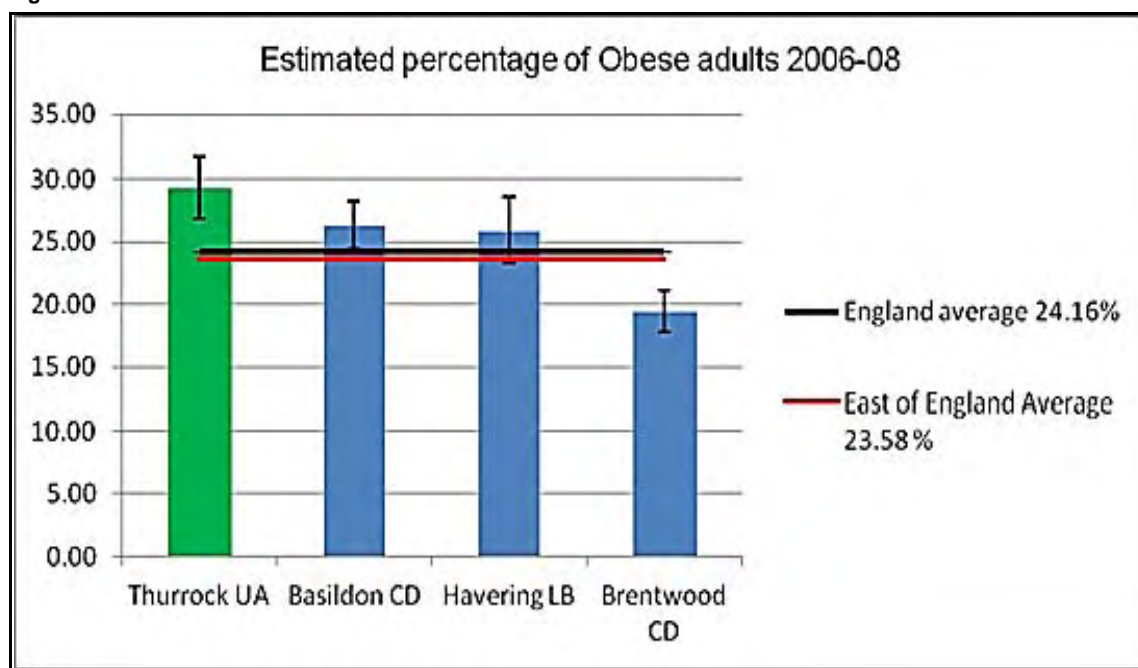


Figures 8.15 and 8.16 show the percentage of children at year R and year 6 who are overweight and obese, comparing Thurrock to its CIPFA local authority group. In comparison with the CIPFA areas Thurrock has the highest prevalence of obesity in Year R children and by Year 6 Thurrock is in the top quartile of the CIPFA areas in terms of obese children. This highlights a need to tackle obesity in Reception age children and preschool children in the levels of obesity are already very high by the time children start school.

## Adult Obesity

Figure 8.17 shows the estimated prevalence of obese adults aged 16+ by local authority areas compared with geographical neighbours, the national and East of England average.

Figure 8.17

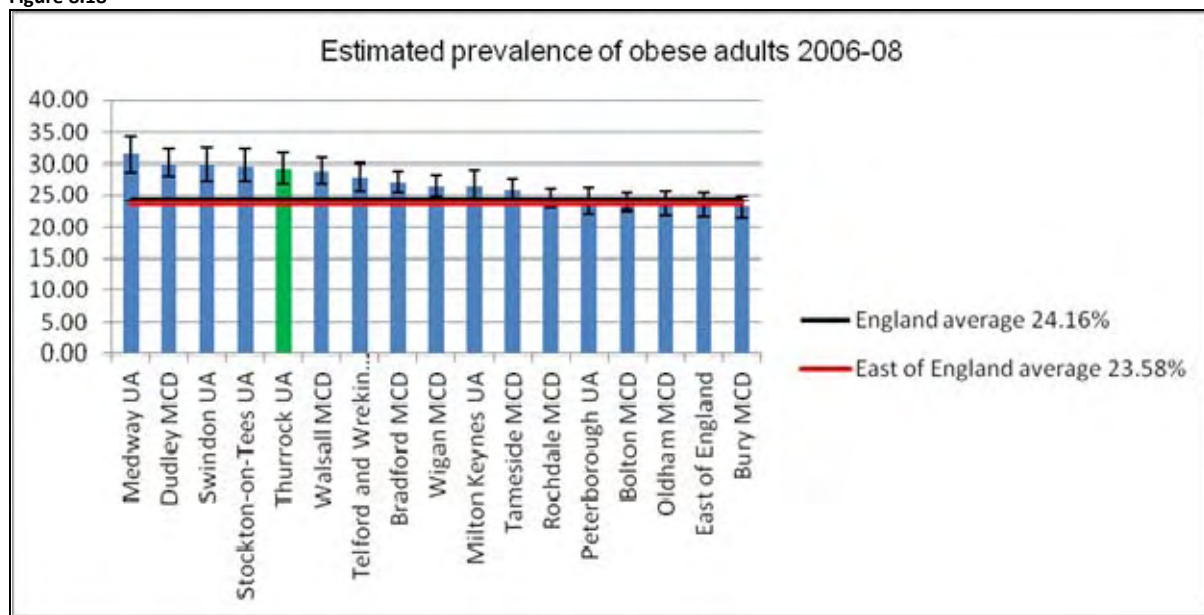


Source: ERPHO

Thurrock has a greater percentage of obese adults than its geographical neighbours of Basildon, Havering and Brentwood and regional and national averages.

Figure 8.18 shows estimated prevalence of Obese adults aged 16+ in Thurrock compared with CIPFA neighbours.

Figure 8.18



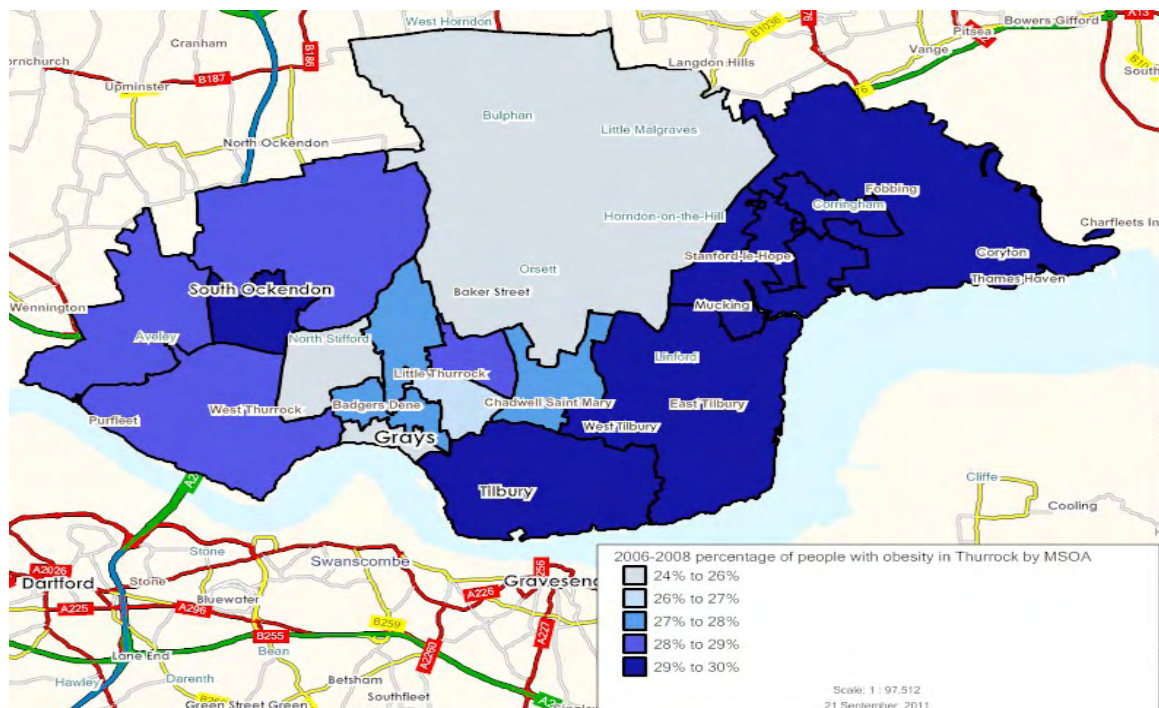
Source: ERPHO.

Thurrock's prevalence of obese adults is significantly greater than the national and East of England average and is near the top of the range of CIPFA comparator local authorities.

Figure 8.19 shows the percentage of adults people with obesity in Thurrock: Modelled estimates based on East of England Lifestyle survey 2008



**Figure 8.19**



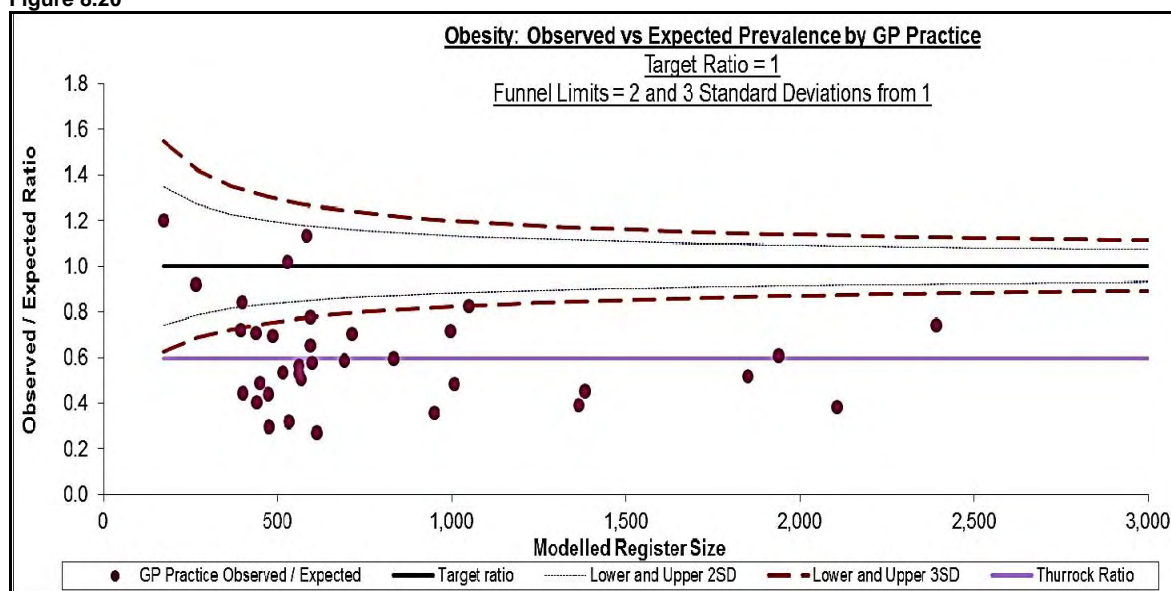
**Modelled estimates, based on individual-level data from the Health Survey for England 2006-2008. Source ERPHO**

The darker blue areas show the MSAOs with the highest levels of obesity as shown in Tilbury and largely the East and South East of the area of Thurrock to be at around one third of adults reporting a BMI of 30+. The paler grey areas such as North Stifford and Orsett in the North of Thurrock as well as Grays to have the lower levels of adults who are obese reported at close to a quarter.

