

**NORTHUMBERLAND, TYNE AND WEAR NHS FOUNDATION TRUST**

**BOARD OF DIRECTORS MEETING**

**Meeting Date:** 28 January 2015

**Title and Author of Paper:** Reference Cost Draft Results – 2013/14,  
Chris Cressey, Head of Finance & Business Modelling

**Paper for Debate, Decision or Information:** Information

**Key Points to Note:**

The Trust reference cost for 2013/14 is 142 – second highest in England.

The reference cost is high across the majority of the services included in the submission.

The major contributing factor to the high reference cost across mainstream services remains the high level of inpatient costs compared to community in the combined unit cost compared to other Trusts, as has been the case in recent years.

The Trust has higher occupied bed days per 100k of population and lower community days per 100k of population than those with the best reference cost.

Modelling of the Trust's potential future reduced inpatient configuration shows a significant reduction in the mainstream reference cost, but the score would remain above the national average level. A considerably higher community caseload is needed to reduce the reference cost to under the national average.

The reference cost is high in mainstream CAMHS, Medium Secure CAMHS, and Secure Services.

The reference cost results have been taken as a clear indicator as to where Specialist Care will focus delivery of their Financial Delivery target

**Outcome required:** To note the 2013/14 reference cost result and discuss the analysis of results relating to delivery of the Trusts Transformation agenda

## Reference Cost Results 2013/14

Following submission of the Trust's 2013/14 reference cost return in July the Department of Health have issued the results. Reference costs scores are a percentile of 100, with 100 being the baseline national average. NTW has a score of **142**. This result suggests in 2013/14 NTW was 42% more expensive in providing the services submitted than the national average. This is the second highest score in England.

The reference cost exercise is based on the cost of a patient day. This was chosen as the basis of comparison because it was the lowest common denominator that organisations could collect at this stage in the development of mental health payment systems. The comparisons with other organisations therefore do not take into account length of episode of care, intensity of care during treatment, or quality of care. The unit of activity is average caseload, which is the number of people recorded as being open to treatment at any one time. It should be noted that there remain concerns nationally about the quality and robustness of data systems underpinning the national collection, but the promotion of an open and transparent approach is designed to enable providers and commissioners to identify and prioritise areas for improvement

FIBD received a paper signing off the submission of the Trust reference cost return in July 14 in which it was reported and discussed at the meeting that the Trust expected the score to be high for 2013/14 in some areas. The table below shows the total cost of services provided by NTW (adjusted for MFF\*) and the costs of the activity undertaken at the national average.

	<b>NTW Submission</b>	<b>Cost of NTW activity at National Ave</b>	<b>Ref Cost</b>
<b>TOTAL</b>	<b>£232,119,869</b>	<b>£163,234,615</b>	<b>142</b>
In Scope	£154,695,163	£105,466,760	147
CYPS	£20,671,018	£17,201,104	120
Neuro	£15,918,880	£13,860,041	115
Secure	£9,933,995	£8,116,841	122
Drug & Alc	£7,407,470	£2,607,406	284
Cognitive Therapies	£7,384,766	£4,256,126	174
Alnwood	£3,657,228	£2,740,661	133
Autism	£3,346,715	£2,086,481	160
Comm Forensics	£2,730,656	£1,166,761	234
Eating	£2,143,066	£1,639,009	131
M&B	£1,779,174	£1,270,439	140
Liaison Psy	£1,549,895	£2,222,904	70
Services for Deaf	£224,374	£124,954	180
Other	£677,470	£475,127	143

\*MFF – In calculating the reference cost the DH applies a multiplier, known as the Market Forces Factor to reflect the various financial pressures of different geographic regions nationally. NTW has no influence over the multiplier.

For a number of our services it is difficult to assess whether the comparisons are with like for like services, as often the descriptions in the reference cost guidance are generic and do not take into account the specific nature of the type of services delivered. This will be explored further in the paper. The analysis is also a comparison of cost and not price, and is influenced by issues that affect cost (for example specific pressures) or activity (for instance reducing levels of bed occupancy) in year.

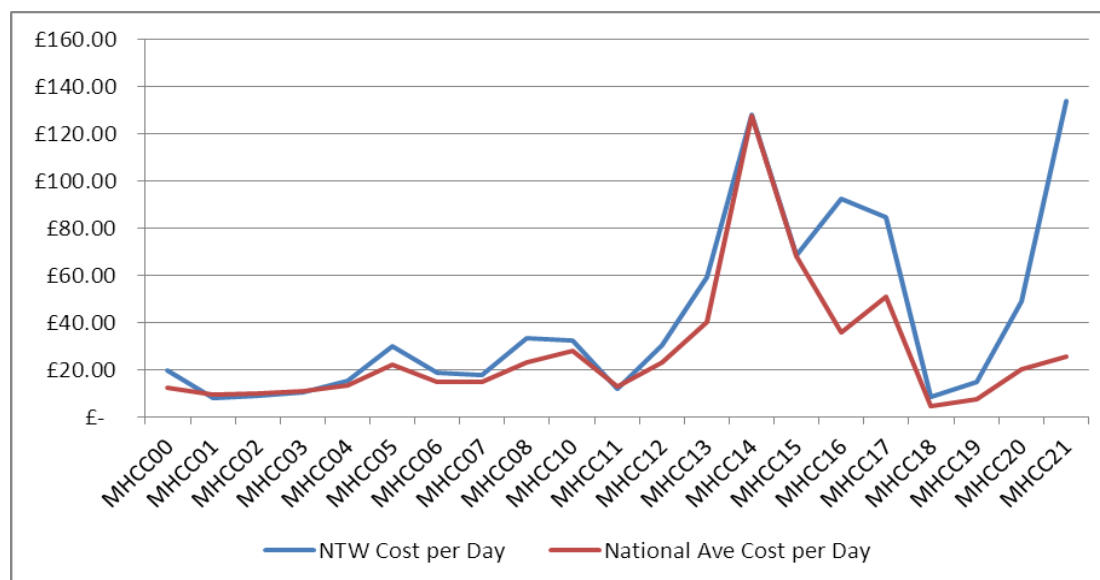
The following sections will look at the results of some of the other areas in more detail.

### **In Scope – Care Clusters**

The national mental health payment systems project has identified 21 care clusters that are currently in scope and subject to national guidance on costing and contracting. These cover mainstream mental health services for people over 18. The reference cost score for the Trust's mainstream mental health services provided through both community and inpatient settings are calculated as a combined score for each care cluster. Assessment is treated separately. The Trust has a reference cost score of **147** across all the care clusters. Where a Trust has a greater reliance on beds for treating a similar caseload by cluster, this will result in a greater reference cost, as the daily cost of a patient in a bed is significantly higher than one in receipt of services in the community.

Appendix A provides a breakdown of the reference cost across each of the care clusters (for both treatment and assessment). The graph below shows the NTW care clusters cost per day for providing treatment against the national average.

