Trends in Acute Care Usage in Lambeth and Southwark: Public Health Analysis

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- July 2013

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Executive Summary

Shifts in demand and in the pressures on A&E departments have multifactorial causes, and it is hard to identify such complexities without consistent collection of the *right* data across the whole system. It is also difficult to tease out the influence of changes in coding and tariffs. This report has identified a number of features of local urgent care usage in Lambeth and Southwark:

- Population growth is a contributor to demand for urgent care. The populations of Lambeth & Southwark are
 expected to grow by 11% and 15% respectively to 2025. Deprivation, which is higher in both boroughs
 compared to the England average is also a factor. Other factors include access to alternatives to A&E,
 preventive interventions such as influenza immunisation, social support etc.
- Standardised A & E attendance rates were lower in Lambeth & Southwark compared to England during 2010/11 -2012/13.
- The crude numbers of A&E attendances increased by 2.1% in Lambeth and 2.9% in Southwark from 2010/11 2012/13 while attendance rates overall stablilised (decreasing by <1% in both Lambeth & Southwark) during the same period.
- Crude Emergency admission rates reduced by 4.6% in Southwark and <1% in Lambeth from 2010/11 -2012/13.
- A&E attendance and admission rates increased amongst 65-84 year olds, but fell amongst younger groups. The greater proportion of older patients being seen in A&E and urgent care may be one explanation for the increased 'acuity' experienced by clinicians since they are more likely to present with co-morbidities.
- The proportion of long stays amongst older patients has not increased however, which is not in keeping with the idea of increased severity of illness, although it may be explained by reductions in delayed discharges.

- The proportion of short (1-2 day) admissions increased in both Lambeth and Southwark, while the proportion
 of long stay admissions decreased. Possible explanations include a lower number of delayed discharges, or
 changes in admission or coding practice.
- The pattern of attendances and admissions amongst children is more variable, but there is some indication that rates per 1,000 population are falling.
- There is little evidence of a seasonal trend in attendance or admission rates
- There is some evidence of increasing admissions in Southwark for preventable conditions, compared to London & England, after adjustment for age and sex differences.
- Among co-morbid conditions, alcohol-related admission rates increases in Lambeth since 2010/11, but fell in Southwark over the same period. Substance misuse-related emergency admissions have remained broadly stable since 2010/11. Mental health co-morbidity amongst emergency admissions has increased since 2010/11.

1. Scope/Aims

- Analysis of unplanned care in Lambeth and Southwark boroughs to the year end of 2012/12 with the aim
 of identifying patterns of change and interpreting possible reasons for trends.
- Based on comparison of 3 years of SUS data for the years 2010/11 to 2012/13
- Includes breakdown of A&E attendances and emergency admissions by:
 - Age
 - Length of stay
 - Proportion of A&E patients admitted to the hospital
 - Primary and secondary diagnoses
 - Further breakdown of groups for whom notable increases are observed compared to previous years

2. Background/Data Issues

There is always interest in analysing unplanned care, representing as it does such a significant cost to the healthcare system. Avoidable emergency admissions are also very costly to patients in terms of distress, and avoidable admissions may represent problems with long-term management. It is however important to recognise that unplanned care is not a negative outcome in itself, and that there is a balance to be struck between controlling its use, but still ensuring that patients access emergency care when appropriate. In a recent BMJ paper¹, Roland and Abel discuss some of the problems with interpreting acute care data:

- Random variation numbers can vary quite widely by chance e.g. if the expected number of admissions is 200, then results would fall outside the range of 173-228 by chance 5% of the time. This means that detecting genuine changes in activity amongst statistical "noise" is difficult, particularly with only a few years year of data.
- Regression to mean individuals who have had frequent admissions in one year often return to the same admission rates as the rest of the population their age without any outside interventions.

They also critique some popular admission strategies:

- Targeting high risk/ frequent attenders: targeting the highest risk people (0.5% of the population) is not necessarily the most effective way to reduce admissions. An alternative theory is that it would be more effective to reduce risk in the 80% of the population who account for 40% of admissions.
- Intensive interventions: these can create supply-induced demand. For example, community matrons for high risk patients can actually increase admissions (but may reduce length of stay).
- Assuming that reducing admissions is always beneficial under referral can be dangerous just as over referral is wasteful.

A&E attendances have been rising over the past decade, although nationally this increase is noted to have levelled off over the past 30 months.² The picture has been complicated by changes in urgent care provision. Since 2004, GPs have not had to provide out of hours care, and the last decade has seen the growth of urgent care centres, walk-in clinics and more recently the 111 telephone service starting to take over from NHS Direct. There have also been changes in data collection, with a broadening of the services coded as urgent care. The increased number of providers, and changes in how they are coded, makes analysis of the long-term trends in urgent care difficult. A&E

data remains far from ideal, providing patient numbers and broad payment codes rather than the actual diagnoses. Activity data from primary care is also missing from the picture, and it is therefore difficult to identify whether increases in one part of the system, such as A&E, reflect a real change in need or rather a shift in the location care has been accessed.

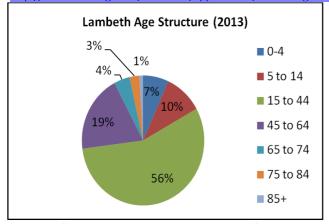
There have been local and national reports of increased 'acuity' in the A&E and emergency caseload, with clinicians noting that even when numbers have remained stable, the workload has increased. This 'acuity', which could be described as increased severity or complexity, is a difficult characteristic to identify within the data. In A&E particularly, diagnostic data collection is limited, and there is a limit to the insights that can be gleaned from HRG codes. There are currently local trials of an acuity score in A&Es, to try and capture shifts in the complexity of the case mix. A&E and emergency admission numbers are based on episodes of care, and can therefore be skewed by small numbers of users requiring frequent attendances and admissions, for example cancer patients or patients who misuse alcohol. Finally, much of the data has been compared over the time period 2010/11 to 2012/13, and ideally trends would be analysed over a longer time period to avoid drawing conclusions from what could be normal variation.

Over the past few months there has been an increased national focus on the pressures faced by A&Es, both from NHS England, and the media. CCGs have been asked to "facilitate the development of local recovery and improvement plans centred around each A&E department." Lambeth and Southwark CCGs have now formed an Urgent Care Board, and this paper contributes to the extensive range of metrics analysed in the annual review of winter pressures.

3. Lambeth and Southwark Demographics

Where possible this report presents attendance and admission figures as rates per 1,000 population so that increases in the population or its age structure are accounted for. Rates are produced using population estimates produced by the GLA based on the 2011 Census.⁴

4http://data.london.gov.uk/datastore/applications/custom-age-tool-gla-population-projections-ward





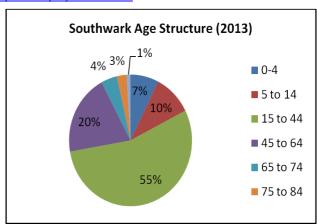


Figure 2. (Source: GLA mid-year estimates)

Lambeth and Southwark have very similar age structures. They are typical of London, where compared to the rest of England there is a higher than average working age population. Migration into the capital has led to a 13.5% increase in the number of residents aged 15-64 since the 2001 census. GLA projections indicate that the populations of Lambeth and Southwark will grow by 11% and 15% respectively by 2025, but that the age structure will remain broadly similar, in contrast to the national picture of an ageing population. There is also a higher level of population turnover, or churn, with around 10% of the population arriving, and around 10% leaving each year in both boroughs. This can cause issues with data collection, and with continuity of care, which could impact on emergency care usage.

¹ Roland M, Abel G, Reducing Emergency Admissions – are we on the right track? BMJ 2012;345:e6017

² Appleby, Are Accident and Emergency Attendances Increasing? BMJ 2013;346:f3677

³Letter re Delivery of the A&E 4 Hour Operational Standard, Dame Barbara Hakin. Chief Operating Officer/Deputy Chief Executive, NHS England, 09/05/13

Lambeth and Southwark also have ethnically diverse populations in common and in particular a high proportion of African/Caribbean/Black British groups, which account for around a quarter of the population in both boroughs. The ethnic composition of the boroughs could impact on emergency care usage both in terms of the conditions experienced by the population, but also in patterns of healthcare access.

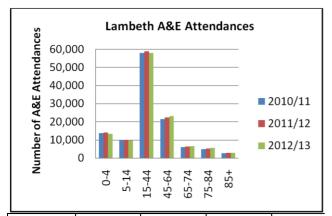
Deprivation is higher in both boroughs than the English average, although as is the case in most of London there are pockets of affluence alongside extremely deprived localities. Higher deprivation is generally associated with a higher level of emergency admissions, due to a combination of factors including higher levels of morbidity and barriers to community management.

Figure 3. (Source: Local SUS data, 2010/11 – 2012/13) Figure 4. (Source: Local SUS data, 2010/11 – 2012/13)

Figures 3 and 4 show that Lambeth and Southwark residents also make similar use of emergency providers. The majority of Lambeth and Southwark residents receiving emergency care during the period 2010/11 to 2012/13 did so at either Guy's and St Thomas' NHS Foundation Trust (GSTT) or Kings College Hospital NHS Foundation Trust (KCH). In both boroughs, care is split fairly evenly between these two providers, although a greater proportion of Lambeth residents seek emergency care at alternative providers, chiefly St George's Healthcare and Croydon Health Services (whereas Southwark residents are more likely to use Lewisham Healthcare). The similarities in provider landscape in the two boroughs means differences between the emergency care data for the two boroughs are less likely to be due to coding differences, as a shift in the coding practice of either GSTT or KCH would impact on both boroughs.