Figure 8.20 shows a 'funnel plot' of the observed/expected ratio of obese patients on GP practice obesity registers in Thurrock.



Figure 8.20



Practice Code	Observed Prevalence <sup>*1</sup>	Observed Register Size	Expected Prevalence	Expected Register Size <sup>*2</sup>	GP Practice Observed / Expected	Total Population <sup>*3</sup>
Thurrock Total	13.3%	16,731	22.1%	27,923	0.60	126,271
England <sup>*4</sup>	9.9%		22.6%		0.44	
EOE <sup>*4</sup>	9.3%		22.8%		0.41	

Notes:

\*1 QMAS for March 2011 as at 22/09/2011

\*2 ERPHO model as at October 2009

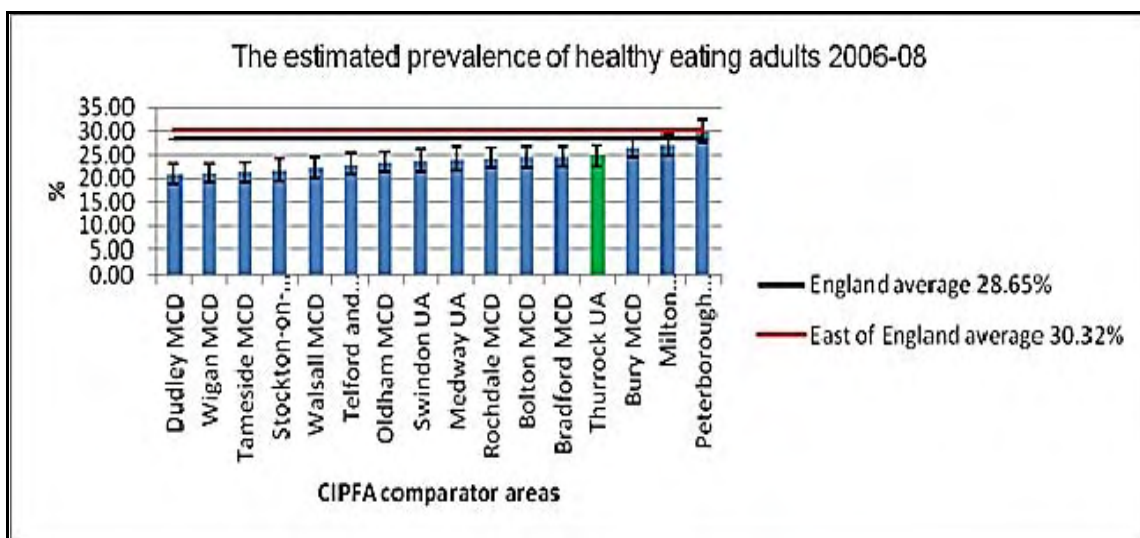
\*3 Population as at January 2011

\*4 taken from NHS Comparitors as at March 2009

Figure 8.20 shows a funnel plot of observed/expected prevalence of obesity for each Thurrock GP practice. There are 16,731 people on the Obesity registers of practices within Thurrock in March 2011, giving a prevalence of 13.3%. This prevalence is greater than the England and EOE prevalence, but still only 60% of what is expected across Thurrock as a whole. 28 out of the 36 practices in Thurrock are more than 3 standard deviations from the expected register size. This suggests that GP practices are failing to identify and record adequately, patients with a BMI over 30.

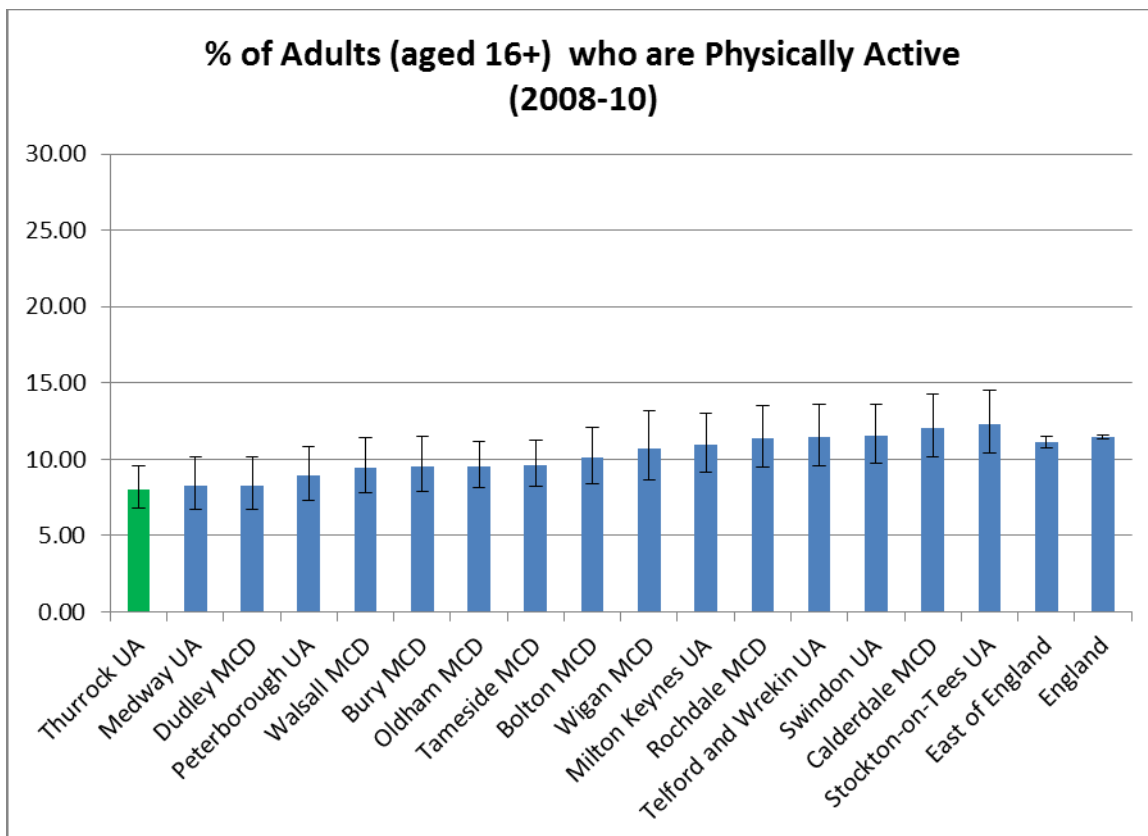
Obesity at an individual patient level is a product of an excess of calories consumed through eating compared to those burned off through metabolism and physical activity. Figures 8.21 shows the percentage of Thurrock residents who eat healthy (as defined by eating five or more portions of fruit and vegetables per day). Whilst it is still possible to consume too many calories whilst eating five portions of fruit and vegetables a day, it is the best proxy measure available to us in terms of healthy eating habits.

Figure 8.21



Thurrock has a smaller prevalence of healthy eating amongst adults compared to regional and national rates, and a prevalence that is not statistically different to all but one CIPFA comparator local authorities.

Figure 8.22



Source: APHO LA Public Health Profiles 2011.

Figure 8.22 shows the percentage of adults in Thurrock who are physically active compared to our CIPFA comparator local authorities and regional and national rates. 'Physically active' is

defined as 'Participation in moderate intensity sport and active recreation on 20 or more days in the previous 4 weeks'.

Thurrock has the lowest percentage of adults who are physically active compared to its CIPFA local authorities, and a rate that is statistically significantly lower than three CIPFA comparators, England and the region.

Encouraging patients to eat more healthily or become more physically active, or referring them into commissioned health improvement programmes (e.g. Vitality) that assist patients to improve their lifestyles is likely to impact positively on Thurrock's obesity problem which in turn should translate into reduced future healthcare cost savings in terms of 'lifestyle related' diseases such as CVD, hypertension, diabetes etc.

## 8.4 Immunisation

Figure 8.23 shows Childhood Immunisation coverage by 5<sup>th</sup> Birthday for SW Essex in 2010-11 and 2011-12 together with coverage for the best and worst performing PCTs in England. Childhood Immunisation coverage has improved in SW Essex in the last three years significantly, and shows a slight improvement between 2010-11 and 2011-12 on every vaccination except Diphtheria, Tetanus, Polio and Pertussis booster, although the differences between the two years are small and could be due to random variation, Coverage of Diphtheria, Tetanus, Polio and Pertussis booster and MMR remain below the 95% required for herd immunity. Childhood immunisations remain one of the most cost effective health interventions that the NHS undertakes, in terms of return on investment, and ensuring 95% herd immunity for all childhood immunisations is an important priority.