#### **Cost per Day – NTW against the and National Average**



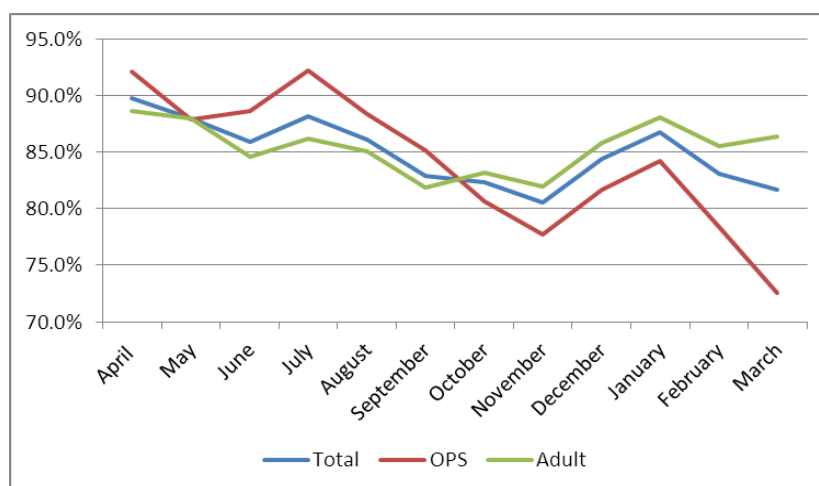
NTW is an outlier against the national average across cluster 16 & 17 and across clusters 19 - 21. These are clusters where NTW uses a greater level of inpatients to provide the pathway than others.

In recent years NTW has been proved to have a high reference cost across the care clusters through a greater level of bed use than other organisations, particularly across the Organic clusters. A significant amount of benchmarking has been done with the provider organisations that make up the Care Packages & Pathways Consortium (CPPP). The table below shows in providing the care pathways NTW continues to use a greater proportion its resource across inpatients than the other organisations across CPPP. This is particularly the case in clusters 16, 17 and 19-21 (as shown in appendix 2). The table below shows the split of the resources used for treatment across Community & Inpatients.

	COMMUNITY	INPATIENTS
NTW	38%	62%
TEWV	53%	47%
Humber	51%	49%
SWYFT	51%	49%
RDASH	51%	49%
Sheffield	46%	54%

One of the major reasons for NTW being a significant outlier in the reference costs in 2013/14 has been the implementation of the ward closures programme. Ward occupancies have dropped disproportionately to costs as units have reduced occupancy to close wards. Staffing levels must be maintained at a safe level whether the ward is half full or only one patient remains. The graph below shows the bed occupancy levels through 2013/14. This has the impact of increasing unit costs during the period of transition.

#### **Care Cluster Inpatients – Bed Occupancy 2013/14**



The Trust has also increased the proportion of qualified nurses on shifts by reinvesting some of the savings from ward closures in the remaining wards. This again has the impact of increasing the reference cost.

The tables below show **NTW in comparison to those organisations with the lowest reference costs**. This analysis has been broken down into analysis of inpatients,

community, combined, and then a review of how this compares to the transformation of services across NTW.

### Inpatients

	Population	INPATIENTS			
		Bed Days	Total Cost	Unit Cost	Bed Days per 100k pop
Pennine	1,300,000	110,034	£38,156,782	£347	8,464
Tees	1,600,000	177,159	£61,182,046	£345	11,072
Bradford	577,000	58,157	£19,531,462	£336	10,079
2gether	761,000	72,976	£26,315,545	£361	9,589
NTW	1,400,000	201,866	£84,165,694	£417	14,419

From the information above the average activity per 100k of population across these organisations is 9,801 occupied bed days (OBD). NTW is currently providing almost 50% more inpatient bed days per 100k population. It should also be noted that the average cost per occupied bed day is 20% more expensive at £417, compared to an average of £347 across these trusts, which is partly driven by low levels of occupancy as bed utilisation is reduced pending ward closure (see above).

Information from the mental health benchmarking club shows that we are performing at around the median for numbers of nurses per ward and ratios of qualified to unqualified, but are relatively high (upper quartile) for numbers of doctors per ward. The Trust has maximised benefits from the valuation of its estate, and is currently undertaking a comparative review of overheads. There is little from the benchmarking club information to date to suggest that the Trust is a significant outlier in the cost of running its mainstream wards.

Furthermore, as the reference cost is described as a daily unit cost it does not reflect the impact of length of stay. Over the last year the Trust has seen reductions in length of stay in mainstream services, particularly in Sunderland and South Tyneside, but this is not reflected in this analysis. The Trust is now performing at around the average nationally in terms of length of stay in adult wards (benchmarking club, figure 6 below, NTW is organisation T56). However older people's services remain a higher outlier (benchmarking club, figure 11 below).

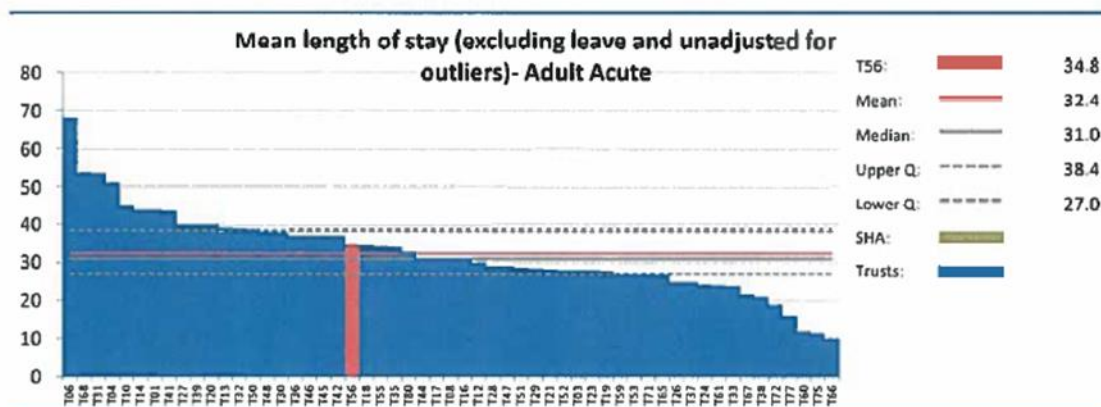


Figure 6

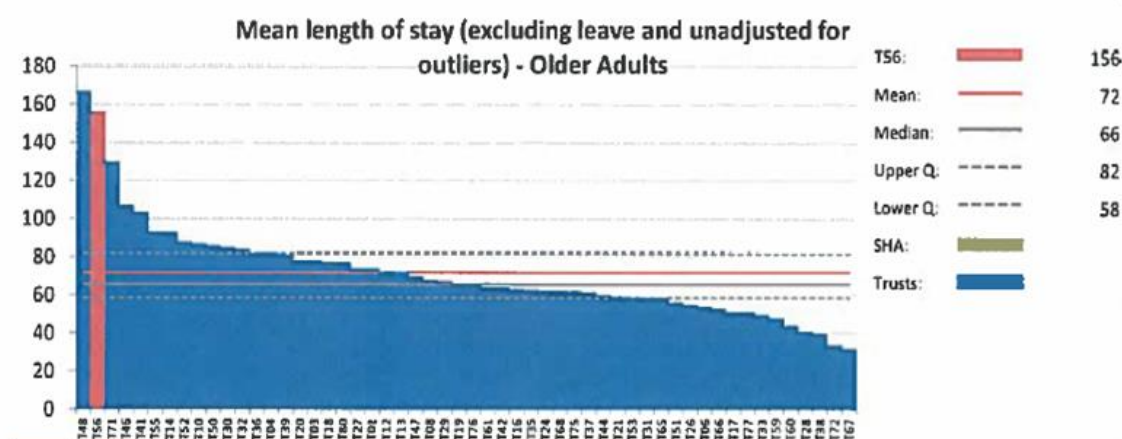


Figure 11

## Community

	COMMUNITY				
	Community Days	Total Cost	Unit Cost	*Assumed Caseload	Caseload per 100k Pop
Pennine	6,505,972	£32,781,622	£5.04	17,825	1,371
Tees	8,561,176	£67,810,378	£7.92	23,455	1,466
Bradford	2,251,581	£21,008,877	£9.33	6,169	1,069
2gether	3,947,515	£27,693,639	£7.02	10,815	1,421
NTW	5,424,296	£51,694,536	£9.53	14,861	1,062

\*The assumed caseload has been calculated by taking the total days for the year and dividing by 365.

