

**Chemotherapy Costing and
Tariff Development Project**

Update for 2010/11 Reference Costs

December 2011

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Chemotherapy Costing and Tariff Development

1 Background

- 1.1 Although the Operating framework for 2012/13, published in November 2011, introduced mandatory currencies for chemotherapy delivery¹, there is still no official policy as to whether chemotherapy might come within the scope of a national tariff. However, it is reasonable to assume that any proposed tariffs could be based, in part, on the 2009/10 or 2010/11 Reference Costs collections.
- 1.2 Furthermore, irrespective of developments in the national tariff, expenditure on chemotherapy continues to increase. Government policy has been to invest in this area as part of its national plan for cancer, with additional funding earmarked for drugs since the general election of 2010.
- 1.3 For these reasons, the quality and robustness of activity recording and costing remains a key issue for chemotherapy services.

Understanding the National Picture

- 1.4 Reference Costs for chemotherapy were reviewed for 2008/09 by the National Cancer Action Team (NCAT). These showed significant differences between individual providers' reference costs reported, raising concern that there were variations in data and/or costing quality.
- 1.5 This indicated an urgent need to review the accuracy of chemotherapy service costs, because of the potential impact of a tariff on provider income and also because commissioners will come under pressure to review their expenditure on all services, including chemotherapy.
- 1.6 To address these concerns, NCAT held a workshop and circulated additional guidance to help identify and clarify some of the difficulties faced by providers and to understand the reasons for such variances.
- 1.7 Learning from a previous review carried by Bailey and Moore in respect of radiotherapy costing in 2010, variations in unit costs reported are likely to be due to 3 key reasons:
 - Different conventions for counting and recording the activity – *for example, drugs are coded by each procurement whereas the unit for reference costs is per cycle.*
 - Different costing assumptions – *for example, how has consultant oncologists' time/cost been allocated between chemotherapy and other cancer services such as radiotherapy?*
 - Genuine variations in cost to the organisation – *for example, where providers have been able to secure volume discounts for drugs costs.*

¹ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131360, s 4.20

- 1.8 In common with radiotherapy, there is likely to be a variety of commissioning arrangements across England. It is recognised that commissioning arrangements need to support the developments in the service, with full cost and volume contracting based on accurately reported activity and a robust understanding of the true cost.

Scope of the Chemotherapy Costing and Tariff Development Project

- 1.9 Work to support providers in understanding their chemotherapy costs commenced with the national workshop in July 2010. To take this forward, additional costing guidance was prepared in January 2011.
- 1.10 In addition, NCAT commissioned Bailey and Moore to undertake a review of chemotherapy costing (*Chemotherapy Costing and Tariff Development*) to:
- Undertake analysis of 2008/09 and 2009/10 reference costs and provide a commentary on the robustness and variances observed.
 - Make preliminary observations on the development of a tariff for chemotherapy and recommendations for future development.
 - Produce a draft report setting out the above.
- 1.11 Following the completion of this work, it was agreed to extend the project to examine different options for calculating an indicative chemotherapy tariff and to show the impact of such a tariff on providers. This work was completed in June 2011.
- 1.12 This report is an update on the work carried out on 2008/09 and 2009/10 Reference Costs submissions, following the publication of 2010/11 Reference Costs.

2 Analysis of 2010/11 Reference Costs

- 2.1 The Reference Costs exercise is a national collection of cost data undertaken by the Department of Health (DH) each year in June. Every NHS provider submits this data, based on the previous financial year's accounts. Therefore the 2010/11 collection, submitted in June 2011 and published on 17 November 2011², is the most recently published data available.
- 2.2 An explanation of chemotherapy reference costs, and their basis in clinical coding and Healthcare Resource Groups (HRGs), is given at **Appendix 1**.
- 2.3 The data downloaded from the DH web site showed that there were 149 (2008/09), 148 (2009/10) and 153 (2010/11) providers of Chemotherapy services in England. Therefore, 5 further providers have now submitted chemotherapy data in 2010/11, compared to those in 2009/10. These are:
- Guys & St Thomas' NHSFT
 - Birmingham Children's Hospital NHSFT
 - Epsom & St Helier University Hospitals NHST
 - East Cheshire NHST
 - Whipps Cross University Hospital NHST
- 2.4 As in our previous report, the providers above have been divided into 8 peer groups of approximately 20 providers each, based on the volume of procurement activity (cycles), deliveries or attendances in 2010/11 as reported in reference costs. This was to enable chemotherapy departments of similar size to be compared in groups rather than geographically which would, for example, compare small satellite units with major cancer centres. Changes in volumes reported since 2008/09 and 2009/10 have meant that several providers have moved between groups.
- 2.5 The peer groups were based on simple attribution criteria, using the cycles, delivery or attendances reported in 2010/11, as shown in Table 1 below:

Table 1: Attribution of Providers to peer groups

Peer Group	Activity reported in 2010/11 Reference Costs	Number of Providers
1	>= 10,000 cycles, deliveries or attendances	20
2	>= 7,000 cycles, deliveries or attendances	18
3	>= 5,000 cycles, deliveries or attendances	21
4	>= 4,000 cycles, deliveries or attendances	18
5	>= 3,000 cycles, deliveries or attendances	19
6	>= 1,600 cycles, deliveries or attendances	20
7	>= 1,000 cycles, deliveries or attendances	18
8	< 1,000 cycles, deliveries or attendances	19
Total		153

² http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131140

- 2.6 A list of all providers that submitted reference costs for chemotherapy in 2010/11 and their allocated peer group, with 2008/09 and 2009/10 equivalents included for comparison, is attached at **Appendix 2**. Where providers have merged, their latest configuration is used in all years. Providers with significant changes since earlier years are marked in yellow (see section 3.1 below).
- 2.7 An overview of the national picture in terms of key data is shown at **Appendix 3**, which covers the following:
- Procurement – number of cycles, total cost
 - Delivery – number of deliveries, total cost
 - Attendances – number of attendances, total cost
- 2.8 For the purposes of comparison, the following unit costs and other ratios are shown at **Appendix 4** and as charts at **Appendix 5**:
- Procurement unit cost (the average cost per cycle)
 - Delivery unit cost (the average cost per delivery)
 - Number of cycles per delivery
 - Ratio of total costs of procurement : total costs of delivery : total costs of attendances
- 2.9 These comparisons are presented to enable each provider to see their own data in the four ratios above, compared to other providers in their peer group, as well as looking at the average for their peer group and the national average.
- 2.10 The comparative data also illustrates the wide range of values that were submitted by providers as part of their reference costs submission and provides an indicator of where there might be issues regarding the accuracy of counting and/or costing.
- 2.11 The costs used in the comparative data were all deflated by each provider's Market Forces Factor (MFF). The MFF is a measure of "unavoidable" cost differences between NHS providers based on their geographical location, principally caused by rates of staff pay and the cost of land and buildings³. The MFF for each provider is published each year and forms part of the annual Reference Costs publication, as well as being used in Payment by Results (PbR) and in resource allocation to PCTs. It is normal practice to deflate all submitted reference costs by the MFF when comparing between providers to ensure a fair "like for like" comparison between providers in different parts of England once unavoidable cost differences have been removed.

³ http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_124434.pdf

3 Analysis of changes since 2009/10 Reference Costs

Providers with significant changes

- 3.1 There are a substantial number of providers who have reported significantly different numbers of deliveries, cycles (procurement) or attendances compared to 2009/10 and 2008/09. For the purposes of highlighting this trend, which is a cause for concern in some cases, the **37** providers whose reported deliveries or procurements (cycles) have changed by **100% or more** since 2009/10 (including the 5 new providers mentioned in section 2.3 above) are highlighted in yellow on **Appendix 2**.
- 3.2 The scope of this report did not allow for the reasons for these changes to be discussed with the providers concerned. However, the following observations can be made:
- These providers have submitted widely differing values for one or more of the activity categories over the 3 years reviewed. In some cases, providers appear to be correcting apparent anomalies in their 2009/10 data, which is to be welcomed. In other cases, the reasons behind the change are unclear.
 - Many of the smaller providers have reported activity (and costs) against HRG SB97Z (same day chemotherapy admission/attendance) and nothing against the procurement or delivery HRGs. This contravenes the grouping logic for chemotherapy HRGs⁴ and reference costs guidance⁵. This may indicate issues with the recording of activity and/or with understanding the principles of coding chemotherapy activity (see **Appendix 1**).
 - Other providers have submitted deliveries without procurement and *vice versa*, which is equally unlikely to be in accordance with the guidance above. Again, this may indicate issues with recording activity and/or understanding the principles of coding.

Changes to unit cost data

- 3.3 Table 2 shows the average of the unit costs submitted for deliveries in 2008/09, 2009/10 and 2010/11, together with range, inter-quartile range and standard distribution of the data:

Table 2: Comparison of average unit costs for reported deliveries

	2008/09 deliveries	2009/10 deliveries	2010/11 deliveries
Peer Group Averages:			
Peer Group 1	£193	£189	£247
Peer Group 2	£217	£271	£223
Peer Group 3	£248	£241	£252
Peer Group 4	£312	£275	£277
Peer Group 5	£291	£491	£289
Peer Group 6	£303	£264	£296
Peer Group 7	£267	£400	£380
Peer Group 8	£542	£325	£484