Figure 8.23: Comparison of Selected Childhood Immunisation Programmes

Childhood Immunisation by 5th Birthday	2010-11			2011-12
	Best PCT*	SWE PCT	Worst PCT*	SWE PCT (Q1-3)
Diphtheria, Tetanus, Polio	98.8	95.7	77.8	96.0
Hib	98.5	95.2	82.7	95.3
Diphtheria, Tetanus, Polio & Pertussis Booster	96.7	89.5	54.4	88.7
MMR (First Dose)	97.8	91.1	80.6	92.2
MMR (First and Second Dose)	95.1	86.5	61.0	86.6

Figure 8.24: Flu Uptake in 65+ years

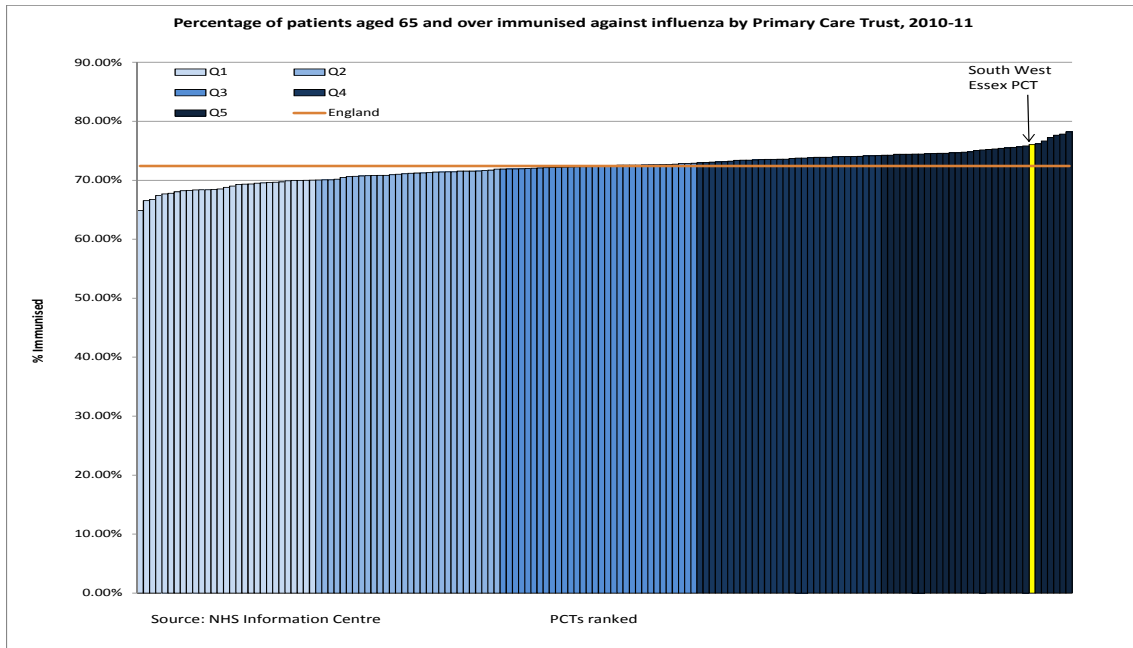


Figure 8.24 shows uptake of flu vaccination in the 65 and older age group, ranked by PCT in England. SW Essex is in the best performing quintile and one of the best performing PCTs in England for flu vaccination coverage in the 65+ population.

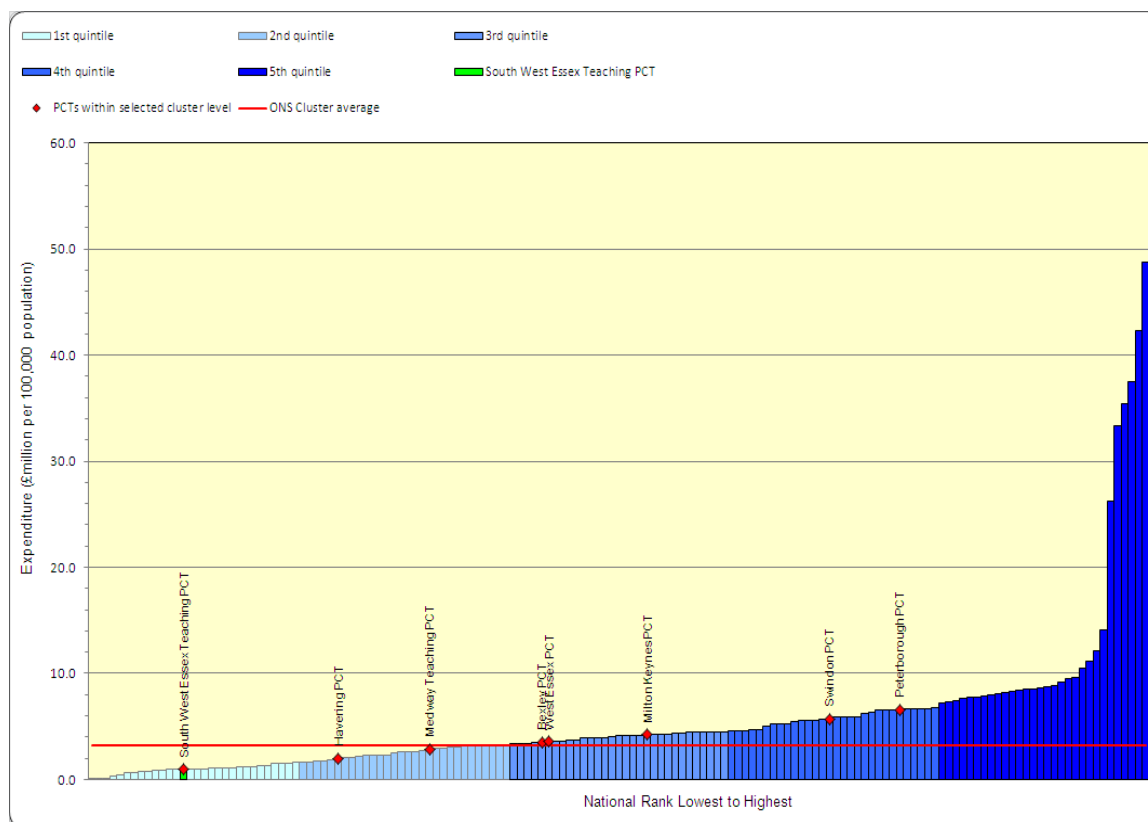
## 9. SOCIAL CARE NEEDS AND THIRD SECTOR COMMISSIONING

This area of spend covers a wide range of activities, which aims to enhance quality of life by collaborating with other agencies, especially the third sector. For example, working with our partners to ensure better support for carers, rehabilitation in the community, collaborating to ensure affordable warmth and minimise the effects of fuel poverty, and collaboration in Children's Centres.

The evidence (see the Public Health Outcomes Evidence Base and NHS Outcomes Evidence Based Practice documents) suggests that joint investment in these activities will promote innovative approaches in prevention work, can improve productivity (through improved effectiveness) and can contribute to significant savings to health and social care spend.

Figure 9.1 shows programme budgeting spend on social care needs and third sector commissioning by PCT and ONS cluster. SW Essex is in the bottom quintile of spenders nationally and below the ONS Cluster Group average. However, due to the very large variation between the highest and lowest spenders across the country some discrepancies in the reporting may be present and caution is needed in any interpretation of the data.

**Figure 9.1: Programme Budgeting Spend on Social Care Needs and Third Sector Commissioning by PCT and ONS cluster 2009-10**

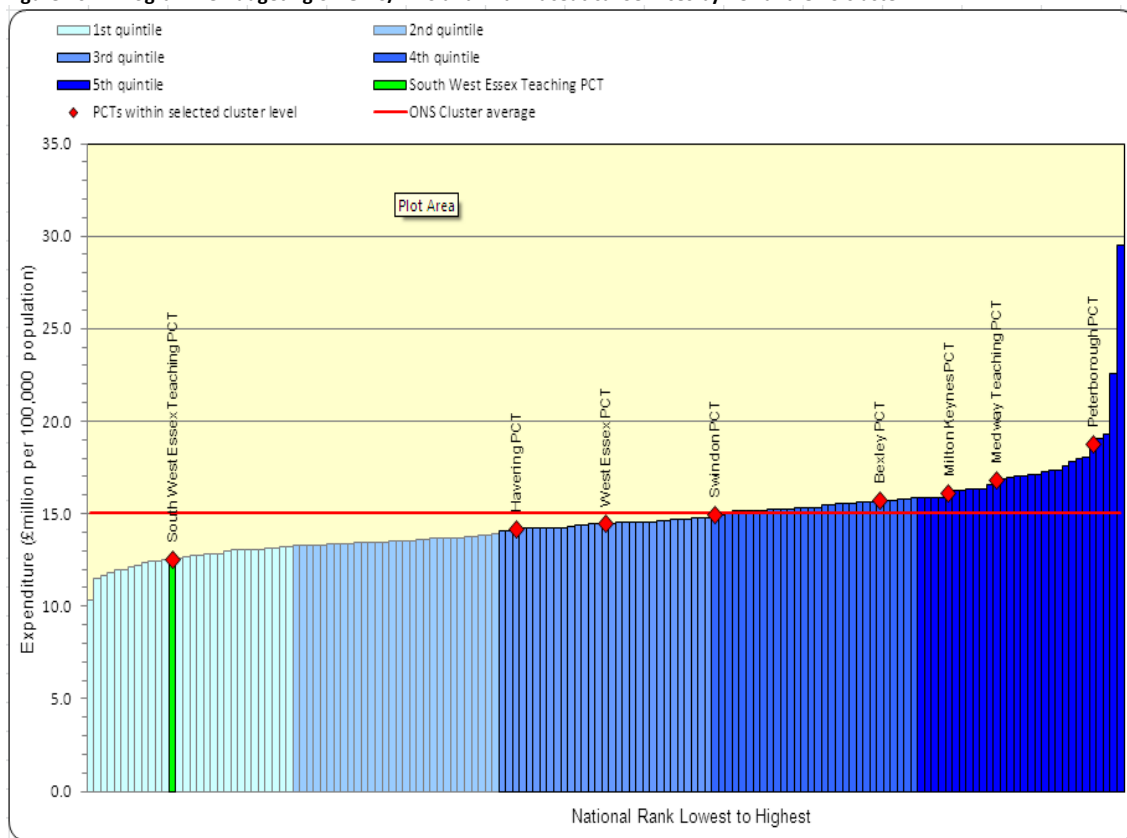


## 10. GMS/PMS and PHARMACEUTICAL SERVICES

This programme includes all other expenditure that cannot be allocated to any of the other categories. The biggest element at present is the GMS & Pharmaceutical Services Contract. In time, better information will allow this area of NHS expenditure to be allocated to the appropriate Programme Budget category.

Figure 10.1 shows programme budgeting on GMS/PMS and pharmaceutical services by PCT and ONS cluster. SW Essex is in the bottom quintile, below the ONS Cluster average and is spending less than all of the ONS Cluster comparators.

**Figure 10.1. Programme Budgeting on GMS/PMS and Pharmaceutical Services by PCT and ONS cluster**



There are a number of indicators that can be used to measure or monitor prescribing in primary care. Indicators are often used within the performance management process or locally in prescribing incentive schemes. These can be used to ensure that patients are receiving optimal care (e.g. statins for CVD risk factors), for minimising the risk of the spread of medicine-resistant bacteria by over prescribing of antibiotics and for cost reduction measures (e.g. generic prescribing of statins).