The Trust has historically had a low notional reference cost for community activity, but in the last two years, this position has not been sustained. The activity driver for the community reference cost is caseload, which is the number of people being recorded as being in receipt of community services at any one time. As can be seen from the

table above, the caseload described per 100k population is a key driver for the unit cost. Over the last two years the Trust has seen its caseload stabilise, as much work has been undertaken on assuring data quality in terms of removing duplicate counts, and reviewing the efficacy on on-going treatment. At the same time, levels of reported activity have been going up nationally. As can be seen from the table above, the Trust is reporting caseloads of around 40% lower than those trusts with the lowest unit costs. We are currently undertaking a more detailed analysis of caseload, as the Trust would expect a relatively high average caseload given that it serves an area of high deprivation. We need to understand further whether this is an issue of discrepancies in quality of activity recording across Trusts, whether the Trust is an outlier in terms of caseload carried per member of staff, or whether there is a more fundamental issue of restricting access to services, or of an unmet need across the local population. It is worth noting that lower levels of caseload do not appear to be associated with higher waiting times. Again the reference costs do not reflect such factors as length of episode of care, intensity of care or quality of outcomes

The table below shows the proportion of resource used across inpatients and community in delivering the pathways by those organisations with the lowest reference cost.

	COMMUNITY	INPATIENTS
PENNINE	46%	54%
TEWV	53%	47%
BRADFORD	52%	48%
2GETHER	51%	49%
NTW	38%	62%

The table below shows the total costs of providing treatment across the Care Clusters in these organisations.

#### Treatment Total

	TREATMENT TOTAL		
	Total Cost	Total Days	Unit Cost
Pennine	£70,938,404	6,616,006	£10.72
Tees	£128,992,424	8,738,335	£14.76
Bradford	£40,540,339	2,309,738	£17.55
2gether	£54,009,183	4,020,491	£13.43
NTW	£135,860,229	5,626,162	£24.15

In summary compared to the lower reference cost organisations the Trust has a higher daily bed cost, partly driven by low levels of occupancy as we manage through the transformation agenda, and compared to all organisations, a high proportion of bed utilisation for the population we serve. This drives up our reference cost. In addition to

this, our caseload for community activity appears low compared to other organisations, which will be driven by a number of factors, potentially including the quality of submissions across the country. Further work is required in understanding the link between cost, activity and quality as we drive through a strategy for improvement. We need to ensure that we are driven towards a cost and pricing structure which transparently reflects value for money in delivering effective care pathways. As things stand, we cannot demonstrate this and the danger is that commissioners will increasingly be concerned at our appearance as a significant outlier.

### Scenario Modelling

Going forward our strategy involves continued reduction of demand for beds, reduction in wards and sites, and a continued transformation of our community services. The tables below show a calculated reference cost for NTW services against the 2013/14 averages based on 2 scenarios of future delivery.

- Scenario 1 shows the impact of a reduction to 25 wards based on the proposed model for inpatient services. The costs are taken from ward costs with the agreed staffing levels at St Georges & Hopewood Park. The activity is based on 93% occupancy, in line with the current national average, and consistent with 85% actual occupancy and a leave rate of 8%. 93% occupancy of the bed model would deliver 10,329 bed days per 100k of population, which is more in line with the organisations with the lowest reference cost in 2013/14 (9,801 OBD).
- Scenario 2 shows the inpatient position as scenario 1. It also shows a community service providing a caseload of 1,400 patients per 100k of population, as per the organisations with the lowest reference cost. This is modelled to be provided at the current cost of community services. At this stage this is a simplistic analysis as high caseloads may be managed by reducing levels of treatment and intervention. Therefore we need further analysis and understanding before setting a caseload target.

	Population	INPATIENTS			
		Bed Days	Total Cost	Unit Cost	Bed Days per 100k pop
NTW - Model 1	1,400,000	144,606	£58,261,620	£403	10,329
NTW - Model 2	1,400,000	144,606	£58,261,620	£403	10,329

	COMMUNITY				
	Community Days	Total Cost	Unit Cost	Assumed Caseload	Caseload per 100k Pop
NTW - Model 1	5,424,296	£51,694,536	£9.53	14,861	1,062
NTW - Model 2	7,154,000	£51,694,536	£7.23	19,600	1,400

	TREATMENT TOTAL			Ref Cost
	Total Cost	Total Days	Unit Cost	
NTW - Model 1	£109,956,156		£19.74	1.14



		5,568,902		
NTW - Model 2	£109,956,156	7,291,751	£15.07	0.87

The results show that simply a reduction in beds would only deliver a reference cost of 114, and the unit cost of an inpatient bed is still comparably high based on the current costs being budgeted for across inpatient services.

An increase in caseload of almost a third for the same cost base, together with a reduced bed base would deliver a reference cost of circa 87, using 2013/14 as a comparator. This increase in community caseload is to a level in line with those who have delivered the lowest reference cost in 2013/14. However, further work is required on the correlation between caseload per member of staff, delivery of effective treatments and delivery of effective outcomes before setting such a standard. The current assumptions within the Community transformation work are a caseload varying from x to y dependent on the intensity of treatment. In some of the low reference cost organisations the Trust is aware that caseloads of 70 are often being carried

## **CAMHS**

CAMHS reference cost is calculated at **120**. That score is a combination of the inpatient reference cost and community. The analysis will review inpatients then community. Not all the inpatient services are submitted as part of the reference cost (some have significant elements of LD services, which are excluded), but they have all been included in the analysis below. The schedule below shows the income and expenditure budgeted against services provided. It shows Ferndene is currently budgeted for a loss of circa £1.2m.

	Fraser House	Stephenson House	The Riding	Redburn
Income	-£2,771,466	-£2,541,191	-£2,120,525	-£3,242,951
Ward	£1,288,075	£1,325,685	£1,088,154	£1,519,164
Group	£850,437	£607,054	£468,910	£988,614
Trust	£986,159	£865,509	£741,862	£1,172,452
	£3,124,670	£2,798,248	£2,298,927	£3,680,230
<b>Loss</b>	<b>£353,204</b>	<b>£257,057</b>	<b>£178,402</b>	<b>£437,279</b>
Beds	12	8	6	14
Occupancy	85%	85%	85%	85%
Activity	3,723	2,482	1,862	4,344
Unit Cost	£839	£1,127	£1,235	£847
Unit Price	-£744	-£1,024	-£1,139	-£747
Loss per day per bed	£95	£104	£96	£101
Ref Costs				£614 Base £942 PICU

There is only a published reference cost to compare for Redburn. The reference cost is split between PICU and base inpatient services. The Trust budgets for a unit cost of £847, although the commissioners currently pay £747 per bed day. The price is a combination of the 4 PICU beds and 10 base beds on the unit. The price is a fair reflection of the reference cost based on the bed configuration. The costs of the unit are comparatively high.

## CAMHS COMMUNITY

The table below shows the CAMHS Community unit cost (the activity for community CAMHS is in contacts) compared with organisations with a low reference cost. Of the 59 providers in the country NTW is the 5<sup>th</sup> highest provider of activity, but has the 13<sup>th</sup> highest unit cost.