⁴ <http://www.ic.nhs.uk/services/the-casemix-service/using-this-service/reference/downloads/costing/hrg4-2010-11-reference-costs-grouper-documentation>, summary for sub-chapter SB

⁵ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_122803, s 433

	2008/09 deliveries	2009/10 deliveries	2010/11 deliveries
National Average	£239	£262	£258
Lowest unit cost	£0	£0	£0
Highest unit cost	£4,145	£2,462	£2,398
Range	£4,145	£2,462	£2,398
Lower quartile	£152	£141	£183
Upper quartile	£298	£332	£335
Inter-quartile range	£146	£191	£152
Standard deviation	£472	£312	£304

3.4 Table 2 shows that, although the overall range and standard deviation continue to be skewed by extreme outliers, there is an increasingly consistent group of providers in the centre of the distribution. This is illustrated by the sharply reduced inter-quartile range (the range between the highest and lowest values of the 'middle 50%' of providers) since 2009/10. In addition, the overall range and standard deviation have reduced marginally, which indicates that the consistency of the whole population has improved slightly.

3.5 Table 3 shows the average of the unit costs submitted for procurement in 2008/09, 2009/10 and 2010/11, together with range, inter-quartile range and standard distribution of the data:

Table 3: Comparison of average unit costs for reported procurement

	2008/09 procurement	2009/10 procurement	2010/11 procurement
Peer Group Averages:			
Peer Group 1	£642	£644	£713
Peer Group 2	£618	£942	£723
Peer Group 3	£617	£769	£852
Peer Group 4	£723	£908	£979
Peer Group 5	£735	£671	£939
Peer Group 6	£695	£790	£762
Peer Group 7	£726	£895	£1,055
Peer Group 8	£543	£950	£838
National Average	£652	£760	£786
Lowest unit cost	£0	£0	£0
Highest unit cost	£4,584	£5,199	£5,104
Range	£4,584	£5,199	£5,104
Lower quartile	£454	£519	£567
Upper quartile	£909	£1,048	£1072
Inter-quartile range	£455	£528	£505
Standard deviation	£662	£636	£625

- 3.6 Again, there is a slight improvement in the overall range and standard deviation, as well as a larger improvement in the inter-quartile range. This again indicates an increasingly consistent group of providers at the centre of the distribution, but the presence of severe outliers, particularly in the smaller peer groups.
- 3.7 The statistical measures shown in Table 3 above and at Appendix 4 exclude data submitted for procurement (cycles) by Weston Area Health NHS Trust, as their reported average unit cost (£26,939 per cycle) is a particularly extreme outlier and significantly skews the average and other statistical measures calculated above.

Changes to other key ratios

- 3.8 Table 4 below shows the ratio of cycles per delivery for 2008/09, 2009/10 and 2010/11:

Table 4: Comparison of cycles per delivery

	2008/09 cycles per delivery	2009/10 cycles per delivery	2010/11 cycles per delivery
Peer Group 1	1.1	1.1	1.0
Peer Group 2	0.9	0.8	1.1
Peer Group 3	1.0	1.2	1.1
Peer Group 4	1.0	1.0	0.9
Peer Group 5	0.9	0.8	0.8
Peer Group 6	1.1	1.1	1.0
Peer Group 7	1.1	1.0	0.9
Peer Group 8	1.7	0.9	0.9
National average	1.0	1.0	1.0
Minimum	0.0	0.0	0.0
Maximum	1297.0	112.8	9.2

- 3.9 This table shows that the ratio of cycles to deliveries is fairly consistent across all peer groups. The ratio is somewhat flawed in that inpatients receiving chemotherapy would have cycles recorded, but not deliveries, against their treatment. Nonetheless, it would therefore provide a reasonable sense check for providers, before submitting their data, to gauge whether their ratio of cycles to deliveries reported appears reasonable compared to the above ratios.
- 3.10 Table 5 below shows the ratio of total costs allocated to procurement, deliveries and (for 2010/11) attendances:

Table 5: Division of total costs by activity type

Average	2008/09 proc cost: delivery cost	2009/10 proc cost: delivery cost	2010/11 proc cost: delivery cost: atts
Peer Group 1	79:21	78:22	71:26:03
Peer Group 2	72:28	73:27	75:22:04
Peer Group 3	72:28	79:21	73:20:07
Peer Group 4	71:29	77:23	74:24:02
Peer Group 5	70:30	54:46	68:27:05
Peer Group 6	72:28	76:24	62:24:14
Peer Group 7	75:25	69:31	64:26:10
Peer Group 8	64:36	73:27	54:36:10
National average	74:26	74:26	71:24:05

3.11 Again, this table shows a fairly consistent average across most peer groups. These ratios could provide another reasonableness sense check for providers, before submitting their data, to assess whether their allocation of costs between different types of activity appears to be consistent with the above.