Figure 10.2

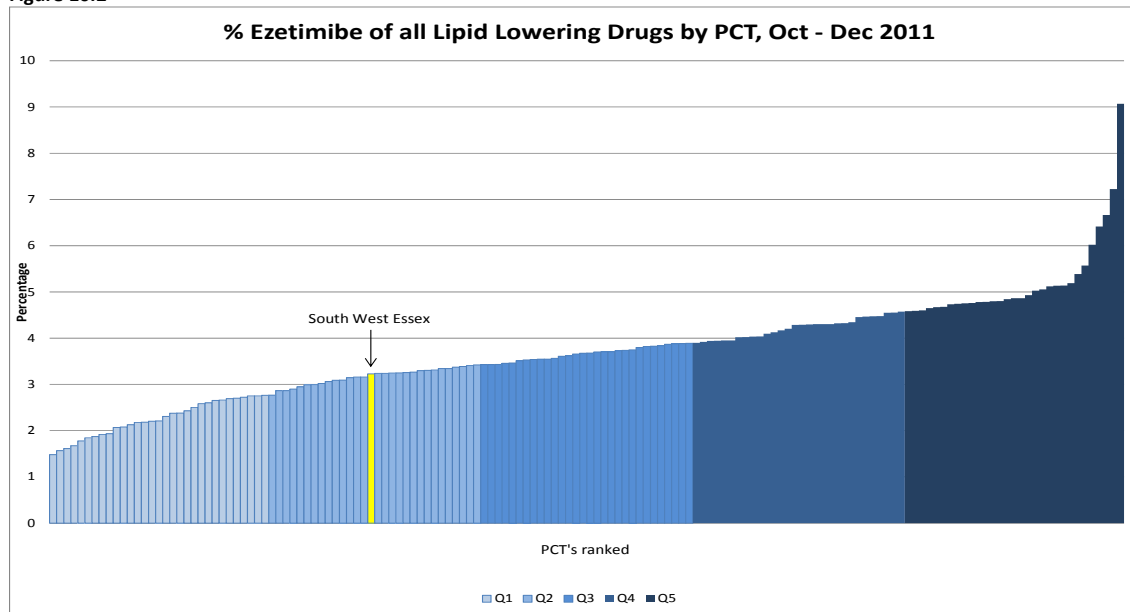


Figure 10.2 shows the percentage of all lipid lowering drugs prescribed as ezetimibe by PCT. SW Essex is in the second lowest quintile with 3.2% of lipid lowering drugs being prescribed as ezetimibe.

Ezetimibe does not have the same evidence-base as statins, especially in terms of outcome data. It is also less cost-effective than statin therapy. It is therefore an area of prescribing which is being reviewed as one of the QIPP prescribing work streams. In SW Essex prescribing costs have shown a 31% reduction in 2011/12 compared to the previous year.

Figure 10.3

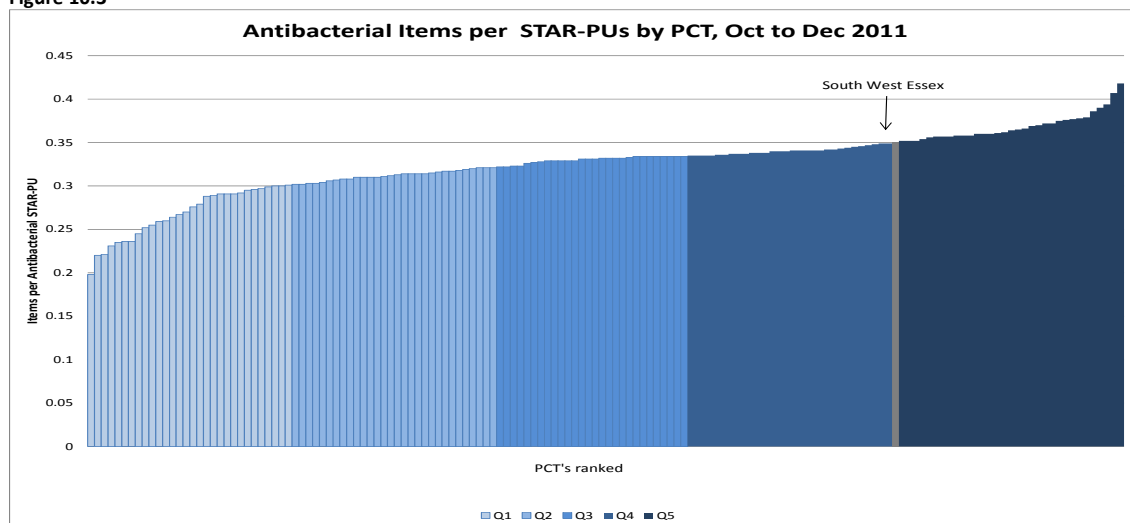




Figure 10.3 shows the number of antibiotic items prescribed per STAR-PU by PCT for the third quarter of 2011/12. This provides an indication of the volume of prescribing by the PCT and suggests that SW Essex is demonstrating a high usage of antibiotics. As well as contributing to costs, a high usage of antibiotics may also increase the incidence of antibiotic resistance.

Figure 10.4

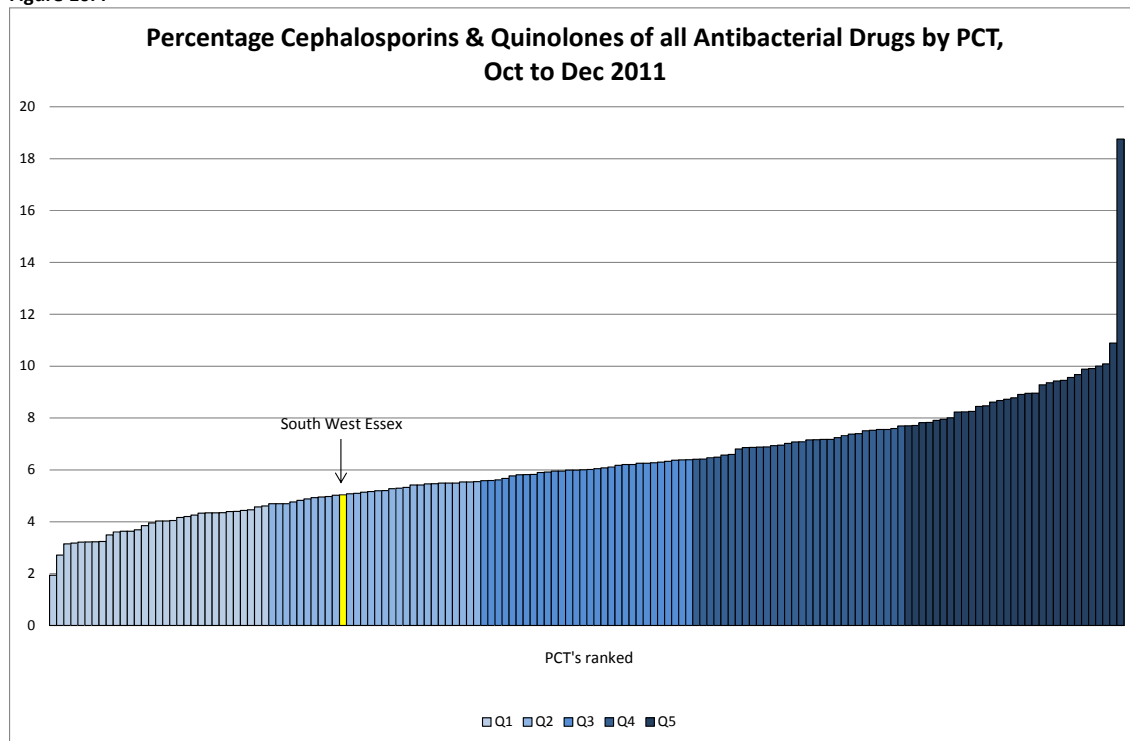


Figure 10.4 shows proportion of cephalosporins and quinolones as a percentage of all antibacterial drugs prescribed by individual PCT in the last quarter of 2011/12. A higher use of cephalosporins and/or quinolones in primary care is associated with a higher rate of hospital acquired infections such as C. diff. SW Essex is in the second lowest quintile for this indicator, showing a lower use of cephalosporins and quinolones compared to antibiotics as a whole.

Figure 10.5

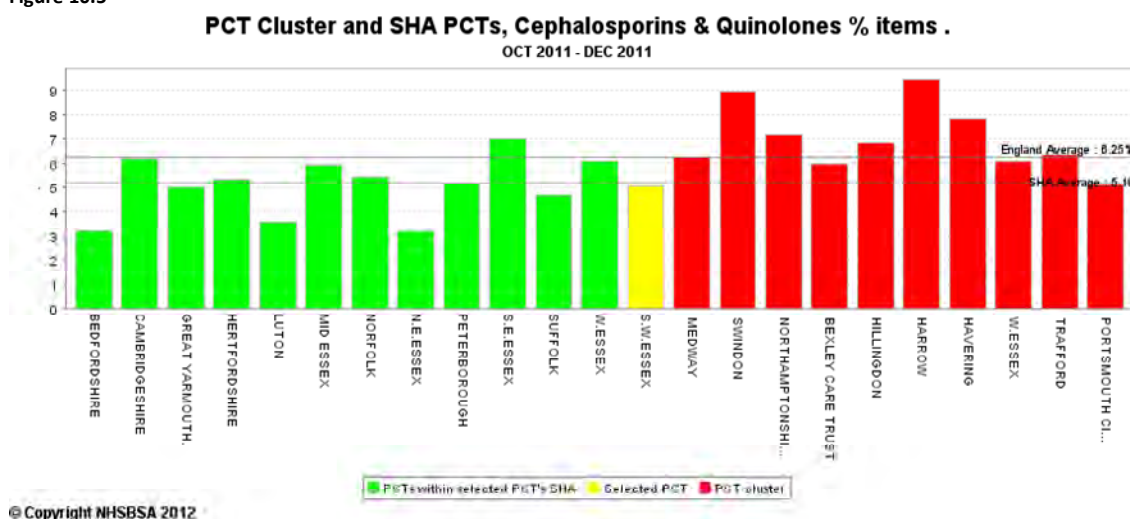




Figure 10.7 shows the percentage of statins that are prescribed as either pravastatin or simvastatin across SW Essex and our ONS Cluster PCTs. SW Essex has a smaller percentage of all statins prescribed that are pravastatin/simvastatin compared to regional and national percentages and a smaller percentage than all but three of our ONS cluster PCTs. However, this indicator will become less relevant as a marker of cost-effective prescribing once the cost of atorvastatin reduces following patent expiration of Lipitor®.