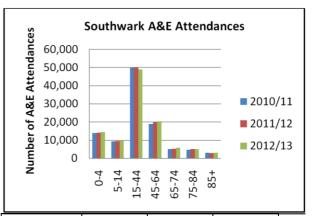
However, since 15% more patients in Lambeth received their care in 'other' hospitals, differences between GSTT/KCH and these other providers may be more strongly reflected in Lambeth's data.

4. A&E Attendance



Lambeth	2010/11	2011/12	2012/13
0-4	13,851	14,067	13,471
5-14	9,931	10,079	9,798
15-44	58,020	58,952	58,041
45-64	21,505	22,336	23,101
65-74	6,028	6,389	6,501
75-84	5,003	5,246	5,710
85+	2,749	2,890	2,972
Total	117,087	119,959	119,594

Figure 5. (Source: Local SUS data)



Southwark	2010/11	2011/12	2012/13
0-4	13,945	14,238	14,607
5-14	9,307	9,576	9,887
15-44	49,949	49,993	49,029
45-64	18,904	19,846	20,474
65-74	5,194	5,379	5,877
75-84	4,789	5,073	5,205
85+	3,047	2,975	3,130
Total	105,135	107,080	108,209

Figure 6. (Source: Local SUS data)

The number of A&E attendances by Lambeth residents has increased by 2.1% since 2010/11, but actually fell by 0.3% last year. The greatest increase was in the 75-84 age group, where attendances increased by 707, or 14.1%. There were 2.9% more A&E attendances by Southwark residents in 2012/13 compared to 2010/11, with a 1.1% increase in 2012/13. In contrast to Lambeth, the greatest increase was seen in the 65-74 year old age group where attendances increased by 13.1% over the 3 years.

Figures 5 and 6 show clearly that 15-64 year olds make up the majority of A&E attendees in both Lambeth and Southwark. They accounted for 68% of attendances in the Lambeth population and 64% of Southwark attendances in 2012/13. However, this age group accounts for 75% of the population in both boroughs, indicating that they are proportionally lower users of A&E services.

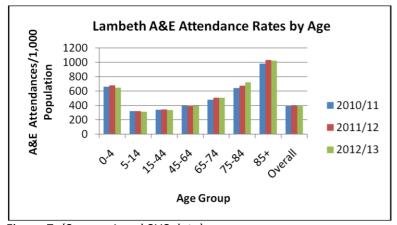
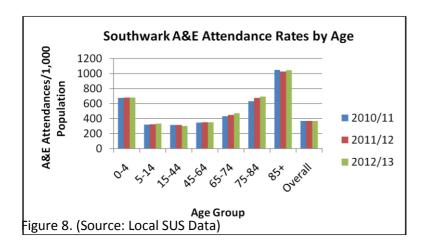


Figure 7. (Source: Local SUS data)

Age group	% change 2010/11- 2011/12	% change 2011/12- 2012/13	% change 2010/11- 2012/13
0-4	3.03%	-5.15%	-2.28%
5-14	0.51%	-3.41%	-2.91%
15-44	1.37%	-2.34%	-1.00%
45-64	-1.20%	1.13%	-0.08%
65-74	5.99%	0.16%	6.16%
75-84	4.86%	7.47%	12.69%
85+	5.13%	-0.71%	4.38%
Overall	1.37%	-1.44%	-0.08%

Converting attendance numbers to rates allows comparison of usage levels between age groups, across years and between the boroughs. For example, the population in Lambeth has increased by an estimated 2.2% since mid-2010, during which time the number of A&E attendances has risen by 2.1%; this is reflected in the A&E attendance rate, which has remained very stable at 388 per 1,000 population. As with the crude numbers, 75-84 year olds account for the greatest increase in A&E attendance rate, with a 12.69% increase since 2010/11.

The picture amongst younger age groups is far more variable, and it is difficult to discern a pattern in these variations. Both 0-4 and 5-14 age groups have shown a decrease in attendance rate over the past year, with the attendance rate amongst under 4s falling by 5.15% since 2011/12. In isolation, in the context of the variability in attendance rates, this may not be significant, but figures should be monitored over the coming year to identify whether this is part of a longer term trend. A fall in the A&E attendance rate amongst children could reflect a decrease in actual need, parents taking children to other settings such as GPs, or more home management of illness, but it is important that parents can access emergency care for their young children, and a lower rate of attendance is not necessarily desirable.



Age group	% change 2010/11- 2011/12	% change 2011/12- 2012/13	% change 2010/11- 2012/13
0-4	0.64%	-0.27%	0.36%
5-14	1.50%	2.56%	4.09%
15-44	-0.79%	-3.27%	-4.03%
45-64	0.36%	0.68%	1.04%
65-74	4.42%	4.89%	9.53%
75-84	7.34%	2.60%	10.14%
85+	-2.36%	1.70%	-0.70%
Overall	0.30%	-0.67%	-0.37%

In Southwark, A&E attendance numbers increased by 2.9% between 2010/11 and 2012/13, but taking into account the estimated population growth of 3.3% over this period, the attendance rate/1,000 population has remained very stable. Within this stable picture, there were significant increases of 9.53% and 10.14% in the attendance rate/1,000 population amongst 65-74 year olds and 75-84 year olds respectively. This was balanced out by a 4.03% fall in the attendance rate/1,000 population amongst the large 15-44 age group.

Amongst children in Southwark, the attendance rate in the 0-4 age group has remained stable, whereas the rate amongst 5-14 year olds has increased by 4.09%. This is contrast to the picture in Lambeth where both age groups showed reduced rates of A&E attendance/1,000 population last year.

Figure 9. (Source: NHS Comparators, 2013. * 2012/13 figures are rolling year figures based only on Q1/2 data)

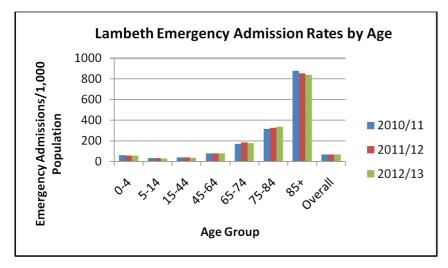
The above figure is based on NHS Comparators data, which standardises crude rates per 1,000 population to allow comparison between areas and over time. The standardisation involves producing an expected number of A&E attendances for the characteristics of the population (e.g. age, deprivation, ethnicity), and then comparing this to the actual number observed. The validity of the standardised rate therefore relies on the completeness, consistency and quality of population and A&E data (which has had particularly issues in terms of completeness), but also on the standardisation methodology itself. This can make standardised rates controversial, but they do allow cautious comparison across geographical areas, and over time.

The figure for 2012/13 is a preliminary rolling year rate based on Q1/2 data, and as such should be treated with particular caution. Population estimates for Lambeth and Southwark used by NHS comparators are notably different from the GLA figures used to calculate rates for local SUS data elsewhere in this paper, with all NHS comparators estimates being higher. This is particularly the case for the Lambeth population estimate used by NHS comparators, which may go some way towards explaining the consistently lower standardised rates observed in Lambeth when compared with Southwark.

Based on NHS Comparators data, both Lambeth and Southwark have had standardised A&E attendance rates per 1,000 population that are consistently lower than the England-wide rate since 2009/10. Lambeth's standardised A&E attendance rate has been significantly lower than that of both Southwark and London over this period, although it too showed an increase between 2010/11 and 2011/12. Southwark's standardised A&E attendance rate has tracked the England-wide rate fairly closely but has stayed more stable than the continually increasing London-wide rate, and Q1/2 data suggests that it may actually be lower than London for 2012/13.

5. Emergency Admission Rates

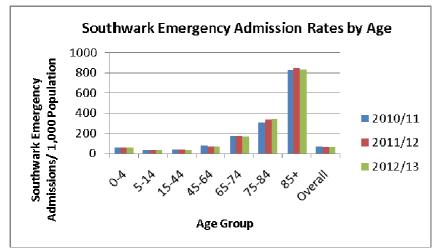
Emergency admissions analysis excludes maternity, mental health and A&E admissions, for example to a Clinical Decision Unit (CDU).



Age group	% change 2010/11- 2011/12	% change 2011/12- 2012/13	% change 2010/11- 2012/13
0-4	-4.97%	0.25%	-4.73%
5-14	0.73%	-5.40%	-4.72%
15-44	3.20%	-8.34%	-5.41%
45-64	-0.43%	1.19%	0.75%
65-74	8.90%	-4.26%	4.25%
75-84	3.07%	3.18%	6.35%
85+	-2.84%	-1.76%	-4.55%
Overall	2.15%	-2.52%	-0.42%

Figure 10. (Source: Local SUS Data)

Whereas the crude number of emergency admissions in Lambeth increased by 1.8% between 2010/11 and 2012/13, the emergency admission rate/1,000 population remained very stable, with a 2.15% increase in 2011/12 followed by a slightly larger decrease in 2012/13. The increase in emergency admissions in older age groups is lower than the increase in A&E attendances, but 75-84 year olds again showed the greatest increase.