Organisation	Activity (contacts)	Unit Cost	Population	Activity per 100k of population
PENNINE CARE NHS FT	51,600	£200	1,300,000	3,969
TEES, ESK AND WEAR VALLEYS NHS FT	92,629	£223	1,600,000	5,789
BRADFORD DISTRICT CARE TRUST	19,431	£244	577,000	3,368
SOUTH LONDON AND MAUDSLEY NHS FT	78,309	£208	1,100,000	7,119
NORTHUMBERLAND, TYNE AND WEAR NHS FT	61,747	£279	1,400,000	4,411

## CAMHS Medium Secure

The reference cost for CAMHS Medium Secure inpatients is calculated to be **133**. The schedule below shows the Alnwood Unit budgeted position for income and expenditure and compares this to the reference cost for 2013/14.

	Ashby	Wilton	Lennox
Income	-£2,770,496	-£1,846,727	-£2,002,496
Ward	£1,310,909	£1,103,818	£976,426
Group	£277,201	£276,632	£252,854
Trust	£857,943	£787,442	£961,513
	£2,446,054	£2,167,893	£2,190,793
<b>-Surplus / Loss</b>	<b>-£324,442</b>	<b>£321,166</b>	<b>£188,297</b>
Beds	9	6	7
Occupancy	90%	90%	90%
Activity	2,957	1,971	2,300
Unit Cost	£827	£1,100	£953
Unit Price	-£937	-£937	-£871
Loss per day per	-£110	£163	£82

bed			
Budget Setting	£961,641	£364,764	£760,702
Ref Costs	£1,207	£1,207	

The schedule shows that Ashby and Wilton (combined) are currently budgeted to about breakeven and there is budgeted loss on Lennox. These services are currently budgeted for a unit cost of £827 - £1,100 per bed day and commissioners pay £937 per bed day. The national reference cost is £1,207 and NTW delivered a unit cost in 2013/14 of £1,610 per bed day.

The budget setting process for 2015/16 has identified a shortfall in the budget for staff the unit use of £2m. That increase in expenditure would increase the budgeted cost of a day to £1,220 – £1,361, which is above the reference cost (for 2013/14). Of the 5 units nationally NTW is one of two units that provide services to female patients, and it is generally acknowledged female patients require a greater level of staffing.

The reference cost shows that the current service budget and income level is below the national average cost. If the unit are to continue to treat patients with a higher acuity (particularly females), they will need the additional resources identified in the budget setting round for 2015/16, (if the overall national average cost is £1,207 per bed day patients with a higher acuity will cost more). Those resources can only be provided if the income increases from the current level of £937 per bed day.

The table below shows the reference cost across providers of Medium secure CAMHS:

	Activity	Assumed Beds at 90% Occupancy	Bed Day Cost 2013/14 Ref Cost
NTW	2,271	6.9	£1,610
BIRMINGHAM & SOLIHUL	4,706	14.3	£1,160
GREATER MANCHESTER	3,057	9.3	£950
SOUTHERN HEALTH	5,969	18.2	£1,270
WEST LONDON	2,671	8.1	£1,167

The NTW reference cost for 2013/14 of **133** is artificially high as the unit was closed for some of the year, but in a typical year if the case mix of patients remains the same the reference cost for NTW will be higher than the national average as a result of the acuity of the patients treated on the unit. NTW must ensure the price reflects the cost of the patients treated.

### **Secure Services**

The reference cost for secure services is **122** for 2013/14. The analysis of secure service includes low, medium and PD inpatients. The schedule below shows the services are budgeted to make a loss of circa £1.2m.

	Bede	Aidan	Cuthbert	Oswin
Income	-£1,188,210	-	-£1,915,972	-£3,133,000

		£2,254,310		
Ward Cost	771,047	978,911	835,427	950,176
Remaining Group Costs	567,022	744,183	677,837	408,336
Contribution	£149,859	-£531,216	-£402,709	-£1,774,488
Trust Costs	853,850	827,325	899,119	1,071,471
TOTAL COST	2,191,920	2,550,419	2,412,383	2,429,983
<b>- Surplus / Loss</b>	<b>£1,003,710</b>	<b>£296,109</b>	<b>£496,411</b>	<b>-£703,018</b>
Beds	10	10	15	16
Occ	95%	95%	95%	85%
Activity	3,468	3,468	5,201	4,964
Unit Cost	£632	£736	£464	£490
Unit Price	-£343	-£650	-£368	-£631
Loss per day per bed	£289	£85	£95	-£142
Ref Costs	£391	£493	£493	£522

An analysis of the market based on the reference cost published for 2013/14 shows NTW is the 3<sup>rd</sup> smallest provider of low secure services delivering the 2<sup>nd</sup> most expensive service (across 42 providers). NTW is the smallest provider of medium secure services delivering the 4<sup>th</sup> most expensive services (across 24 providers). Appendix 3 provides schedules showing the rankings for low and medium secure services. LD and PD are not included in the submission for medium secure.

NTW is currently being paid at above the reference cost for Aidan as a result of HDU bed provided as part of the 10 beds delivered. The 2013/14 reference cost is higher than the 2014/15 bed day price for Bede & Cuthbert.

The Forensics Transformation Implementation Group (TIG) have discussed the reference cost results for 2013/14 and begun a workstream to bring these services in line with the reference costs.

**The Specialist Care Financial Delivery Plan has a focus on services delivering within the prices commissioners are paying. If a service cannot be delivered for the prices commissioner are paying as a result of acuity of patients or economies of scale a recommendation for the future of the service will be made through the Specialist Care Transformation process.**

As discussed the reference cost for Neuro Services and Autism services are expected to be high due to the acuity of the patients treated in these services and the reference cost submission does not distinguish services that provide at the highest end of the spectrum.

The services analysed above account for 90% of the expenditure included in the submission. The remaining services results are under review with the relevant Groups. The comments below relate to these services where there are specific issues that support / question the results published.

**Drug & Alcohol** – The Trust Drug & Alcohol services have been through 3 tenders in 2 years the latest of which has required a local authority level of cost reduction (13%). The service have been successful in winning the business at these lower levels of funding so the reference costs score of **284** is not recognised by the service. Further work is being done to review the comparisons.

**Cognitive Therapies** – This service is submitted in an, 'other' category and therefore the comparison is not with directly similar services. The reference cost score is therefore not of significant use in determining the efficiency of the service.

**Mother & Baby** – The occupancy of the Mother & Baby unit remains low (59% 2013/14). The unit is funded on a block contract to provide financial sustainability despite low occupancy, but the low occupancy has a negative impact from a unit cost perspective.

**Community Forensics** – The category the Forensics Community Team has been submitted under is under review.

**Eating Disorders** – The occupancy of the eating disorder beds through the year is low (52% 2013/14). The review of services has subsequently been completed and a revised model and contract have been agreed until the services are re-tendered for 2016.

## **Conclusion**

In conclusion the reference cost score of 142 for 2013/14 is non-recurrently high as a result of the bed closure programme. NTW currently has an underlying reference cost higher than the national average across the 3 major areas of service delivery within the Trust.

**Care Cluster Inpatients** – NTW has a unit cost of £417 in 2013/14 and the proposed bed model would deliver a lower unit cost. This is expensive compared to the national average. If the Trust delivered a 25 ward model that worked at 93% occupancy the activity per 100k of population would be closer to those organisations with the lowest reference costs in 2013/14.

**Care Cluster Community** – NTW has a unit cost 30% more expensive than the organisations with the lowest reference costs. Also the activity currently delivered in NTW is based on a caseload of 1,062 patients per 100k population, which is only two thirds of the levels being delivered by the organisations with the lowest reference costs in 2013/14.