Figure 10.8

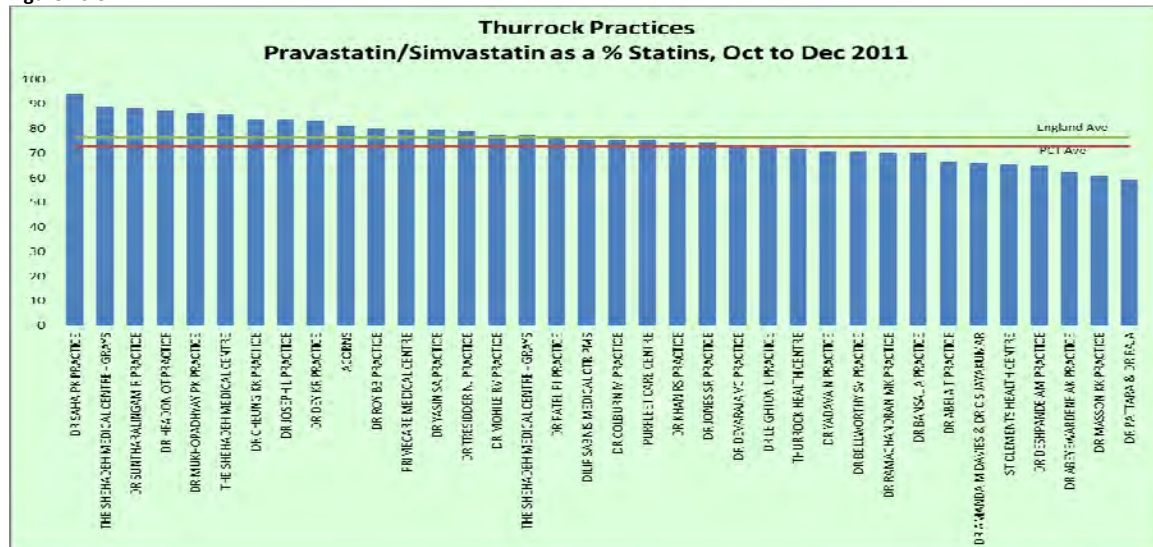


Figure 10.8 shows that the majority of Thurrock practices prescribe a greater percentage of pravastatin/simvastatin as a percentage of all statins compared to the PCT average. Again there are considerable differences in prescribing habits between practices within Thurrock.

## Summary / Conclusions

Programme Budgeting spend across SWE on GMS/PMS and Pharmaceutical services is generally low compared to other PCTs and our ONS PCT cluster.

The percentage of all lipid lowering drugs prescribed as ezetimibe and the percentage of cephalosporins and quinolones as a percentage of all antibacterial drugs are also relatively low compared with other PCTs in England and in line with regional averages. This suggests across Thurrock prescribing behaviour is of relatively high quality.

There are however significant differences between different GP practices in prescribing behaviour which provides further scope for QIPP savings and quality improvements. Similarly overall prescribing of antibiotics is high compared to England PCTs and warrants further investigation.

## 11. OLDER PEOPLE HEALTH AND WELLBEING

As people get older, mobility becomes a common problem and many could become isolated and unable to access the services they need. It is estimated that the number of people aged 65+ living on their own, will increase by 44% by 2025 and are the highest user of statutory services, although locally hospital admissions, in people aged 75yrs and over, is amongst the lowest in England. Loneliness can damage both physical and mental health and can be further exacerbated by lack of transport and poor mobility.

The growth in the ageing population will translate into additional pressure on all services, especially with an increase in neurological, circulatory, endocrinology, respiratory and mental health conditions. It is estimated that two thirds of people with dementia are looked after by unpaid carers.

According to research conducted by the Royal Pharmaceutical Society of Great Britain (RPSGB), older people are taking a cocktail of medicines without fully understanding what they are or the side effects they are causing, with one in five patients not complying with their medication. Primary care practitioners and partner agencies need to encourage older people to have a regular Medicine Use Review (MUR).

Figure 11.1 shows emergency hospital admissions in the over 75s in SW Essex compared to all PCTs in England. SW Essex is below the 3SD limit indicating that emergency admissions in people aged 75yrs and over is significantly lower than the national average.

Figure 11.1: Funnel plot – Emergency admissions rate per 1000K population in persons over 75

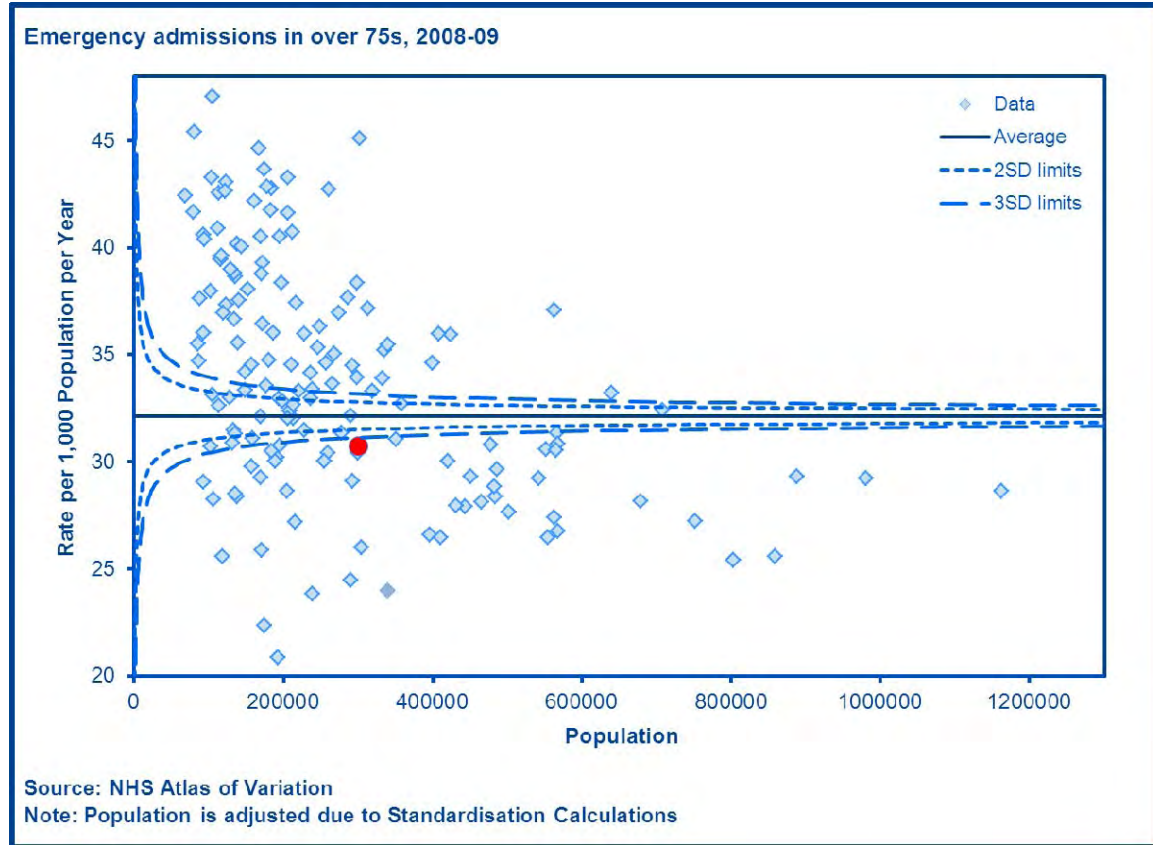
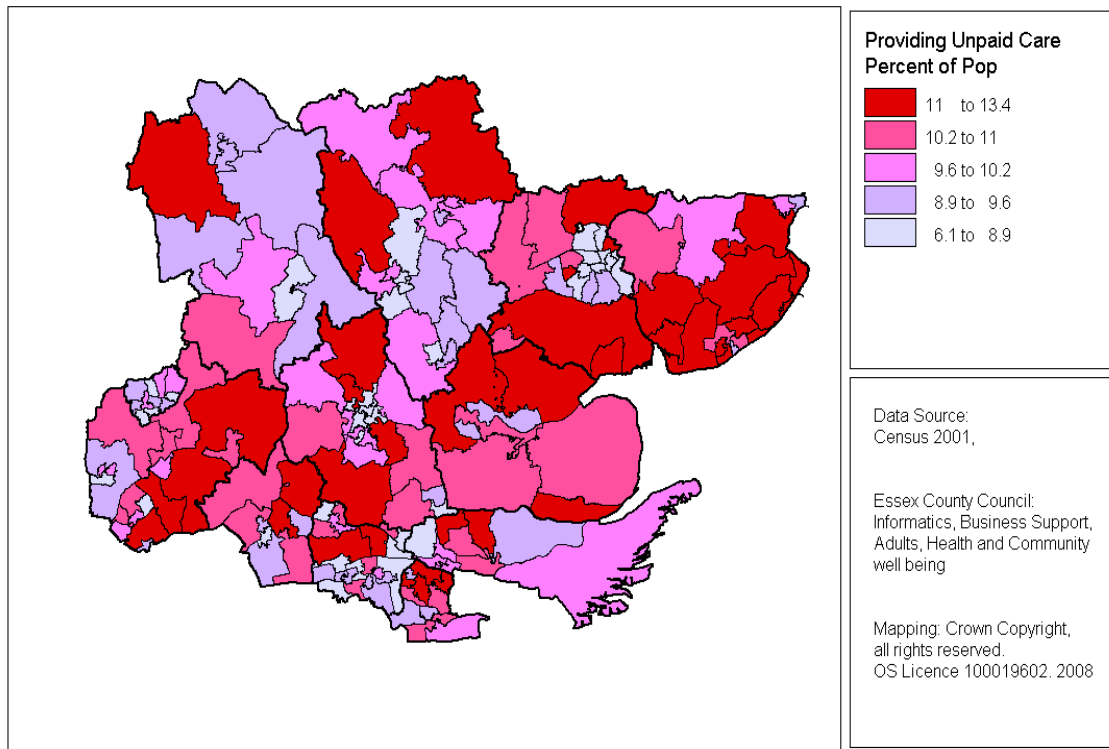


Figure 11.2 shows the percentage of the population providing unpaid care within Essex. The main areas of SW Essex providing unpaid care are within Basildon and Brentwood. The information shown here only accounts for the carers we know about and not the thousands of other unknown adults, young people and children who are caring for someone.