Age group	% change 2010/11- 2011/12	% change 2011/12- 2012/13	% change 2010/11- 2012/13
0-4	-4.92%	0.18%	-4.74%
5-14	-3.45%	-0.31%	-3.75%
15-44	-3.39%	-6.58%	-9.74%
45-64	-4.79%	-5.36%	-9.90%
65-74	-1.37%	-1.15%	-2.50%
75-84	11.25%	0.28%	11.56%
85+	2.43%	-2.03%	0.35%
Overall	-1.47%	-3.24%	-4.66%

Figure 11. (Source: Local SUS Data)

In Southwark, the number of emergency admissions in 2012/13 was 1.5% lower than in 2010/11, but the rate per 1,000 population fell by a more significant 4.66%. A&E attendance rate per 1,000 population (see fig.8) had risen by around 10% in both 65-74 and 75-84 age groups since 2010/11, but the emergency admission rate per 1,000 population actually fell by 2.50% in the 65-74 age group, whilst rising 11.56% in the 75-84 age group. This may indicate that the increase in attendances by 65-74 year olds is predominantly amongst less seriously ill individuals, whereas the increase in the older 75-84 year old age group consists of more seriously ill individuals who then require admission, but ideally a longer time trend is needed.

The decrease in the rate of emergency admissions/1,000 population amongst younger age groups is greater in Southwark than in Lambeth. The rate of admissions amongst 15-44 year olds in Southwark was 9.74% lower in

2012/13 compared to 2010/11, whereas this figure was 5.41% in Lambeth. Whereas the emergency admission rate/1,000 population in the 45-64 age group in Southwark remained stable, it fell by 9.90% in Lambeth.

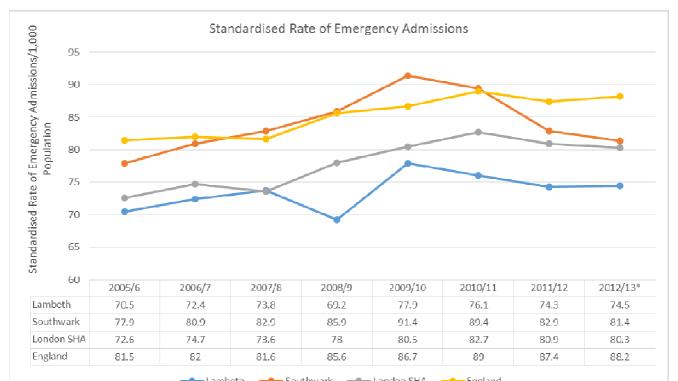


Figure 12. (Source: NHS Comparators * 2012/13 figures are preliminary rolling year figures based only on Q1/2 data)

Figure 12 compares the NHS comparators standardised emergency admission rates for Lambeth and Southwark to London and England figures. A time series such as this going back to 2005/6 is vulnerable to changes in coding of emergency admissions over time. As with the standardisation of A&E attendance rate, comparison relies on the validity of the algorithm used to standardise crude rates.

NHS comparators data indicates that since 2005/6 Lambeth has consistently had a lower standardised emergency admission rate than England overall, and lower than the overall London standardised rate for the past 5 years. It has also been consistently lower than the Southwark standardised emergency admission rate.

The Southwark standardised emergency admission rate has been consistently higher than the Lambeth and London standardised rates, but has shown more fluctuation when compared with the England figure. For the past 2 years it appears to be falling below the England-wide standardised emergency admission rate after a number of years of exceeding this figure.

6. Admittance Rate From A&E

The 'conversion rate' of an A&E department refers to the percentage of patients attending the A&E who are then admitted to the hospital. Again, emergency admissions are defined as excluding maternity, mental health and A&E admissions, whereas the A&E attendances include all patients. The ratio of admittances to attendances is therefore lower than if these groups of patients were included.

The proportion of patients admitted could reflect the 'acuity' of the patient mix attending A&E. However, the decision to admit can also be influenced by pressures on the system. Patients requiring high levels of observation may be kept in A&E rather than being transferred to a ward. Since it is a proportion, this figure is also influenced by fluctuations in A&E attendances by individuals who do not require A&E care. A low proportion of patients admitted could indicate inappropriate attendances, although it is important to note that even if a patient only receives advice rather than treatment, this is not necessarily an inappropriate use of A&E.

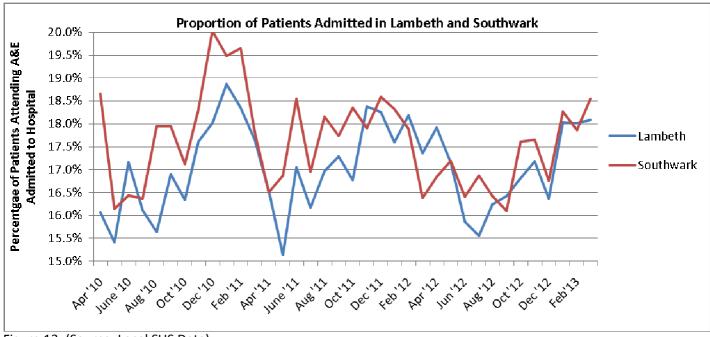


Figure 13. (Source: Local SUS Data)

The proportion of patients admitted is slightly lower in Lambeth compared to Southwark, but the two boroughs have followed a very similar pattern since April 2010, peaking at 18.9% and 20.0% respectively in December and January 2010, followed by a low of 15.1% and 16.5% respectively in April and May 2011.

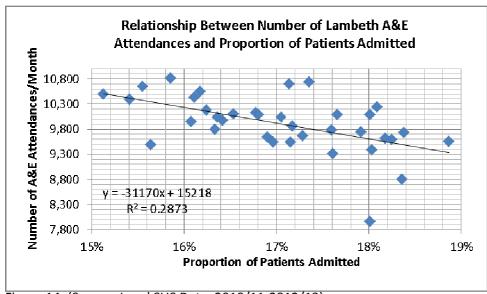
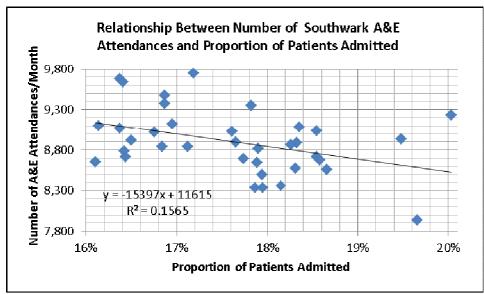


Figure 14. (Source: Local SUS Data, 2010/11-2012/13)

Despite an apparent relationship between how 'busy' a month is, and the proportion of patients admitted, the correlation coefficient is only 0.536. This indicates a moderate negative linear relationship between the number of A&E attendances per month and the proportion of patients admitted, but is not significant enough to draw conclusions without further analysis.



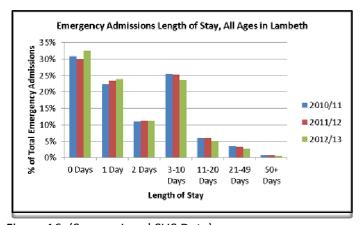
In Southwark, the correlation is 0.396 which again only represents a moderate linear correlation. In Southwark the correlation is weaker than in Lambeth, so should be treated with even greater caution.

Figure 15. (Source: Local SUS Data, 2010/11 -2012/13)

The variation in the proportion of patients admitted is relatively low, and falls in the middle of the UK-wide range (3-38%)⁵. The data presented in figures 14 and 15 is at a borough level, and without looking at daily or weekly provider-level data it is difficult to draw definite conclusions.

7. Length of Stay

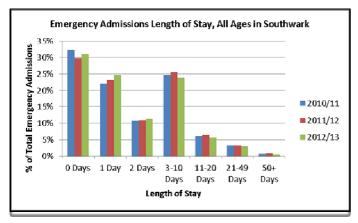
Average length of stay can be a marker of the severity of case mix being admitted through a hospital, and therefore reflect actual need. For an individual patient, length of stay can also be influenced by quality of care affecting speed of recovery, or issues with discharge. Shifts in trends of length of stay can however also reflect changes in discharge protocols or coding practices.



	% change	%change	% change
Length of	2010/11-	2011/12-	2010/11-
Stay	2011/12	2012/13	2012/13
0 Days	-2.80%	14.31%	11.12%
1 Day	3.86%	8.49%	12.68%
2 Days	1.81%	5.94%	7.86%
3-10 Days	-0.60%	-0.75%	-1.34%
11-20 Days	1.31%	-8.20%	-7.00%
21-49 Days	-6.02%	-12.01%	-17.31%
50+ Days	-6.57%	-36.02%	-40.22%

Figure 16. (Source: Local SUS Data)

⁵ Purdy et al. (2012) Interventions to reduce unplanned hospital admission: a series of systematic reviews. http://www.apcrc.nhs.uk/library/research_reports/documents/9.pdf



Length of Stay	% change 2010/11 - 2011/12	% change 2011/12 - 2012/13	% change 2010/11 - 2012/13
0 Days	-13.51%	10.38%	-4.53%
1 Day	-1.74%	12.86%	10.90%
2 Days	-5.99%	11.05%	4.40%
3-10 Days	-2.65%	-1.23%	-3.84%
11-20 Days	-2.44%	-7.90%	-10.15%
21-49 Days	-6.68%	-4.20%	-10.60%
50+ Days	15.32%	-25.94%	-14.59%

Figure 17. (Source: Local SUS Data)

Both Lambeth and Southwark have shown an increase in 1-2 day admissions in the last year, and a decrease in the proportion of longer admissions. Hospital data indicates that delayed discharges have reduced over this time period, which could be one explanation for this trend. However it is important to ensure that pressures in the system do not lead to premature discharges. Another possible explanation is variation in coding practice.