**Specialist Services** – Review of the services with high reference costs for Specialist Care (particularly services commissioned by NHS England) are providing the basis of the Financial Delivery Plan for 2015-17. Work to ensure services deliver the required service specification for the income paid by commissioners is a priority for the group triumverate. Delivery of the financial targets for the Group will be directly linked to using the reference cost as a guide for prices/costs. Where a standard service is being

funded, but patients with a higher than average acuity are being treated NTW prices must reflect that. If not the only patients treated must be those able to be supported by the funding levels provided. Costs cannot exceed prices.

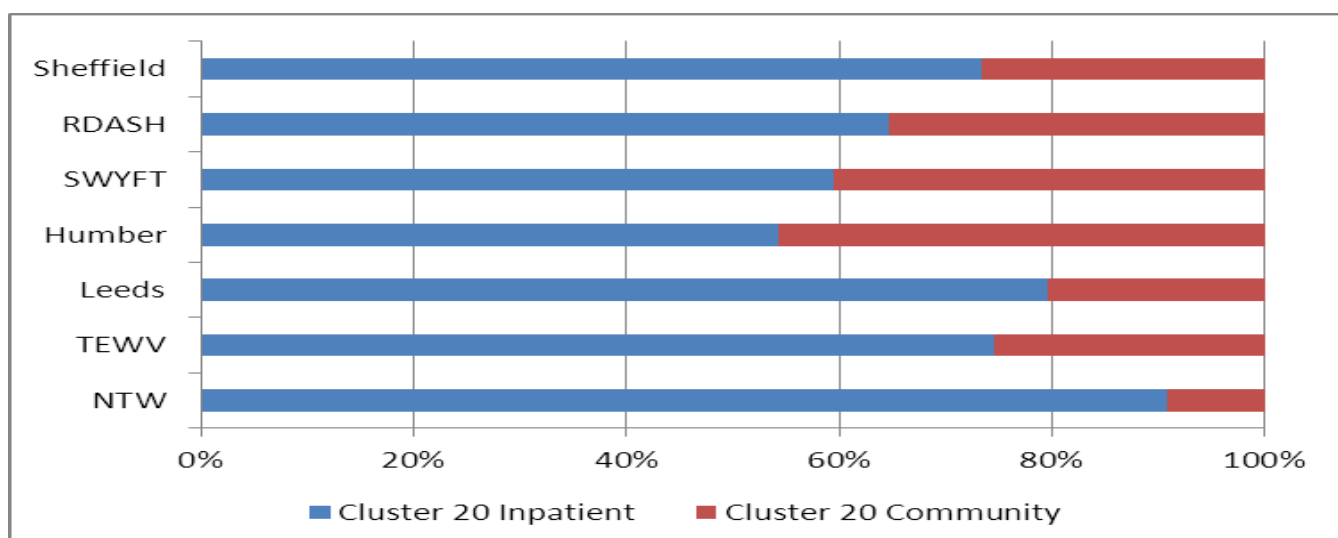
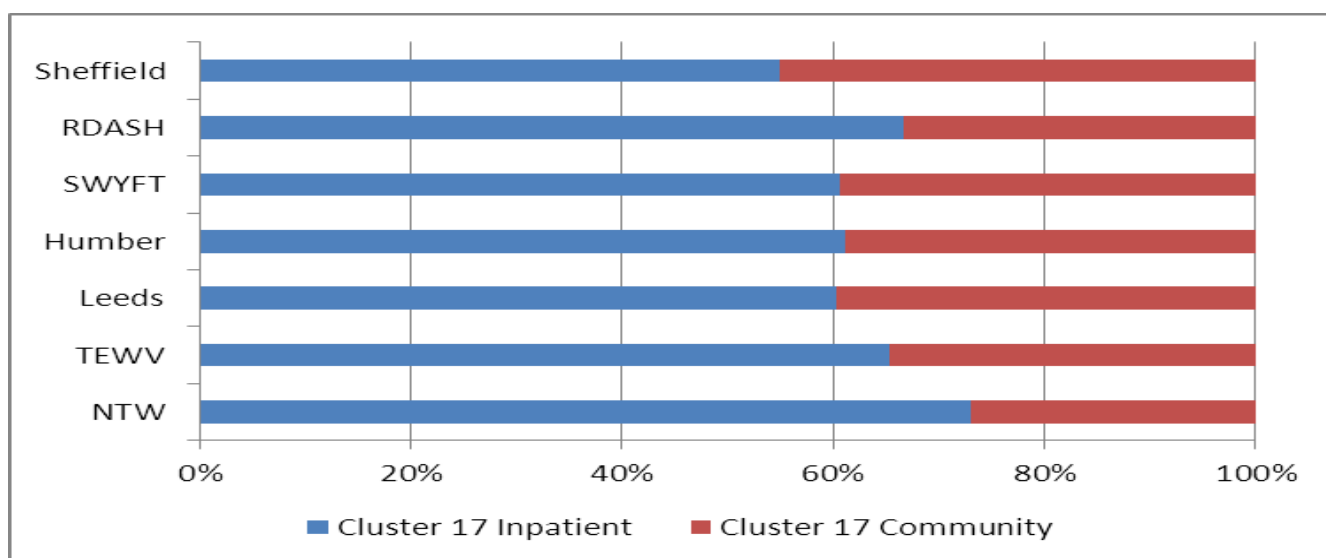
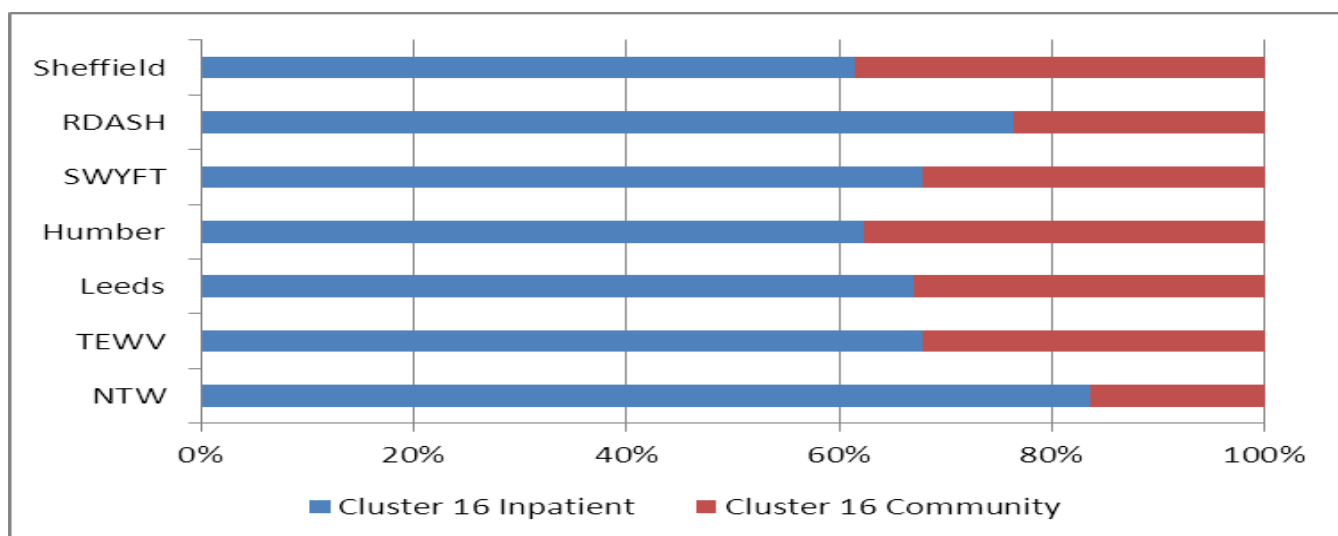
## **APPENDIX 1**