Figure 11.2: Percentage of Population providing unpaid care



## Summary / Conclusions

Emergency admissions in people aged 75 years and over within SW Essex are significantly lower than the national average but with an ageing population this number could increase over time. 11-13.4% and 10.2-11% of the population of many wards within SW Essex are providing unpaid care. This is worrying because it is likely that these carers may be suffering from ill health themselves. The growth in the ageing population will translate into additional pressure on all services, especially with an increase in neurological, circulatory, endocrinology, respiratory and mental health conditions.

## 12. END-OF-LIFE CARE

### END-OF-LIFE CARE

The National Strategy on End of Life Care<sup>iii</sup> is intended to ensure that people with advanced, progressive and incurable illness have the best quality of remaining life possible. It promotes the identification of palliative care needs of both patient and family, and planning of supportive care.

The national drive is also intended to promote people dying at home rather than in hospital, which requires collaborative working and good planning. A key aim of the strategy therefore is to improve provision for support and palliative care in the community to make this possible. One review<sup>iv</sup> estimated that 40% of the patients who had died in hospital had not had medical needs which required them to be there in the first place.

Dealing with this area of people's care is complex and decisions are normally informed by technical, medical considerations and economic factors as well as ethical issues (especially where rationing of care is concerned). It is paramount that end-of-life decisions are subject to considerations of patient autonomy and involve relevant carers.

Many people express the desire to die in their own home but it is important to remember that for many older adults their normal home is a care home. Unfortunately, sometimes, because of the nature of distressing symptoms and complications of their disease, patients need to be cared for in hospital and sometimes they have a related or unrelated acute complication which results in admission to hospital. This may not be the most appropriate place to manage their symptoms and the admission prior to death may not always be avoidable.<sup>v</sup>

Figures 12.1, 12.2 and 12.3 show the percentage of all deaths occurring in hospital by England LA. Thurrock (Fig 12.1) is a significant outlier and has a percentage of deaths occurring in hospital (68%) significantly greater than the national average. It is interesting to note that Basildon (figure 12.2) is also an outlier with a significantly greater rate of its population dying in hospital compared with other England LA populations. (64%). Brentwood (Fig 12.3) has rates in line with the national average.



Figure 12.1: Funnel plot – percentage of all deaths occurring in hospital by England LA (Thurrock red dot)

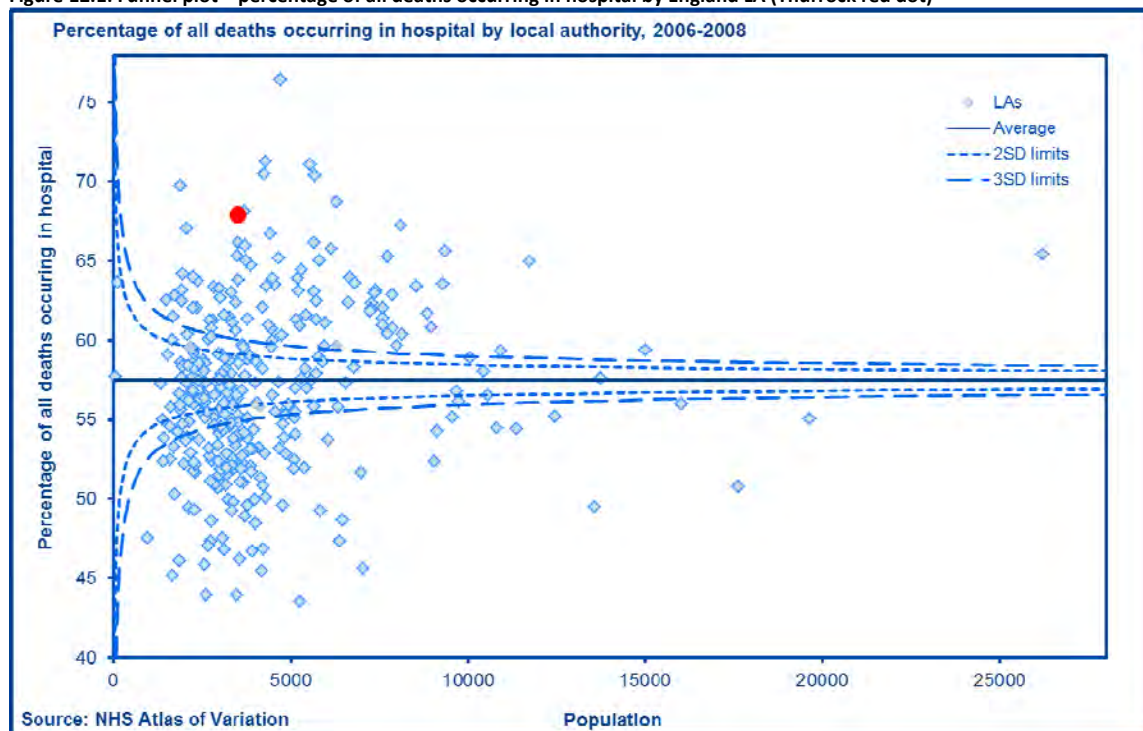


Figure 12.2: Funnel plot – percentage of all deaths occurring in hospital by England LA (Basildon red dot)

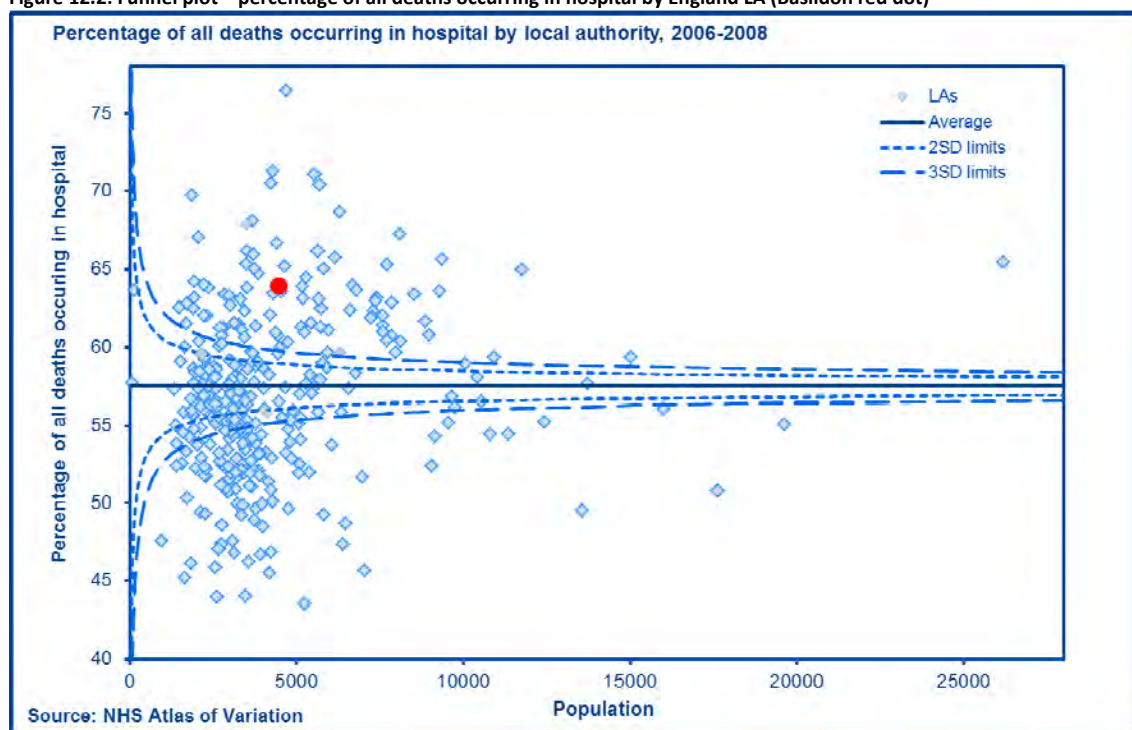
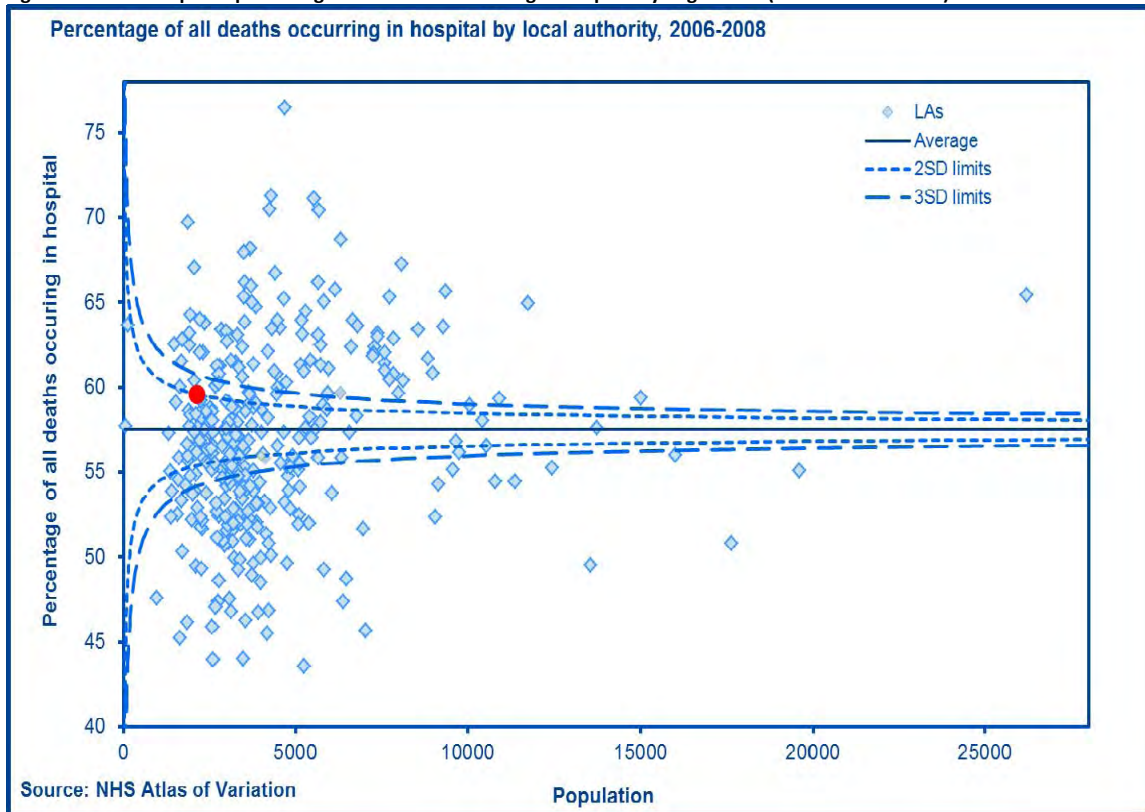


Figure 12.3: Funnel plot – percentage of all deaths occurring in hospital by England LA (Brentwood red dot)



## Summary / Conclusion

Thurrock has a significantly higher proportion of people dying at hospital than the national average and is a major outlier when compared to other LA populations in England. Basildon is also an outlier although Brentwood is in line with the national average. These findings may reflect the different deprivation levels seen in these areas. It could be that the proportion of people dying in hospital or hospices increases with increasing deprivation, and the proportion of people dying in care homes decreases by increasing deprivation. However, it may also reflect the fact that more people in Thurrock (and Basildon) access Basildon and Thurrock University Hospital than people living in Brentwood where other District General Hospitals are geographically nearer. There may of course be other unrelated factors in the case of Thurrock, but given the very high proportion of hospital deaths, this warrants further investigation.