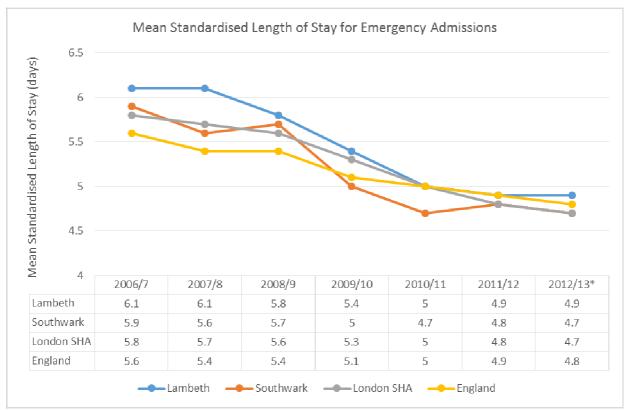


Figure 18. (Source: NHS Comparators * 2012/13 figures are preliminary rolling year figures based only on Q1/2 data)

The mean length of stay is another way of expressing trends in length of stay. NHS comparators standardised figures indicate there has been a downwards trend in the mean length of emergency admissions since 2006/7 across Lambeth, Southwark, London and England. The variation between these geographical areas is low, and the figures have become more similar over time, although Lambeth has consistently had a slightly higher mean standardised length of stay since 2006/7.

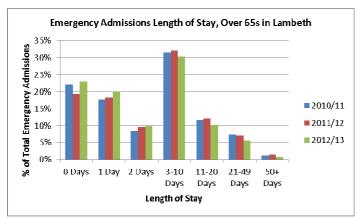
8. Emergency Care for the Elderly

The 65-84 year old group in particular have had increased A&E attendance rates/1,000 population, and also increased rates/1,000 population of emergency admittance (Southwark 65-74 year olds being the exception).

The proportional increase in attendance of patients of older age may mean a greater proportion of patients with comorbidities as elderly patients are more likely to present with a number of conditions. Managing chronic conditions during an acute illness presents challenges, and this could be part of the explanation for the increased 'acuity' noted by local clinicians.

Length of Stay:

One way of measuring whether the elderly patients presenting to A&E in 2012/13 have been more seriously ill than in previous years is to look at their length of stay. The caveat is that a long stay in hospital can also reflect delayed discharge, and over 65s often require more complex packages of care on discharge than their younger counterparts. Recent initiatives to help shift care to the community as part of an integrated care programme (ICP) across Lambeth and Southwark include home wards and intermediate care.



	% change 2010/11 - 2011/12	% change 2011/12 - 2012/13	% change 2010/11 - 2012/13
0 Days	-8.91%	25.97%	14.74%
1 Day	8.62%	15.73%	25.70%
2 Days	20.29%	9.61%	31.86%
3-10 Days	6.79%	0.13%	6.92%
11-20 Days	8.62%	-11.61%	-3.99%
21-49 Days	1.10%	-16.70%	-15.79%
50+ Days	22.85%	-37.92%	-23.74%

Figure 19. (Source: Local SUS Data)

<u>م</u> 35%								
5 30%								
Ĕ 25%								
20% ځ								
5 15%		ш						2010/1
E 10%								2011/1
% of Lotal Emergency Admissions of 2 5% 2 0% 15% 10% 5% 0% 0%		П						■2012/1
%	0 Days	1 Day	2 Days	3-10	11-20	21-49	50+	
				Days	Days	Days	Days	

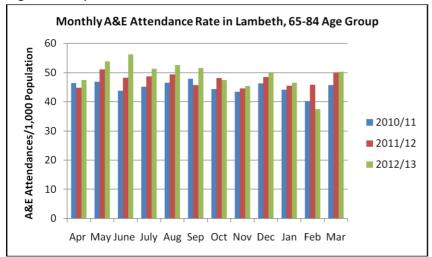
	% change 2010/11 - 2011/12	% change 2011/12 - 2012/13	% change 2010/11 - 2012/13
0 Days	-13.77%	14.18%	-1.55%
1 Day	-0.41%	15.70%	15.23%
2 Days	1.80%	8.99%	10.95%
3-10 Days	3.29%	-0.23%	3.06%
11-20 Days	4.76%	-11.13%	-6.90%
21-49 Days	2.07%	-6.35%	-4.41%
50+ Days	41.40%	-27.70%	2.23%

Figure 20. (Source: Local SUS Data)

In both Lambeth and Southwark, there has been an increase in the proportion of emergency admissions discharged after 1-10 days, and particularly 1 and 2 day admissions each year since 2010/11. This was more marked in Lambeth than Southwark. The proportion of longer stays has shown a corresponding fall, largely over the last year. Stays over 50+ days have shown a particularly significant fall in both boroughs, although the numbers involved are very small. More significant in terms of overall bed-days are the falls in the number of 11-20 day and 21-49 day admissions in both boroughs. This could be due to lower illness severity amongst admissions, which would contradict theories of higher acuity. However, other possible explanations include better treatment with faster recovery, or, more likely, changes in discharge practices or coding. Hospital analysis does indicate a reduced incidence of delayed discharges; this could be due to the support offered by ICP initiatives described above across Lambeth and Southwark. Ideally, data would be compared to years prior to 2010/11 to allow analysis of longer term trends.

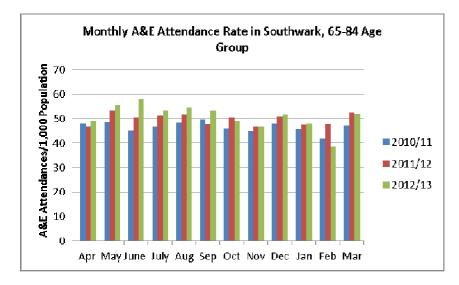
Attendances and Admissions by Month:

Analysing attendances and admissions by month can give some indication of the seasonality of pressures on the urgent care system.



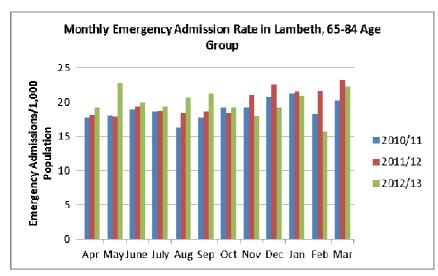
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2010/11-2011/12	-3.48%	8.89%	10.20%	8.04%	6.11%	-4.70%	8.63%	2.71%	4.66%	3.00%	13.76%	9.54%
2011/12-2012/13	5.88%	5.46%	16.60%	5.29%	6.47%	12.93%	-1.45%	1.80%	2.94%	2.27%	-18.23%	0.48%
2010/11-2012/13	2.19%	14.84%	28.49%	13.76%	12.97%	7.62%	7.05%	4.56%	7.73%	5.34%	-6.97%	10.06%

Figure 21. (Source: Local SUS data)



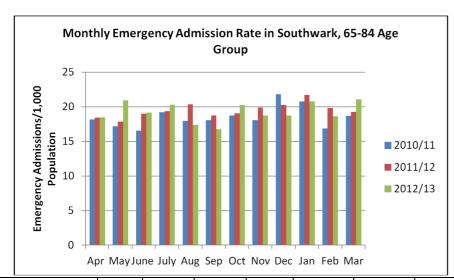
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2010/11-2011/12	-2.49%	10.01%	11.33%	9.15%	7.19%	-3.73%	9.74%	3.77%	5.73%	4.06%	14.93%	10.66%
2011/12-2012/13	4.75%	4.34%	15.35%	4.17%	5.33%	11.73%	-2.50%	0.72%	1.84%	1.18%	-19.10%	-0.59%
2010/11-2012/13	2.14%	14.78%	28.43%	13.70%	12.91%	7.56%	7.00%	4.51%	7.67%	5.29%	-7.02%	10.01%

Figure 22. (Source: Local SUS Data)



	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2010/11	1.65%	-0.82%	2.60%	0.52%	13.21%	4.68%	-4.58%	9.16%	8.73%	1.15%	18.55%	15.05%
2011/12	6.27%	27.71%	2.79%	3.44%	11.88%	13.85%	4.07%	-14.31%	-14.92%	-2.80%	-27.15%	-4.15%
2012/13	8.03%	26.67%	5.46%	3.98%	26.67%	19.18%	-0.70%	-6.46%	-7.49%	-1.68%	-13.64%	10.27%

Figure 23. (Source: Local SUS Data)



	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2010/11-2011/12	1.31%	4.01%	14.66%	0.76%	13.30%	3.58%	1.57%	10.11%	-6.98%	4.48%	17.46%	2.95%
2011/12-2012/13	0.22%	17.11%	0.93%	5.00%	-14.78%	-10.51%	6.44%	-5.77%	-7.44%	-4.34%	-6.04%	9.46%
2010/11-2012/13	1.53%	21.81%	15.72%	5.80%	-3.45%	-7.31%	8.11%	3.76%	-13.90%	-0.06%	10.37%	12.69%

Figure 24. (Source: Local SUS Data)

The monthly analysis of figures illustrates that there is no particular trend of seasonality in terms of the rate of A&E attendances and emergency admissions. The most significant increase in 2012/13 for 65-84 year olds was in May 2012, when rates of attendance and admission increased by between around 15-25%. This counters the widely held perception that pressure on A&Es and acute care due to excess morbidity amongst the elderly is a winter problem, although numbers alone do not capture the workload created by a varying case mix.