### TREATMENT AND ASSESSMENT REFERENCE COST BY CLUSTER 2013/14

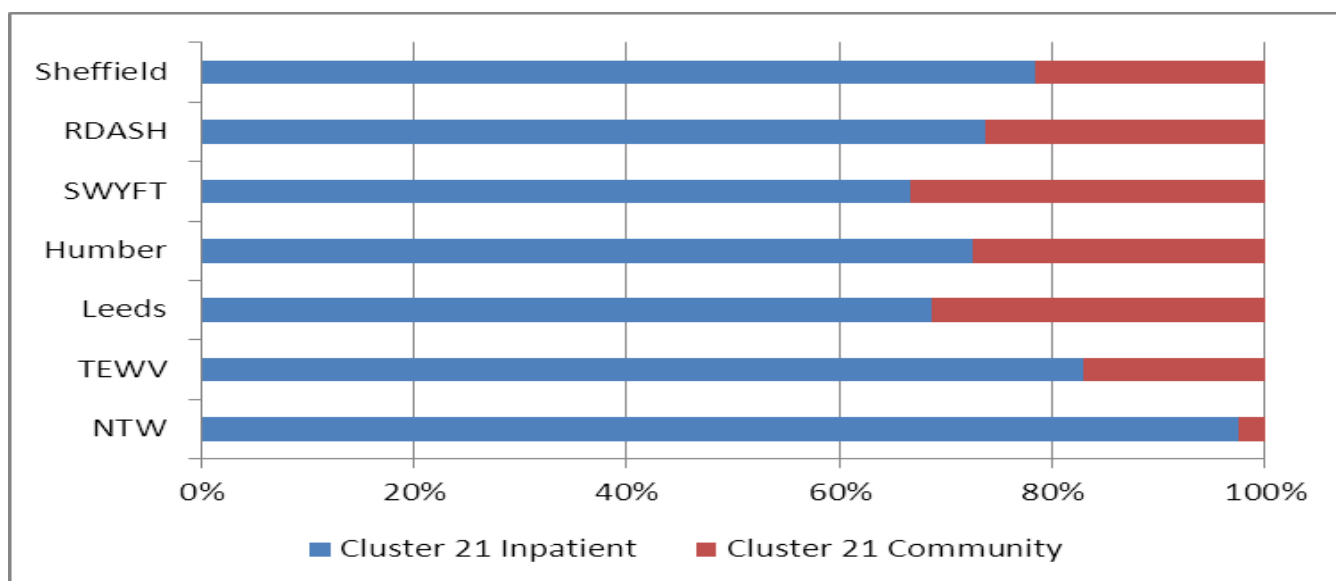
2013-14 - MFF adjusted							
Ward Description	Currency code	Activity	Unit cost	National Average Unit Cost	Actual Cost	Expected Cost	
	<b>MHCC00</b>	<b>71,224</b>	<b>£ 19.38</b>	<b>£12.03</b>	<b>£ 1,379,984</b>	<b>£ 857,175</b>	<b>1.61</b>
Non Psychotic	MHCC01	26,620	£ 7.88	£9.53	£ 209,733	£ 253,749	0.83
Non Psychotic	MHCC02	91,761	£ 8.70	£9.93	£ 798,455	£ 911,185	0.88
Non Psychotic	MHCC03	400,030	£ 10.47	£10.55	£ 4,189,675	£ 4,219,787	0.99
Non Psychotic	MHCC04	469,860	£ 15.24	£13.03	£ 7,161,019	£ 6,121,017	1.17
Non Psychotic	MHCC05	160,273	£ 29.75	£21.91	£ 4,768,721	£ 3,510,781	1.36
Non Psychotic	MHCC06	169,061	£ 18.43	£14.87	£ 3,115,120	£ 2,514,606	1.24
Non Psychotic	MHCC07	420,669	£ 17.63	£14.47	£ 7,418,486	£ 6,087,755	1.22
Non Psychotic	MHCC08	280,150	£ 33.04	£23.19	£ 9,257,411	£ 6,497,321	1.42
<b>Sub Total - Non Psychotic</b>							<b>1.23</b>
Psychotic	MHCC10	217,188	£ 32.36	£27.91	£ 7,027,967	£ 6,060,712	1.16
Psychotic	MHCC11	694,807	£ 11.52	£12.62	£ 8,002,493	£ 8,767,002	0.91
Psychotic	MHCC12	610,681	£ 30.41	£22.85	£ 18,569,387	£ 13,956,736	1.33
Psychotic	MHCC13	227,425	£ 59.12	£40.04	£ 13,444,737	£ 9,105,814	1.48
Psychotic	MHCC14	60,668	£ 127.76	£127.47	£ 7,750,860	£ 7,733,267	1.00
Psychotic	MHCC15	20,396	£ 68.11	£67.76	£ 1,389,254	£ 1,382,122	1.01
Psychotic	MHCC16	92,855	£ 92.30	£35.74	£ 8,570,408	£ 3,318,997	2.58
Psychotic	MHCC17	89,374	£ 84.40	£51.00	£ 7,543,072	£ 4,557,970	1.65
<b>Sub Total - Psychotic</b>							<b>1.32</b>
Psychotic	MHCC18	635,060	£ 8.49	£4.23	£ 5,391,991	£ 2,684,444	2.01
Dementia	MHCC19	615,027	£ 14.91	£7.45	£ 9,172,381	£ 4,580,857	2.00
Dementia	MHCC20	216,875	£ 49.00	£19.88	£ 10,627,404	£ 4,312,530	2.46
Dementia	MHCC21	56,158	£ 133.63	£25.33	£ 7,504,586	£ 1,422,353	5.28
<b>Sub Total - Dementia</b>							<b>2.52</b>
	<b>MHCCIA00</b>	<b>359</b>	<b>£ 466</b>	<b>£270.49</b>	<b>£ 167,361</b>	<b>£ 97,107</b>	<b>1.72</b>
Non Psychotic	MHCCIA01	144	£ 466	£256.34	£ 67,131	£ 36,912	1.82
Non Psychotic	MHCCIA02	230	£ 466	£291.53	£ 107,223	£ 67,051	1.60
Non Psychotic	MHCCIA03	1,027	£ 466	£267.90	£ 478,775	£ 275,135	1.74
Non Psychotic	MHCCIA04	1,290	£ 466	£293.68	£ 601,382	£ 378,846	1.59
Non Psychotic	MHCCIA05	811	£ 466	£337.31	£ 378,078	£ 273,557	1.38
Non Psychotic	MHCCIA06	277	£ 466	£325.17	£ 129,134	£ 90,071	1.43
Non Psychotic	MHCCIA07	747	£ 466	£300.66	£ 348,242	£ 224,591	1.55
Non Psychotic	MHCCIA08	511	£ 466	£327.31	£ 238,222	£ 167,253	1.42
<b>Sub Total - Non Psychotic</b>							<b>1.55</b>
Psychotic	MHCCIA10	359	£ 466	£352.34	£ 167,361	£ 126,490	1.32
Psychotic	MHCCIA11	348	£ 466	£301.54	£ 162,233	£ 104,937	1.55
Psychotic	MHCCIA12	266	£ 466	£347.00	£ 124,006	£ 92,302	1.34
Psychotic	MHCCIA13	155	£ 466	£375.90	£ 72,259	£ 58,264	1.24
Psychotic	MHCCIA14	196	£ 466	£447.20	£ 91,373	£ 87,650	1.04
Psychotic	MHCCIA15	52	£ 466	£355.51	£ 24,242	£ 18,486	1.31
Psychotic	MHCCIA16	82	£ 466	£376.27	£ 38,227	£ 30,854	1.24
Psychotic	MHCCIA17	24	£ 466	£357.12	£ 11,189	£ 8,571	1.31
Psychotic	MHCCIA18	2,306	£ 466	£280.81	£ 1,075,029	£ 647,537	1.66
<b>Sub Total - Psychotic</b>							<b>1.50</b>
Dementia	MHCCIA19	1,464	£ 466	£290.59	£ 682,499	£ 425,430	1.60
Dementia	MHCCIA20	406	£ 466	£288.59	£ 189,272	£ 117,167	1.62
Dementia	MHCCIA21	95	£ 466	£315.50	£ 44,288	£ 29,972	1.48
<b>Sub Total - Dementia</b>							<b>1.60</b>
	<b>MHCCIA99</b>	<b>13,309</b>	<b>£ 466</b>	<b>£244.38</b>	<b>£ 6,204,492</b>	<b>£ 3,252,396</b>	<b>1.91</b>