## References

- <sup>1</sup> End of life care strategy, Department of Health, July 2008
- <sup>2</sup> End of Life care, UK National Audit Office Comptroller and Auditor General's report, 26 November 2008
- <sup>3</sup> Variations in Place of Death in England, National End of Life Care Intelligence Network

### 13. DIAGNOSTIC SERVICES

Good access to diagnostic service (radiology, pathology & cytology) is critical in modern medicine, as it helps optimise diagnosis and brings about rapid intervention to ensure the best health outcomes for patients as well as aiding decisions around cost-effectiveness of potential interventions.

Figure 13.1 shows the rate of magnetic resonance imaging (MRI) for all PCTs in England. SW Essex falls above the 3SD upper limit showing it has a significantly higher rate of use of MRI for its population than compared nationally.

Figure 13.1: Funnel plot – MRI rate per 1000 population per annum by England PCT

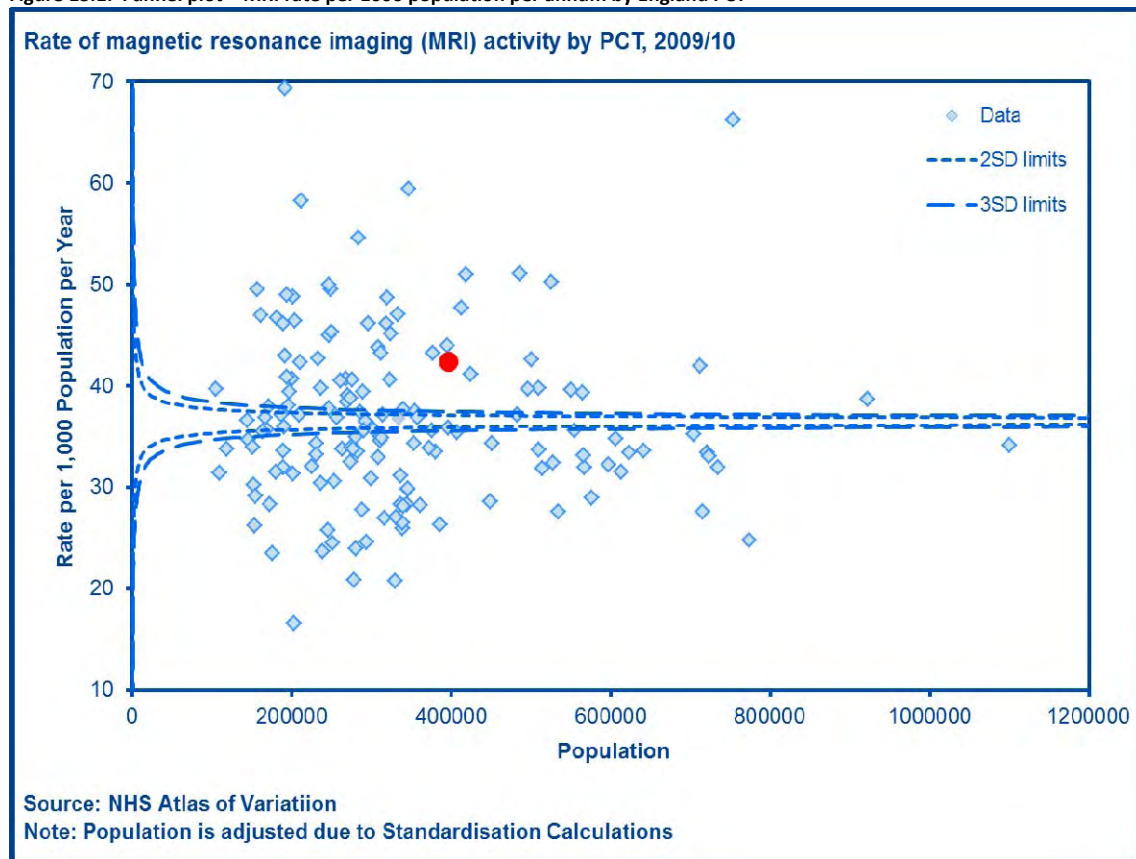
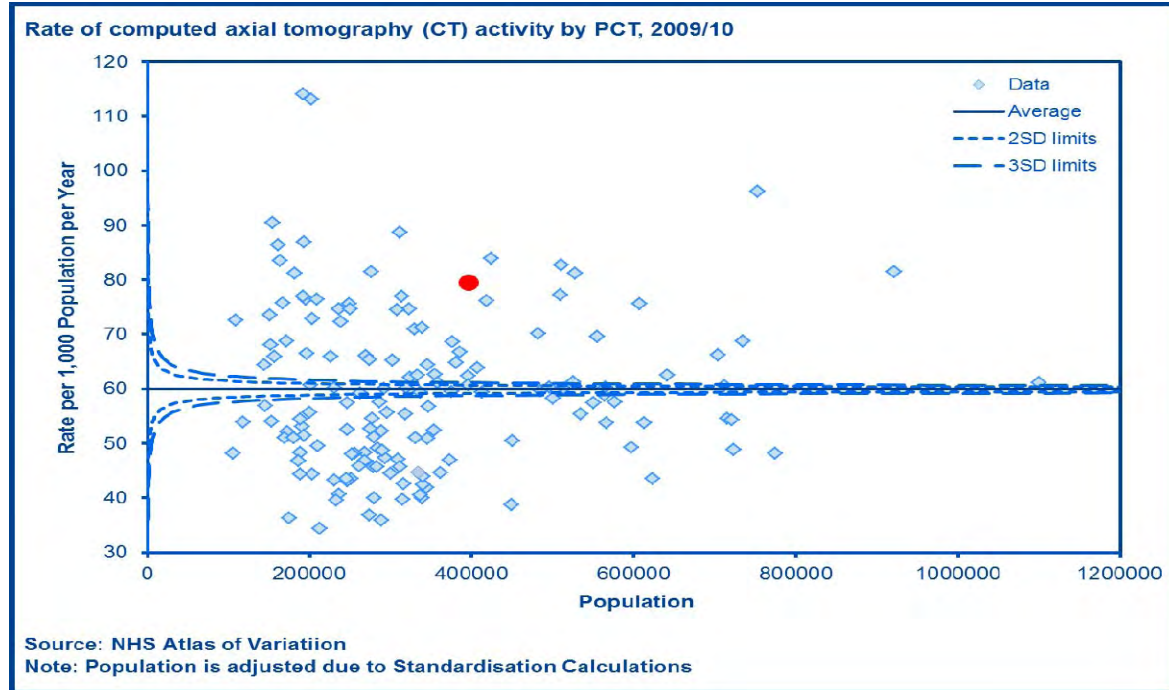


Figure 13.2 shows the rate of computed axial tomography for all PCTs in England. SW Essex falls above the 3SD upper limit showing it has a significantly higher rate of use of CT for its population than compared nationally.

**Figure 13.2 CT rate per 1000 population per annum by England PCT**



### Summary / Conclusions

SW Essex has a significantly higher rate of use of MRI and CT activity for its population than compared nationally. It would be interesting to ascertain why SW Essex has such a significantly higher rate than compared nationally. This warrants further investigation.

<sup>i</sup> National Institute of Health and Clinical Excellence (NICE), 2008. Smoking Cessation Services in Primary Care, Pharmacy, Local Authorities and Workplaces. <http://www.nice.org.uk/PH010>

<sup>ii</sup> Jarvis, M. J. and Wardle, J (2005) Social patterning of health behaviours: the case of cigarette smoking. In: Marmot, M. and Wilkinson, R. (eds) *Social Determinants of Health*. Oxford: Oxford University Press, 2<sup>nd</sup> edition.

<sup>iii</sup> End of life care strategy, Department of Health, July 2008

<sup>iv</sup> End of Life care, UK National Audit Office Comptroller and Auditor General's report, 26 November 2008

<sup>v</sup> Variations in Place of Death in England, National End of Life Care Intelligence Network

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## Appendix A: Methodology for modelled estimates of expected number of emergency admissions by PCT

### Final Model Details

Outcome variable: Square Root of number of emergency admissions for each GP practice in England with a list size of > 1000

Predictor variables: Population size, Disability free life expectancy at age 70, proportion of the population aged 85+, CHD QOF register size, Diabetes QOF register size, standardised mortality rate

### Type of Model

A multivariable linear regression model was used. The model was weighted by practice list size so that larger practices had more leverage than smaller practices. Standard errors were adjusted for clustering of GP practices within PCTs.

Discussion was had as to whether to use a Poisson model but it was decided that as admissions may not be independent (High Intensity Users) or random then these assumptions were violated.

The outcome variable, number of admissions, was transformed (square root) so that it was normally distributed. The resulting predicted outcome was then back-transformed to obtain number of admissions.

### Choosing the predictor variables

Data from the commissioning toolkit was used (weighted capitation model) and a backwards stepwise method using variables available in this toolkit was performed to end up with a model for which all variables within the model had  $p < 0.05$  (likelihood ratio test) and  $p < 0.01$  for the model as a whole. The resulting model (below) explained 80% of the variation in the square root of emergency admissions at a GP practice level nationally.