9. Emergency Admission Diagnoses

Lambeth Top 25 ICD 10 Diagnoses in 2012/13 by Emergency Admission Rate Per 1,000 Population	2010/11	2011/12	2012/13	Southwark Top 25 ICD 10 Diagnoses in 2012/13 by Emergency Admission Rate Per 1,000 Population	2010/11	2011/12	2012/13
R074 - Chest pain, unspecified	8.07	8.34	8.56	N390 - Urinary tract infection, site not			
N390 - Urinary tract infection, site not specified	7.96	8.43	7.96	specified R074 - Chest pain,	7.87	8.08	8.34
R104 - Other and unspecified abdominal pain	5.77	4.74	5.08	unspecified R104 - Other and	8.60	7.47	7.16
J181 - Lobar pneumonia, unspecified	3.14	3.64	4.62	unspecified abdominal pain	5.75	4.52	5.37
J459 - Asthma, unspecified	3.90	3.86	4.20	J181 - Lobar pneumonia,			
R55X - Syncope and collapse	3.80	3.46	4.06	unspecified R55X - Syncope and	3.42	3.49	4.58
J22X - Unspecified acute lower respiratory infection	4.22	3.67	4.04	collapse B349 - Viral infection,	4.01	2.90	4.16
D570 - Sickle-cell anaemia with crisis	3.26	3.74	3.83	unspecified	2.84	2.47	3.88
B349 - Viral infection,	2.81	3.37	3.51	J22X - Unspecified acute lower respiratory infection	4.40	3.73	3.69
unspecified R51X - Headache	3.69	3.62	3.25	D570 - Sickle-cell anaemia with crisis	3.43	3.34	3.61
				J459 - Asthma, unspecified	3.14	2.89	3.36
J440 – COPD with acute lower respiratory infection	2.37	2.42	2.81	R51X - Headache	3.51	3.21	3.05
D400 D : : :				J440 - COPD with acute			
R103 - Pain localized to other parts of lower abdomen	2.29	2.17	2.77	R103 - Pain localized to	3.47	3.12	2.98
R073 - Other chest pain	2.46	2.63	2.72	other parts of lower	2 22	2.45	2.04
F100 - Mental and behavioural disorders due to use of alcohol	2.06	2.14	2.71	abdomen J189 - Pneumonia, unspecified R073 - Other chest pain	3.39 2.38	3.35 2.97	2.94 2.77 2.62
J189 - Pneumonia, unspecified	2.76	2.88	2.45	J441 – COPD with acute exacerbation,unspecified	2.93	2.74	2.58
K590 - Constipation	2.32	2.18	2.40	L031 - Cellulitis of other parts of limb	2.62	2.31	2.54
J441 – COPD with acute exacerbation, unspecified	2.08	2.46	2.38	K590 - Constipation	2.48	1.93	2.29
chacer battori, an specified				148X - Atrial fibrillation and			
L031 - Cellulitis of other parts of limb	2.04	2.69	2.36	flutter	2.14	2.11	2.00
R101 - Pain localized to upper abdomen	1.61	1.73	2.18	R101 - Pain localized to upper abdomen R060 - Dyspnoea	1.63	1.36	1.92
I500 - Congestive heart failure	1.87	1.73	1.96	I500 - Congestive heart	1.91	1.54	1.91
I48X - Atrial fibrillation and flutter	2.70	2.14	1.95	failure N12X - Tubulo-interstitial	1.67	1.79	1.89
R11X - Nausea and Figuiting 5. (Source: Local S	2.05 US đáta)	1.62	1.94	nephritis, not specified as acute or chronic	0.98	1.32	1.82

R060 - Dyspnoea	1.68	1.14	1.90	R11X - Nausea and	2.09	1.65	1.79	
G409 - Epilepsy,	1.91	1.74	1.88	vomiting				
unspecified	1.51	1.74	1.00	J039 - Acute tonsillitis,	1.30	1.43	1.68	
R568 - Other and	1.84	1.58	1.87	unspecified				
unspecified convulsions	1.04	1.36	1.07	R072 - Precordial pain	0.80	0.56	1.68	

The above table illustrates a high degree of crossover between the ICD 10 codes accounting for the highest rate of emergency admissions in both boroughs. The most notable variation is the 2012/13 Lambeth admission rate of 2.71 per 1,000 population for mental and behavioural disorders due to use of alcohol, whereas in Southwark this is the 28th most common diagnosis, with an admission rate of 1.57 per 1,000 population.

For the purposes of analysis, a list based on individual ICD 10 codes gives little insight into patterns of admission by condition or category of condition. For example, pneumonia can be classified as lobar, unspecified, or categorised more precisely by causative organism. Grouping these ICD 10 codes gives the following emergency admission rates:

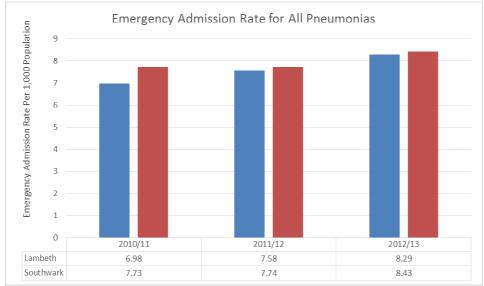


Figure 26. (Source: Local SUS data)

Figure 26 gives a greater insight into admission patterns for pneumonia. The admission rate per 1,000 has increased in both boroughs since 2010/11 but whereas Lambeth did have a lower admission rate than Southwark, it has increased by twice as much in the past 2 years (the emergency admission rate has increased by 9.1% in Southwark and 18.8% in Lambeth) so that Lambeth and Southwark now have very similar rates of admission.

This increase could be due to an increase in susceptible individuals in the community, an increase in the circulation of pneumonia-causing organisms over the past 2 years, or issues with managing patients with pneumonia in the community to avoid an emergency admission.

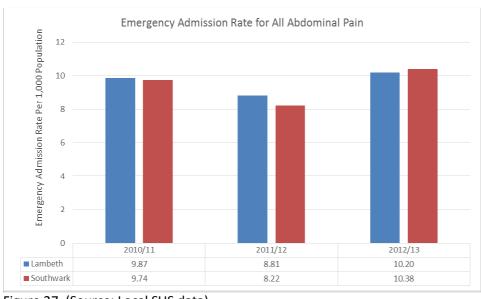


Figure 27. (Source: Local SUS data)

Combining ICD 10 codes for upper, lower and other abdominal pain gives a broader perspective on the emergency admission rate for abdominal pain. There was a downwards fluctuation in the admission rate in 2011/12, but overall emergency admissions have risen slightly (3.3% in Lambeth, 6.5% in Southwark) since 2010/11.

The same approach of grouping ICD 10 codes is used for diagnostic analysis through the rest of the paper.

10. Preventable Admissions

Ambulatory care sensitive conditions are defined as conditions where management in primary care or the community can prevent emergency admission. They are of particular interest since there is scope to reduce overall emergency admissions by targeting care at these conditions. As well as reducing pressures on acute care, this also has obvious benefits for individual patients who are supported to stay at home, and to avoid a stressful emergency admission.

NHS Comparators produces a 'Managing Emergency Care' metric, using a compound standardised admission rate for 19 ambulatory care sensitive conditions. It defines the 'Managing Variation in Emergency Admissions' comparator as: "The rate per 1000 practice population of emergency admissions for 19 conditions. These conditions have been identified as ones where community care can avoid the need for hospitalisation. The purpose of the comparator is to help monitor potentially avoidable emergency hospital admissions for certain acute illnesses that are amenable to management in a primary care setting." The conditions are:

- Vaccine-preventable: including Influenza and pneumonia
- Chronic: Diabetes complications; Nutritional deficiencies; Iron deficiency anaemia; Hypertension; Congestive heart failure; Angina; Chronic obstructive pulmonary disease; Asthma
- Acute: Dehydration and gastroenteritis; Convulsions and epilepsy; Ear, nose and throat infections; Dental conditions; Perforated/bleeding ulcer; Ruptured appendix; Pyelonephritis; Pelvic inflammatory disease; Cellulitis; Gangrene

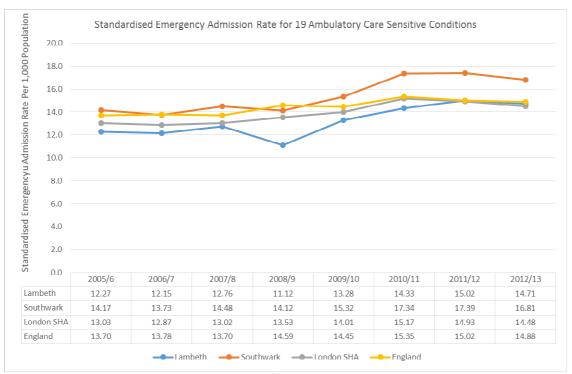


Figure 28. (Source: NHS Comparators * 2012/13 figures are preliminary rolling year figures based only on Q1/2 data)

The standardised emergency admission rate for the 19 ambulatory care conditions follows a similar pattern to the overall standardised emergency admission rate over the same period. There was a notable rise in all geographical areas in 2010/11, and a levelling off over the past 2 years. Southwark has had consistently higher standardised

admission rates for these conditions than Lambeth, London and England, although as for other NHS comparators categories this may raise questions about the standardisation methodology. If accurate, it would suggest that more Southwark patients with the 19 listed ambulatory care sensitive conditions are being admitted as emergencies, which could reflect issues with how their care is managed in the community.