## APPENDIX 2

### CLUSTER 16, 17, 20 & 21 – PROPORTION OF COST – INPATIENT TO COMMUNITY







### APPENDIX 3

Medium Secure & Low Secure activity & unit costs – Reference Cost publication 2013/14

Row Labels	Activity	Unit Cost	Mkt Share	Beds		
Low Level Secure Services		528,278	£391.38		328.5	
1	HUMBER NHS FOUNDATION TRUST	1,631	£532.20	0.31%	5.0	1 PENNINE CARE NHS FOUNDATION TRUST
2	SOMERSET PARTNERSHIP NHS FOUNDATION TRUST	3,467	£514.93	0.66%	10.6	2 EAST LONDON NHS FOUNDATION TRUST
3	NORTHUMBERLAND, TYNE AND WEAR NHS FOUNDATION TRUST	3,559	£611.13	0.67%	10.8	3 OXFORD HEALTH NHS FOUNDATION TRUST
4	LINCOLNSHIRE PARTNERSHIP NHS FOUNDATION TRUST	3,679	£639.71	0.70%	11.2	4 OXLEAS NHS FOUNDATION TRUST
5	ZGETHER NHS FOUNDATION TRUST	4,056	£516.39	0.77%	12.3	5 CENTRAL AND NORTH WEST LONDON NHS FOUNDATION TRUST
6	DORSET HEALTHCARE UNIVERSITY NHS FOUNDATION TRUST	4,098	£518.73	0.78%	12.5	6 GREATER MANCHESTER WEST MENTAL HEALTH NHS FOUNDATION TRUST
7	CORNWALL PARTNERSHIP NHS FOUNDATION TRUST	4,192	£570.45	0.79%	12.8	7 BIRMINGHAM AND SOULHULL MENTAL HEALTH NHS FOUNDATION TRUST
8	SOUTH LONDON AND MAUDSLEY NHS FOUNDATION TRUST	4,335	£526.17	0.82%	13.2	8 TEES, ESK AND WEAR VALLEYS NHS FOUNDATION TRUST
9	BIRMINGHAM AND SOULHULL MENTAL HEALTH NHS FOUNDATION TRUST	4,827	£345.58	0.91%	14.7	9 SOUTH WEST LONDON AND ST GEORGE'S MENTAL HEALTH NHS TRUST
10	HERTFORDSHIRE PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST	4,985	£451.41	0.94%	15.2	10 NORTH EAST LONDON NHS FOUNDATION TRUST
11	NORTHAMPTONSHIRE HEALTHCARE NHS FOUNDATION TRUST	5,108	£503.73	0.97%	15.5	11 LANCASHIRE CARE NHS FOUNDATION TRUST
12	NORTH EAST LONDON NHS FOUNDATION TRUST	5,143	£358.73	0.97%	15.7	12 WEST LONDON MENTAL HEALTH NHS TRUST
13	CHESHIRE AND WIRRAL PARTNERSHIP NHS FOUNDATION TRUST	5,529	£450.28	1.05%	16.8	13 CAMBRIDGESHIRE AND PETERBOROUGH NHS FOUNDATION TRUST
14	SOUTH WEST LONDON AND ST GEORGE'S MENTAL HEALTH NHS TRUST	5,718	£351.05	1.08%	17.4	14 SOUTHERN HEALTH NHS FOUNDATION TRUST
15	KENT AND MEDWAY NHS AND SOCIAL CARE PARTNERSHIP TRUST	6,489	£427.14	1.23%	19.8	15 SUSSEX PARTNERSHIP NHS FOUNDATION TRUST
16	DERBYSHIRE HEALTHCARE NHS FOUNDATION TRUST	6,671	£408.63	1.26%	20.3	16 DEVON PARTNERSHIP NHS TRUST
17	CAMBRIDGESHIRE AND PETERBOROUGH NHS FOUNDATION TRUST	6,858	£381.59	1.30%	20.9	17 DERBYSHIRE HEALTHCARE NHS FOUNDATION TRUST
18	NORTH ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST	6,926	£462.12	1.31%	21.1	18 SOUTH ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST
19	CENTRAL AND NORTH WEST LONDON NHS FOUNDATION TRUST	7,419	£338.90	1.40%	22.6	19 KENT AND MEDWAY NHS AND SOCIAL CARE PARTNERSHIP TRUST
20	SHEFFIELD HEALTH & SOCIAL CARE NHS FOUNDATION TRUST	7,466	£443.29	1.41%	22.7	20 BARNET, ENFIELD AND HARINGEY MENTAL HEALTH NHS TRUST
21	AVON AND WILTSHIRE MENTAL HEALTH PARTNERSHIP NHS TRUST	8,702	£559.13	1.65%	26.5	21 5 BOROUGH PARTNERSHIP NHS FOUNDATION TRUST
22	SOUTHERN HEALTH NHS FOUNDATION TRUST	10,198	£382.23	1.93%	31.0	22 BRADFORD DISTRICT CARE TRUST
23	DEVON PARTNERSHIP NHS TRUST	10,335	£400.69	1.96%	31.5	23 SHEFFIELD HEALTH & SOCIAL CARE NHS FOUNDATION TRUST
24	SOUTH ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST	10,422	£410.57	1.97%	31.7	24 CHESHIRE AND WIRRAL PARTNERSHIP NHS FOUNDATION TRUST
25	SOUTH STAFFORDSHIRE AND SHROPSHIRE HEALTHCARE NHS FOUNDATION TRUST	10,701	£468.09	2.03%	32.6	25 HERTFORDSHIRE PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST
26	MERSEY CARE NHS TRUST	11,025	£509.66	2.09%	33.6	26 NORTH ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST
27	BRADFORD DISTRICT CARE TRUST	12,030	£432.36	2.28%	36.6	27 NOTTINGHAMSHIRE HEALTHCARE NHS TRUST
28	SOUTH WEST YORKSHIRE PARTNERSHIP NHS FOUNDATION TRUST	12,276	£502.55	2.32%	37.4	28 SOUTH STAFFORDSHIRE AND SHROPSHIRE HEALTHCARE NHS FOUNDATION TRUST
29	5 BOROUGH PARTNERSHIP NHS FOUNDATION TRUST	13,588	£431.94	2.57%	41.4	29 LEEDS AND YORK PARTNERSHIP NHS FOUNDATION TRUST
30	NORFOLK AND SUFFOLK NHS FOUNDATION TRUST	15,176	£593.72	2.87%	46.2	30 SOUTH WEST YORKSHIRE PARTNERSHIP NHS FOUNDATION TRUST
31	GREATER MANCHESTER WEST MENTAL HEALTH NHS FOUNDATION TRUST	18,215	£344.97	3.45%	55.4	31 NORTHAMPTONSHIRE HEALTHCARE NHS FOUNDATION TRUST
32	BARNET, ENFIELD AND HARINGEY MENTAL HEALTH NHS TRUST	18,589	£431.72	3.52%	56.6	32 MERSEY CARE NHS TRUST
33	OXFORD HEALTH NHS FOUNDATION TRUST	19,860	£311.27	3.76%	60.5	33 SOMERSET PARTNERSHIP NHS FOUNDATION TRUST
34	LANCASHIRE CARE NHS FOUNDATION TRUST	20,814	£367.35	3.94%	63.4	34 ZGETHER NHS FOUNDATION TRUST
35	OXLEAS NHS FOUNDATION TRUST	21,167	£325.51	4.01%	64.4	35 DORSET HEALTHCARE UNIVERSITY NHS FOUNDATION TRUST
36	SUSSEX PARTNERSHIP NHS FOUNDATION TRUST	21,662	£396.68	4.10%	65.9	36 SOUTH LONDON AND MAUDSLEY NHS FOUNDATION TRUST
37	TEES, ESK AND WEAR VALLEYS NHS FOUNDATION TRUST	21,693	£348.77	4.11%	66.0	37 HUMBER NHS FOUNDATION TRUST
38	LEEDS AND YORK PARTNERSHIP NHS FOUNDATION TRUST	22,519	£475.98	4.26%	68.6	38 AVON AND WILTSHIRE MENTAL HEALTH PARTNERSHIP NHS TRUST
39	NOTTINGHAMSHIRE HEALTHCARE NHS TRUST	26,918	£467.54	5.10%	81.9	39 CORNWALL PARTNERSHIP NHS FOUNDATION TRUST
40	EAST LONDON NHS FOUNDATION TRUST	31,617	£278.73	5.98%	96.2	40 NORFOLK AND SUFFOLK NHS FOUNDATION TRUST
41	PENNINE CARE NHS FOUNDATION TRUST	42,065	£133.57	7.96%	128.1	41 NORTHUMBERLAND, TYNE AND WEAR NHS FOUNDATION TRUST
42	WEST LONDON MENTAL HEALTH NHS TRUST	46,550	£380.87	8.81%	141.7	42 LINCOLNSHIRE PARTNERSHIP NHS FOUNDATION TRUST