---

```
.regress sqrtadms poptotal dfle70 prop85plus chd_stqof dm_stqof smrads [
> aw= poptotal] if poptotal>1000, cluster(pct)
(sum of wgt is 5.4904e+07)
```

```
Linear regression               Number of obs = 8152
                                F( 6, 150) = 645.00
                                Prob > F   = 0.0000
                                R-squared   = 0.8073
                                Root MSE  = 3.4251
```

(Std. Err. adjusted for 151 clusters in pct)

```
-----+-----
      |           Robust
sqrtadms |      Coef. Std. Err.      t    P>|t|     [95% Conf. Interval]
-----+-----
poptotal | .0013932 .0000316   44.12  0.000   .0013308   .0014556
dfle70   | .1684129 .0542613    3.10  0.002   .0611977   .2756281
prop85plus | 15.67168 2.300445    6.81  0.000   11.12622   20.21714
chd_stqof | 7.889191 .7932183    9.95  0.000    6.321867    9.456515
```



## Appendix B: List of GP Practices in Thurrock CCG

Practice Name	PCT Code	GPs	Practice Manager	Practice Address	Practice Phone Number	Practice List size
Suntharalingam R & Partner	F81110	Dr Suntharalingam	Jackie Meredith	The Health Centre London Road Tilbury RM18 8EB	01375 842028	2,225
Pattara A J & Partner	F81198	Dr Pattara	Anna Richardson	The Surgery High Road Horndon on the Hill SS17 8LB	01375 642362	2,516
Joseph L & Partner	F81218	Dr L Joseph (f) Dr P A Joseph	Jenny Dennis	New Road Medical Centre 22 New Road Grays RM17 6NG	01375 390717	2,851
Ramachandran M K	F81652	Dr Ramachandran	Mrs Ramachandran	Appledore Medcial Centre 8 Coronation Avenue East Tilbury Essex RM18 8SJ	01375 855288	2,628
Roy B B & Partner	F81088	Dr Roy	Lorraine Cobb	271a Southend Road Stanford-le-Hope SS17 8HD	01375 679316	2,911
Bansal A & Partner	F81155	Dr Bansal Dr R Punwani Dr P Arora	June Tobin	Balfour Medical Centre 2 Balfour Road Gray RM17 5NS	01375 373366	5,745
Deshpande A M. Dr Deshpande. Neera Medical Centre, 2 Wharf Road, Stanford le Hope	F81177	Dr A Deshpande Dr P Gurjar	Janet Jannaway (PA)	Neera Medical Centre 2 Wharf Road Stanford le Hope SS17 0BY	01375 672109	2,912
Yadava N & Partner	F81211	Dr Yadava	Marilyn Spires	East Turrock Road Medical Centre 34 East Thurrock Road Grays RM17 6SP	01375 390575	5,880
Kadim H & Sidana S S	F81623	Dr Sidana	Jean Burrows (Administrator)	The Surgery 167 Bridge Road Grays RM17 6DB	01375 373322	2,263
Dey K R & Partner	F81669	Dr Dey Dr S Okoi	Mrs Dey (Pat Fatharly)	Belhus Medical Practice 2 Fortin Path South Ockendon RM15 5NL	01708 855009	3,516



<b>Dilip Sabnis Medical Centre</b>	F81698	Dr Ambikapathy Dr Al-Kaisy Dr J Otim	Elaine Jordan	Dilip Sabnis Health Centre Linford Road Chadwell St Mary Grays RM16 4JY	01375 851578	3,025
<b>Patel P J &amp; Partners</b>	F81708	Dr P Patel	Mrs Smita Patel Linda Day	Sai Medical Centre 105 Calcutta Road Tilbury RM18 1QA	01375 855643	2,612
<b>Mukhopadhyay P K</b>	F81719	Dr Mukhopadhyay	Lynn Heath	The Surgery 57 Calcutta Road Tilbury RM18 7QZ	01375 859535	3,007
<b>Saha P K</b>	F81734	Dr Saha	Mrs Kay Saha	Tilbury Surgery 4 Commonwealth Hse Montreal Road Tilbury RM18 8XU	01375 855755	1,147
<b>St. Clements Health Centre</b>	Y00999	Dr Bose	Yvonne Wright	St Clements Medical Centre London Road West Thurrock Essex RM20 3DR	01708 891007	2,832
<b>Patel P C &amp; Partners</b>	F81645	P C Patel M T Patel (f) M Kamdar	Christopher Clark	6 Rectory Park Drive Pitsea Basildon Essex, SS13 3DW	01268 552999 or 553622	3,510
<b>Prasad B K</b>	F81666	B K Pasad E Perez	Uma Prasad PM Asst - Madhu McVay	Noak Bridge Medical Centre Bridge Street Noak Bridge Basildon Essex, SS15 4EZ	01268 284285	3,303
<b>Singh P K &amp; Partner</b>	F81707	P K Singh	(Mrs) Dalvinder Singh also Sue Harmer	Fryerns Medical Centre Peterborough Way Craylands Basildon Essex, SS14 3SS	01268 532344	2,394
<b>Rao H S</b>	F81710	H S Rao	Mrs S Hindnavis	Dipple Medical Centre West Wing Wickford Avenue Pitsea Essex, SS13 3HQ	01268 583288	2,468
<b>Jas B B &amp; Partner</b>	F81729	B B Jas K Jas (f)	Eileen Street	The Surgery 48 Matching Green Basildon Essex, SS14 2PB	01168 533928	3,445

<b>Abraham K K &amp; Partner</b>	F81186	K K Abraham J Joseph	Mrs Abrahams	<a href="#">The Surgery Felmores Centre Felmores Basildon Essex, SS13 1PN</a> Branch Surgery The Surgery 30 Long Riding, Basildon Essex, SS14 1QY	01268 728108 01268 285285	4,456
<b>Mampilly J J</b>	F81640	J Mampilly	Maria Mampilly	<a href="#">The Surgery Felmores Centre Felmores Basildon Essex, SS13 1PN</a> Branch Surgery The Surgery, Presidents Court, 41 Hoover Drive, Laindon, Essex, SS15 6LF	01268 728142 01268 543366	3,004
<b>Leighton L &amp; Partners</b>	F81010	Dr S Chauhan (Dr Leighton) (also see Bluebell Surgery)	(new PM tbc)	Aveley Medical Centre 22 High Street Aveley Essex RM15 4AD	08444 778675	11,294
<b>Jones S R &amp; Partner</b>	F81082	Dr S Jones Dr G Byrne	Jan Halcox	Main Surgery The Rigg Milner Medical Centre 8 Bata Avenue East Tilbury RM18 8SD Branch Surgery The Health Centre PCT Giffords Cross Road Corringham, SS17 7QQ	01375 843217	5,038
<b>Mohile R V &amp; Partners</b>	F81084	Dr Mohile	Linda Moore	Chadwell Medical Centre 1 Brentwood Road Chadwell St Mary Grays RM16 4JD	01375 842289	4,774
<b>Abela T &amp; Partners</b>	F81113	Dr T Abela Dr K Gunasekera Dr J Evans Dr S Olatigbe Dr N Aiub Dr L Grewal	Colin Townsend shares role with Dori Lopez	Chafford Hundred Medical Centre Drake Road Chafford Hundred RM16 6RS	01375 480000	14,855
<b>Davies A M &amp; Partner</b>	F81134	Dr A M Davies Dr C Jayakumar Dr Farid	Dawn Mainhood	Main Surgery Pear Tree Surgery Pear Tree Close South Ockendon RM15 6PP Branch Surgery 129 Station Road, West Horndon, CM13 3NB	01708 852318	7,177

<b>Colburn M &amp; Partners</b>	F81137	Dr Colburn Dr J D'Mello Dr N Bingham Dr A Mitchell	Joyce Mallagh	The Surgery 63 Rowley Road Orsett Grays RM16 3ET	01375 892082	7,309
<b>Tresidder N J &amp; Partners. Mr Russell Vine, Hassengate Medical Centre, Southend Road, Stanford-le-hope.Essex.</b>	F81153	Dr Tresidder Dr Kate Hanson Dr Judy Pusey	Russell Vine	Hassengate Medical Centre Southend Road Stanford-le-Hope Essex SS17 0PJ	08444 778945	11,642
<b>Bellworthy S V</b>	F81197	Dr S Bellworthy	Jackie Griffin	Sancta Maria Centre 2 Balfour Road Grays RM15 5SZ	01708 853114	2,915
<b>Abeyewardene A K &amp; Partner</b>	F81219	Dr Abeyewardene Dr Amarasingha	Lynn King (Practice Admin)	Main Surgery 111 Orsett Road Grays RM17 5HA Branch surgery 19 Wharf Rd, Stanford-le-Hope SS17 0BZ	0844 4773125 0844 477 33075	4,751
<b>Yasin S A</b>	F81632	Dr Yasin (South Ockendon)	Janet Poole	The Health Centre Darenth Lane South Ockendon RM15 5LP	01708 853113	3,510
<b>Masson K K &amp; Partner</b>	F81641	Dr K Masson (senior) Dr H Masson	Mrs Davinder Masson	12 Milton Road Grays RM17 5EZ	01375 381612	3,260
<b>Cheung K K</b>	F81644	Dr K Cheung	Vivienne Page (Administrator)	Ash Tree Surgery 33 Fobbing Road Corringham SS17 9BG	01375 643000	2,222
<b>Khan R S &amp; Partner</b>	F81691	Dr R Khan (East Tilbury) Dr S Gorai	Mr Shahid Khan	Main Surgery East Tilbury M C 85 Coronation Avenue East Tilbury RM18 8SN Branch Surgery E Tilbury, PCT Premises, Gifford's Cross Road, Corringham, SS17 7QQ	01375 846232	3,568
<b>Devaraja V C &amp; Partner</b>	F81697	Dr V Devaraja Dr G Devaraja	Danielle Bailey	The Sorrell Surgery 7 The Sorrells Stanford le Hope SS17 7DZ	01375 641740	3,531
<b>Acorns Pms</b>	F81742	Teresa Kearney (Nurse consultant) Dr S Ajetunmobi SPCT	Kay Painter	Acorns Queensgate Centre Orsett Road Grays RM17 5DF	01375 397470	2,683

Locum Purfleet Care Centre	Y00033	Dr T Nimal-Raj Dr Onykwell	Yvonne Wright	Purfleet Care Centre Tank Hill Road Purfleet RM19 1SX	01708 853113 864834	4,861
Thurrock Health Centre	Y02807					2,045
<b>TOTAL CONSORTIA PATIENT LIST SIZE</b>						<b>164,085</b>