11. COPD Admissions

COPD is of particularly interest because patients often have repeated emergency admissions, and it is viewed as an ambulatory care sensitive condition, meaning admissions can be prevented through care in the community. The admission rate is calculated based on prevalence estimates using the APHO COPD model which adjusts the number of patients on GP disease registers to include an estimate of the number of undetected individuals. This gives an estimate of 8,145 individuals in Lambeth (APHO modelling of 2011 figures) 9,029 in Southwark (using March 2013 figures). It is also possible that the 'undetected' patients are also less likely to present to A&E either due to milder illness or barriers to healthcare access. COPD admissions were defined as all occasions when COPD ICD-10 codes were listed as the primary diagnosis (as opposed to occasions when a patient with COPD was admitted with another problem, such as a fracture).

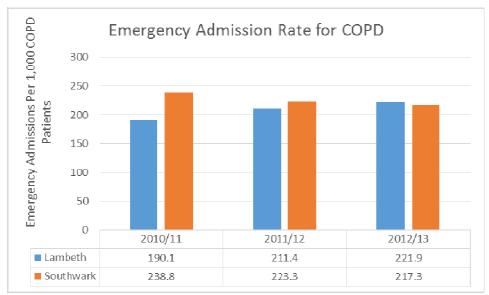


Figure 29. (Source: Local SUS Data and APHO COPD Model)

Lambeth and Southwark have broadly similar admission rates per 1,000 COPD patients, but whereas the admission rate has increased by 16.7% from a lower starting point in Lambeth since 2010/11, in Southwark it has fallen by 9.0%. The admission rate in the two boroughs has therefore become more similar over time. An increase in emergency admissions could reflect issues with primary care management, or access to ambulatory services to prevent such admissions. The differences could also be explained by normal variation, or the severity of illness of the patient group.

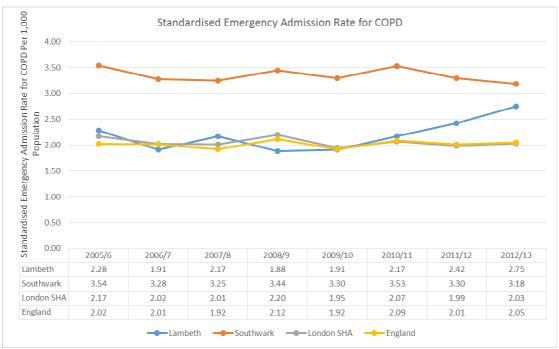


Figure 30. (Source: NHS Comparators * 2012/13 figures are preliminary rolling year figures based only on Q1/2 data)

NHS Comparators have produced a standardised emergency admission rate for COPD per 1,000 population. In common with the local crude rates, the Lambeth standardised rate has increased since 2009/10, whereas the Southwark standardised rate has fallen, and London and England rates have remained broadly stable. This strengthens the case for examining differences between Lambeth and Southwark in terms of community management of COPD.

12. Congestive Heart Failure Admissions

Congestive heart failure is another ambulatory care sensitive condition, where community management can help control symptoms and prevent admissions.

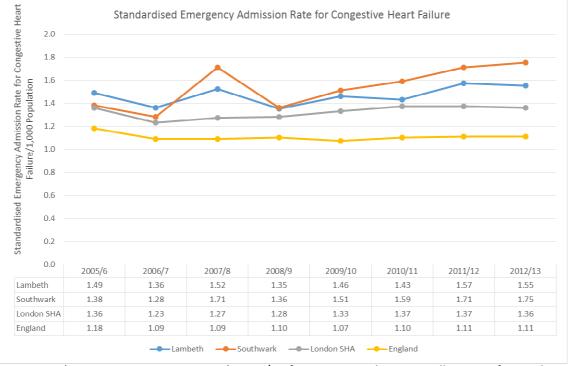


Figure 31. (Source: NHS Comparators * 2012/13 figures are preliminary rolling year figures based only on Q1/2 data)

Figure 31 shows the NHS comparators standardised emergency admission rates for congestive heart failure. The England-wide rate has remained very stable, whereas Lambeth and Southwark have both shown greater fluctuations. Southwark shows a trend for increasing emergency admissions for congestive heart failure over time, with the standardised rate increasing from 1.36 per 1,000 population in 2008/9 to 1.75 per 1,000 population in 2012/13. Lambeth standardised emergency admission rates for congestive heart failure have risen slightly, but have been lower than Southwark since 2009/10. This could be due to variation in diagnosis rates, differences in community management, or variation in actual need.

13. Diabetes Admissions

A proportion of admissions for the complications of diabetes are also preventable through good management of blood glucose in the community, and prompt treatment of complications. Complications such as ulcers can also be managed at home with packages of nursing care to avoid admitting a patient to hospital.

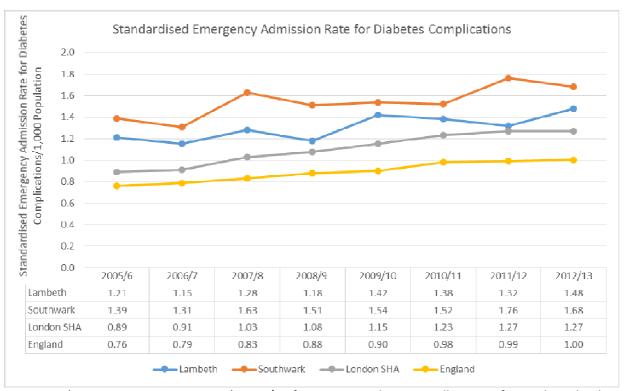


Figure 32. (Source: NHS Comparators * 2012/13 figures are preliminary rolling year figures based only on Q1/2 data)

NHS Comparators standardised emergency admission rates for complications of diabetes have risen steadily in all geographical areas. Both Southwark and Lambeth have had consistently higher rates than London and England. This could reflect differences in the population not allowed for in the standardisation algorithm, or issues with community management of diabetes in the boroughs.

14. Preventing Admissions Through Vaccination

Influenza:

Influenza is of interest as a potentially preventable condition, with the seasonal influenza vaccine programme aiming to protect the patients most at risk of serious complications. Local GPs had also commented that they felt that they were still seeing patients later than in previous influenza seasons.

Influenza-Like Illness, Current and Recent Seasons

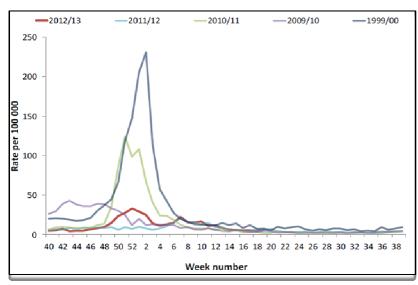


Figure 33. (Source: HPA – RCGP Sentinel GP System)

Figure 33 illustrates the national picture for influenza this year. It is based on a sentinel system of GPs who report all cases of influenza-like illness. These figures are then extrapolated out nationally to give a case rate per 100,000. The graph shows that whilst there were more cases nationally in 2012/13 than in 2011/12, levels were in line with recent non-pandemic years, although the season may have taken longer to tail off than usual in line with local observations.

Influenza emergency admissions to hospital are defined below using the primary or secondary diagnosis ICD 10 codes J10 (where the virus has been identified) and J11 (where it was not). Avian influenza was excluded.

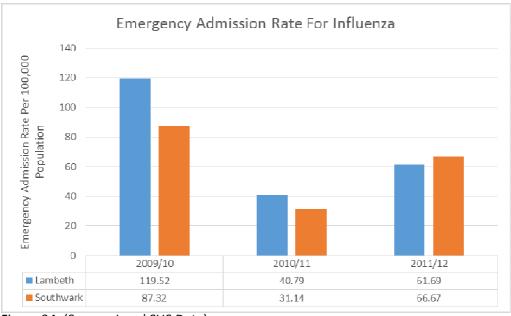


Figure 34. (Source: Local SUS Data)

The number of admissions with influenza listed as the diagnosis is small for all years, and this makes interpretation difficult. The emergency admission rate per 100,000 population was very similar in Lambeth and Southwark in 2012/13, and although higher than in 2010/11 was well below the admission rate during the 2009/10 pandemic. Influenza vaccination can prevent cases in the elderly and vulnerable, who would be the most likely groups to require admission during an episode of influenza.