	Activity	Unit Cost	Mkt Share	Assumed Beds			
Medium Level Secure Services	676,434	£490.26		328.5			
NORTHUMBERLAND, TYNE AND WEAR NHS FOUNDATION TRUST	8,036	£616.46	1.2%	24.5	1	OXLEAS NHS FOUNDATION TRUST	£340.38
MERSEY CARE NHS TRUST	14,065	£525.58	2.1%	42.8	2	EAST LONDON NHS FOUNDATION TRUST	£375.81
SUSSEX PARTNERSHIP NHS FOUNDATION TRUST	14,497	£646.33	2.1%	44.1	3	SOUTHERN HEALTH NHS FOUNDATION TRUST	£406.54
SOUTH WEST LONDON AND ST GEORGE'S MENTAL HEALTH NHS TRUST	14,680	£475.43	2.2%	44.7	4	BARNET, ENFIELD AND HARINGEY MENTAL HEALTH NHS TRUST	£406.69
SOUTH STAFFORDSHIRE AND SHROPSHIRE HEALTHCARE NHS FOUNDATION TRUST	15,164	£626.39	2.2%	46.2	5	GREATER MANCHESTER WEST MENTAL HEALTH NHS FOUNDATION TRUST	£417.82
NORFOLK AND SUFFOLK NHS FOUNDATION TRUST	16,104	£529.12	2.4%	49.0	6	OXFORD HEALTH NHS FOUNDATION TRUST	£440.07
DEVON PARTNERSHIP NHS TRUST	18,739	£523.07	2.8%	57.0	7	SOUTH ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST	£445.75
HUMBER NHS FOUNDATION TRUST	19,012	£481.88	2.8%	57.9	8	WEST LONDON MENTAL HEALTH NHS TRUST	£451.86
LANCASHIRE CARE NHS FOUNDATION TRUST	19,159	£578.86	2.8%	58.3	9	TEES, ESK AND WEAR VALLEYS NHS FOUNDATION TRUST	£464.98
KENT AND MEDWAY NHS AND SOCIAL CARE PARTNERSHIP TRUST	21,772	£470.90	3.2%	66.3	10	KENT AND MEDWAY NHS AND SOCIAL CARE PARTNERSHIP TRUST	£470.90
SOUTH WEST YORKSHIRE PARTNERSHIP NHS FOUNDATION TRUST	22,950	£518.46	3.4%	69.9	11	SOUTH WEST LONDON AND ST GEORGE'S MENTAL HEALTH NHS TRUST	£475.43
TEES, ESK AND WEAR VALLEYS NHS FOUNDATION TRUST	25,360	£464.98	3.7%	77.2	12	HUMBER NHS FOUNDATION TRUST	£481.88
AVON AND WILTSHIRE MENTAL HEALTH PARTNERSHIP NHS TRUST	26,965	£592.60	4.0%	82.1	13	NOTTINGHAMSHIRE HEALTHCARE NHS TRUST	£492.06
OXLEAS NHS FOUNDATION TRUST	27,086	£340.38	4.0%	82.5	14	SOUTH WEST YORKSHIRE PARTNERSHIP NHS FOUNDATION TRUST	£518.46
SOUTH ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST	27,537	£445.75	4.1%	83.8	15	DEVON PARTNERSHIP NHS TRUST	£523.07
SOUTHERN HEALTH NHS FOUNDATION TRUST	27,727	£406.54	4.1%	84.4	16	MERSEY CARE NHS TRUST	£525.58
OXFORD HEALTH NHS FOUNDATION TRUST	30,816	£440.07	4.6%	93.8	17	NORFOLK AND SUFFOLK NHS FOUNDATION TRUST	£529.12
EAST LONDON NHS FOUNDATION TRUST	33,818	£375.81	5.0%	102.9	18	SOUTH LONDON AND MAUDSLEY NHS FOUNDATION TRUST	£575.28
SOUTH LONDON AND MAUDSLEY NHS FOUNDATION TRUST	37,035	£575.28	5.5%	112.7	19	LANCASHIRE CARE NHS FOUNDATION TRUST	£578.86
NOTTINGHAMSHIRE HEALTHCARE NHS TRUST	41,453	£492.06	6.1%	126.2	20	AVON AND WILTSHIRE MENTAL HEALTH PARTNERSHIP NHS TRUST	£592.60
BARNET, ENFIELD AND HARINGEY MENTAL HEALTH NHS TRUST	42,579	£406.69	6.3%	129.6	21	NORTHUMBERLAND, TYNE AND WEAR NHS FOUNDATION TRUST	£616.46
WEST LONDON MENTAL HEALTH NHS TRUST	53,060	£451.86	7.8%	161.5	22	BIRMINGHAM AND SOLIHULL MENTAL HEALTH NHS FOUNDATION TRUST	£620.45
GREATER MANCHESTER WEST MENTAL HEALTH NHS FOUNDATION TRUST	53,397	£417.82	7.9%	162.5	23	SOUTH STAFFORDSHIRE AND SHROPSHIRE HEALTHCARE NHS FOUNDATION TRUST	£626.39
BIRMINGHAM AND SOLIHULL MENTAL HEALTH NHS FOUNDATION TRUST	65,423	£620.45	9.7%	199.2	24	SUSSEX PARTNERSHIP NHS FOUNDATION TRUST	£646.33