Seasonal Influenza Vaccine Uptake 2011/12-2012/13

Group	Lambeth		Southwark			
	2011/12	2012/13*	2011/12	2012/13*		
Over 65s (target 75%)	68.9%	66.5% (-2.4%)	71.9%	70.4% (-1.5%)		
Under 65s in at-risk	48.6%	47.1% (-1.5%)	47.5%	49.0% (+1.5%)		
groups (target 70%)						

Figure 35. (Source: South-East London Health Protection Unit) * 2013 data is provisional and to end January only

Vaccine uptake rates have dropped slightly in all groups apart from the at-risk under 65s in Southwark. This is in keeping with an England-wide picture of slightly lower uptake rates in 2012/13. The target for 2013/14 is 75% for both groups, and there is clearly significant work required to bring local figures closer to that figure, particularly amongst younger vulnerable groups. As an infectious disease, influenza rates are expected to vary from year to year, and the variation illustrated in fig.31 is more likely to reflect seasonal variation than variation in flu vaccine uptake.

Influenza and Pneumonia:

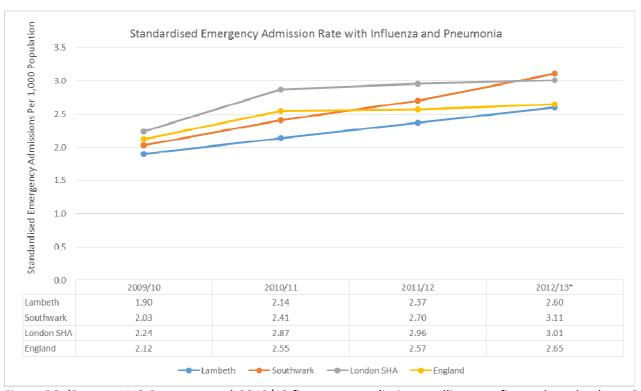


Figure 36. (Source: NHS Comparators * 2012/13 figures are preliminary rolling year figures based only on Q1/2 data)

Figure 36 combines emergency admissions for both influenza and pneumonia in individuals aged over 2 months. The 2012/13 figures need to be viewed with particular caution as they are only based on Q1/2, therefore not capturing the peak influenza/pneumonia season. The emergency admission rate is based on admissions with the following ICD 10 codes:

J10	Influenza due to identified influenza virus	J11	Influenza, virus not identified
J13	Pneumonia due to Streptococcus pneumonia	J14	Pneumonia due to Haemophilus influenzae
J15.3	Pneumonia due to streptococcus, group B	J15.4	Pneumonia due to other streptococci
J15.7	Pneumonia due to Mycoplasma pneumonia	J15.9	Bacterial pneumonia, unspecified
J16.8	Pneumonia due to other specified infectious organisms	J18.1	Lobar pneumonia, unspecified
1188	Other pneumonia, organism unspecified		

It is not possible to tell from this data what proportion of emergency admissions for vaccine-preventable influenzas or pneumonias were individuals who would have been eligible for such vaccines. In addition, not all pneumonias and

strains of influenza are protected for by vaccine. It is therefore not a performance indicator for vaccine programmes, but does provide an insight into the relative burden experienced by Lambeth and Southwark compared to London and England.

Lambeth has had a lower standardised rate of emergency admission for influenza and pneumonia than London and England-wide since 2009/10. The Southwark standardised rate was broadly in line with the England-wide figure (and lower than London overall) until this year when the rate seems to have increased. However, since this figure is a rolling rate based on Q1/2 it may be misleading.

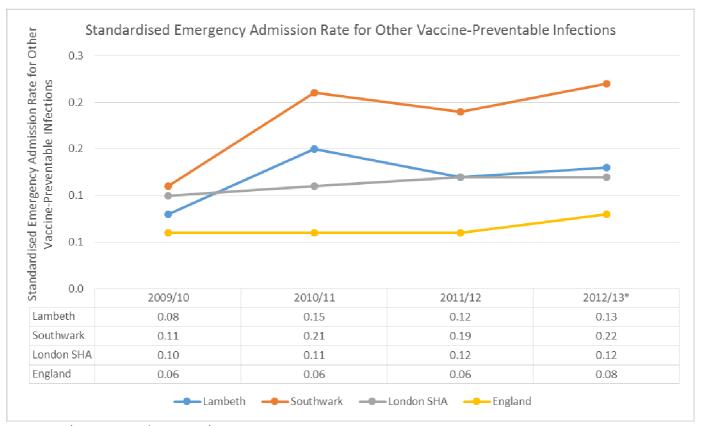


Figure 37. (Source: Local SUS Data)

The NHS comparator for other vaccine preventable conditions is based on emergency admissions with the following ICD 10 diagnosis codes:

A35	Other tetanus	A36	Diphtheria
A37	Whooping cough	A80	Acute poliomyelitis
B05	Measles	B06	Rubella [German measles]
B16.1	Acute hep B with delta-agent (co-infection) without hep coma	B26	Mumps
B16.9	Acute hep B without delta-agent and without hep coma	M01.4	Rubella arthritis
B18.0	Chronic viral hepatitis B with delta-agent	G00.0	Haemophilus meningitis
B18.1	Chronic viral hepatitis B without delta-agent		

It is not possible to distinguish from the data whether an individual had received vaccination, or whether they were eligible for such vaccination. London has particular issues with vaccine-preventable diseases. It has a more transient population than the rest of the country, making it difficult to identify and vaccinate individuals. It also has a high proportion of individuals born outside the UK, or with family in countries where such diseases are endemic. The above graph illustrates this, but also seems to indicate that Southwark has a notably higher standardised emergency admission rate than Lambeth. Since the majority of NHS comparators indicate higher standardised rates for Southwark this should be treated with caution as a possible consequence of flawed standardisation.

15. Alcohol Misuse

The burden on A&E departments due to alcohol-related problems has been well-publicised over the past decade. There have been national and local initiatives to try and address levels of harmful drinking such as controlling the density of outlets, but there have also been local efforts to cope with the consequences of that drinking. Examples include units which supervise intoxicated patients until they are safe to go home, hopefully avoiding an admission.

Alcohol-related admissions in the below figure are defined as all primary or secondary diagnoses with ICD-10 codes related to alcohol. This includes both the short and long-term consequences of drinking, ranging from intoxication to dependence to liver disease, and a range of other complications where the known cause is alcohol. The rate is based on the estimated 15 and over population. Primary diagnoses are when the patient has been admitted for their alcohol-related problem, secondary diagnoses are where a patient has been admitted for another reason but complicated by their alcohol-related problem.

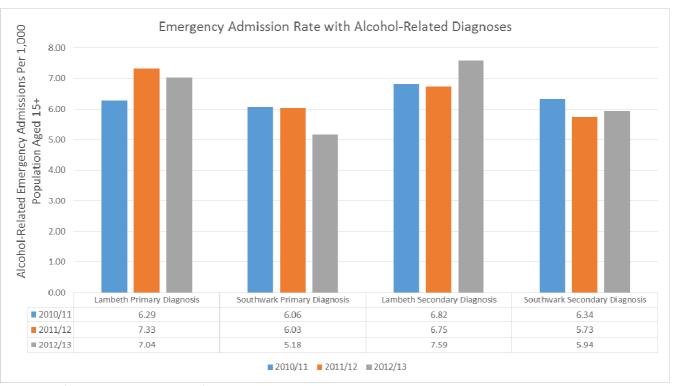


Figure 38. (Source: Local SUS Data)

The Lambeth emergency admission rate (per 1,000 population aged 15+) with an alcohol-related primary diagnosis increased by 11.90% between 2010/11 and 2012/13, whereas in Southwark it fell by 14.62%. The same pattern is evident in the emergency admission rate where the secondary diagnosis is alcohol-related: in Lambeth the emergency admission rate per 1,000 population aged 15 + increased by 11.30% between 2010/11 and 2012/13 whereas in Southwark it fell by 6.25%. This increase means that in 2012/13 Lambeth had approximately 2 more admissions per 1,000 population aged 15 and over for both primary and secondary diagnoses related to alcohol. Even if the two categories are combined, the trend is the same. Since the majority of emergency admissions for Lambeth and Southwark residents are to the same 2 hospitals, and in similar proportions, this is unlikely to be due to differences in coding between the populations.

It could be due to differences in the actual levels of alcohol-related harm in the two boroughs, differences in ascertainment of cases of alcohol misuse, differences in the community support available for these individuals, or differences in how people seek help when unwell.

16. Substance Misuse

Local concern had been expressed that an increasing number of patients presenting to A&E had concomitant substance misuse diagnoses, complicating their care and increasing 'acuity'. Patients with substance misuse issues can require greater supervision, and whilst in hospital their withdrawal from the substance has to be carefully managed. In the below graph, substance misuse-related diagnoses include all admissions under the influence of a substance of misuse (excluding alcohol) or due to complications from substance misuse. The term includes misuse of substances such as opioids, cocaine and cannabis. Admissions are classified according to whether the substance misuse was the main reason for the admission (primary diagnosis) or a co-morbidity (secondary diagnosis).

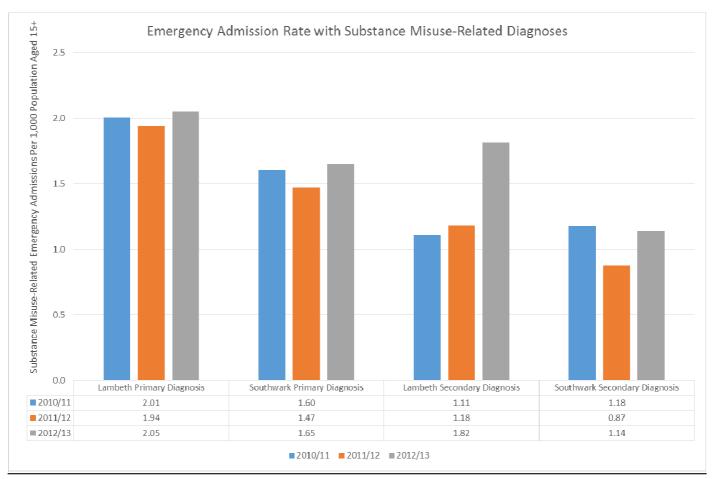


Figure 39. (Source: Local SUS Data)

Rates of admission for substance misuse are higher in Lambeth than in Southwark for both categories. This could be due to demographic differences between the boroughs. The admission rate had remained broadly stable between 2010/11 and 2012/13. The most striking shift is in the Lambeth rate of emergency admissions where substance misuse was noted as a secondary diagnosis: this increased by 64% between 2010/11 and 2012/13, with the majority of that increase occurring in the past year. This could reflect an actual increase or could be due to increased awareness leading to better recognition of substance misuse as a co-morbidity.

17. Mental Health Co-Morbidity

There has been national concern about the ability of hospitals to cope with mental health co-morbidities. Primary diagnosis was not examined in this case as full data for mental health emergency admissions across the system was not available. In the graph below, mental health ICD 10 codes as the secondary diagnosis were compared, hopefully capturing the level of mental health co-morbidity seen in Lambeth and Southwark emergency admissions. Alcohol and substance misuse diagnoses were excluded as these have been explored above.

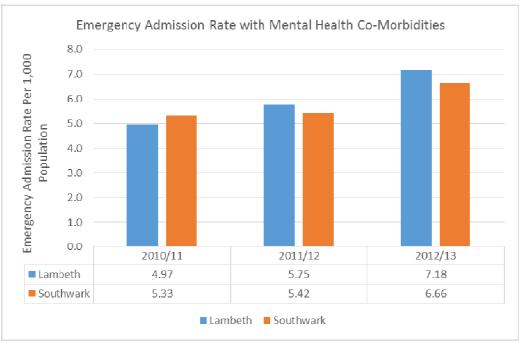


Figure 40. (Source: Local SUS Data)

Figure 40 illustrates that there has indeed been an increase in the rate of emergency admissions with mental health co-morbidities. This is particularly the case in Lambeth, where there has been a 44.5% increase in admissions with mental health co-morbidities since 2010/11. In Southwark the corresponding increase is a less marked 25.0%, but again shows an increasing trend across all 3 years. This could be due to an actual increase in the rate of mental health co-morbidity, increased emergency presentations by patients with mental health conditions perhaps due to difficulty accessing primary and community care, or could in fact represent a change in coding practice. Secondary diagnoses are particularly vulnerable to shifts in coding, for example better recording of mental health co-morbidities due to increased staff awareness of the issue. A mental health secondary diagnosis could be a co-morbidity for a primary mental health diagnosis, so that increases could reflect more patients presenting as emergencies with their mental health conditions to A&E rather than being managed in the community, or being admitted to alternative providers.

This data was broken down further into the main categories contributing to mental health co-morbidity in emergency admissions in both Lambeth and Southwark.

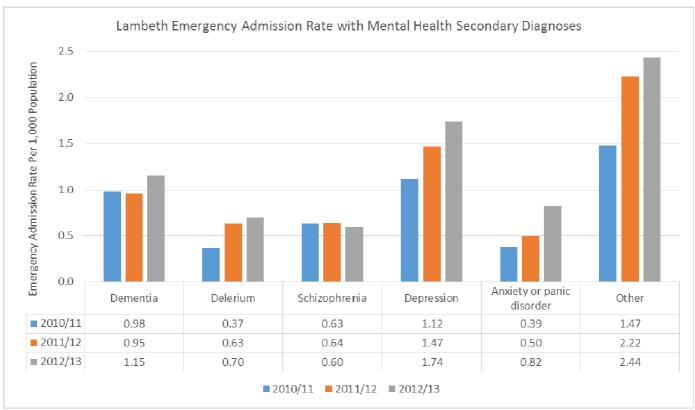


Figure 41. (Source: Local SUS Data)

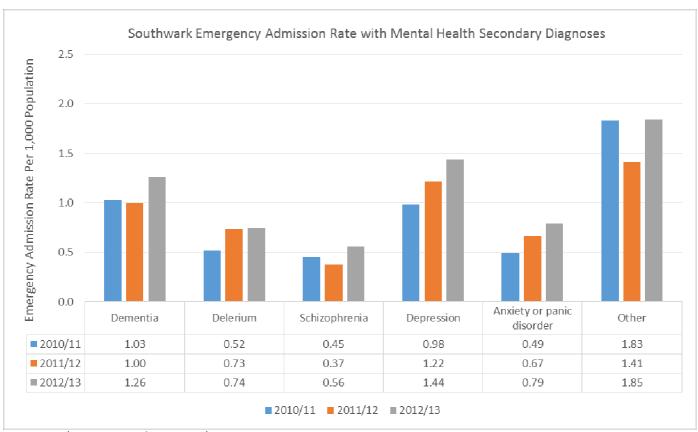


Figure 42. (Source: Local SUS Data)

The mental health diagnoses most commonly listed as a secondary diagnosis are similar across the two boroughs, although Lambeth has had an increasing proportion of 'other' diagnoses which include bipolar affective disorder, eating disorders and developmental and learning difficulties. All the common co-morbidities have seen significantly increased rates of emergency admission since 2010/11 except for schizophrenia in Lambeth.

The ageing population has led to particular concerns about the proportion of elderly patients who will require dementia care during admissions for other illnesses of old age. The emergency admission rate with dementia as a comorbidity has increased since 2010/11, but not actually as sharply as some other diagnoses. The increase has been 17.3% in Lambeth and 22.3% in Southwark. As previously discussed, the elderly population in Lambeth and Southwark is not growing to the same degree as the national picture, but if this trend for increased dementia comorbidity continues hospitals will need to develop increased capacity to cope with patients with dementia.

Although the actual numbers involved are lower, there is a marked increase in the rate of emergency admissions with an anxiety or panic disorder as a co-morbidity. The emergency admission rate per 1,000 population has increased by 110.3% in Lambeth and 61.2% in Southwark. This may have less repercussions in terms of care needs for a hospital, but could reflect difficulties in accessing timely primary care amongst this group. Again, this could be a coding issue due to increased awareness, diagnosis or recording of anxiety disorders.

Delerium can be part of the natural history of a mental disorder such as dementia, or can complicate a physical illness such as sepsis. The significance for hospitals is that patients with delirium may require significant supervision by staff, and managing the delirium is a significant management challenge in itself. The emergency admission rate with delirium as a secondary diagnosis has increased by 89.2% in Lambeth since 2010/11 and by 42.3% in Southwark over the same period. Elderly patients are more susceptible to delirium during physical illness, and this could be one cause for the increase, but it could also be a change in coding practices.

There are similar, although less marked increases in emergency admission rates with depression as a co-morbidity.

18. Preliminary Conclusions

The recent King's Fund report "Urgent and Emergency Care: A Review for NHS South of England (March 2013)" noted that "the data do not explain the problem". This is despite the numerous analyses undertaken annually within health economies across the country. Shifts in demand and in the pressures on A&E departments have multifactorial causes, and it is hard to identify such complexities without consistent collection of the *right* data across the whole system. It is also difficult to tease out the influence of changes in coding and tariffs.

This report has identified a number of features of local urgent care usage in Lambeth and Southwark:

- Whilst crude A&E attendance numbers and emergency admissions have risen slightly over the past 3 years, the rate per 1,000 population for attendance and admission has levelled out.
- Within this picture of stability, there has been an increase in the rate of attendance and admission amongst patients aged 65-84, whilst these rates have fallen amongst younger groups.
- The greater proportion of older patients being seen in A&E and urgent care may be one explanation for the increased 'acuity' experienced by clinicians since they are more likely to present with co-morbidities.
- The proportion of long stays amongst older patients has not increased however, which is not in keeping with the idea of increased severity of illness, although it may be explained by reductions in delayed discharges.
- There has been an increase in the proportion of short (1-2 day) admissions in both Lambeth and Southwark, and a decrease in the proportion of long admissions. Possible explanations include a lower number of delayed discharges, or changes in admission or coding practice.
- The pattern of attendances and admissions amongst children is more variable, but there is some indication that rates per 1,000 population are falling.
- Monthly analysis of the attendances and admissions amongst older people indicate that there is limited seasonality to demand, and that in fact recent periods of high attendance have been in the summer months.
- There has been an increase in the alcohol-related admission rate in Lambeth since 2010/11, whereas it has fallen in Southwark over the same period.
- Substance misuse-related emergency admissions have remained broadly stable since 2010/11.
- Mental health co-morbidity amongst emergency admissions has increased since 2010/11.