3.12 It also shows the increasing propensity amongst smaller providers (peer groups 6 to 8) to allocate significant costs to attendances, in contravention of the relevant guidance, as mentioned in section 3.2 above.

Summary

3.13 Overall, the data shows a slightly improved degree of consistency between providers since our initial analysis of 2008/09 and 2009/10 Reference Costs. This is demonstrated in the tables above.

3.14 However, the data continues to be skewed by the impact of a relatively small number of providers that have submitted data that can only be described as extreme outliers when compared to national and peer group averages. Also, a small but significant number of providers have substantially changed their data submitted compared to previous years.

4 Potential impact of tariff based funding

Calculating an Indicative National Tariff

- 4.1 As part of this update, an indicative tariff has been calculated by Healthcare Resource Group (HRG) based on 2010/11 Reference Costs. This has been calculated by taking the national average unit cost for each HRG, deflated by each provider's PbR MFF.
- 4.2 This tariff is distinct from the non-mandatory tariff issued for chemotherapy delivery by the DH as part of their 2012/13 "road test" package for PbR⁶. The DH tariff is calculated as follows:
- Base data is 2009/10 Reference Costs
 - Exclusion of a very small amount of outlying data (plus or minus 20 x national average)
 - A number of weightings applied to adjust the relative prices of certain HRGs based on clinical feedback
 - Cost data adjusted for inflation to 2012/13 prices
- 4.3 The tariff calculated as part of this report is calculated as follows:
- Base data is 2010/11 Reference Costs
 - No adjustments to underlying cost data other than the exclusion of certain outlying data as set out below
 - No adjustment for inflation, i.e. prices remain at 2010/11 levels
- 4.4 A single tariff has been calculated for each HRG, irrespective of whether the patient was an inpatient, outpatient or day attender when receiving chemotherapy treatment. This is for the following reasons:
- The reference costs data indicates that these categories are not captured consistently across providers
 - It is unlikely that the costs of chemotherapy are significantly different between different modalities of care, as the drugs prescribed and delivery regimen would be similar in most cases.
- 4.5 Any costs attributed to the HRG SB97Z (same day chemotherapy admission/attendance) have been apportioned across the HRGs for delivery in proportion to the total costs of each delivery HRG. This is because Reference Costs guidance states that the expectation is that no costs should be submitted under this HRG⁷. Once the procurement and delivery costs have been unbundled from an admission or attendance solely for chemotherapy, the expectation is that there would be no material amount of costs left to be allocated against the core HRG SB97Z. Therefore it has been assumed that these costs more properly relate to the cost of delivery and that there would be no separate tariff payable for HRG SB97Z.

⁶ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131826

⁷ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_122803, s 433

4.6 Because of the potential of outlying data to skew an average derived from Reference Cost data, our tariff model tested 4 different methodologies to assess the impact of cleaning the reference cost data by removing outliers, as follows:

- **Option 1: All data** – a simple average of all data submitted, except cycles from Weston Area Health NHS Trust as mentioned in section 3.7 above, in effect making the assumption that any outliers at either extreme of the population are counterbalanced by outliers at the other extreme of the population or do not materially affect the national average.
- **Option 2: Exclude data outside the inter-quartile range** – this takes the unit costs for each HRG and excludes the uppermost 25% of values and the lowermost 25% of values for each HRG as outliers, i.e. includes only the “middle 50%” of the data.
- **Option 3: Exclude data below the 10th percentile and above the 90th percentile** – this is similar to option 2, but excludes only the uppermost 10% of values and the lowermost 10% of values as outliers, i.e. includes only the “middle 80%” of the data.
- **Option 4: Exclude data more than one standard deviation from the mean** – this takes the average unit costs for each HRG and calculates the standard deviation of each population. The standard deviation is a statistically recognised measure of dispersion. Any data more than 1 standard deviation away from the national average (approximately 10% of the total data, mostly from the high end of the range) is excluded.

4.7 The indicative tariffs calculated are attached at **Appendix 6**. This shows the tariffs calculated under each of the 4 options. It also shows the highest and lowest tariffs calculated for each HRG (shaded red and green respectively) and the range between them.

4.8 Our assessment of the 4 options is as follows:

- **Option 1:** Includes almost the full set of data, but also includes a significant number of outliers which may call into question the validity of a tariff based on average reference costs.
- **Option 2:** Produces a similarly skewed tariff and excludes almost 50% of the data submitted.
- **Option 3:** Produces a more reasonable result and excludes only around 20% of the data at the highest and lowest ends of the range
- **Option 4:** This also produces a reasonable result, is based on a statistically valid measure of dispersion and excludes the smallest amount of data (around 10% of the total), mostly at the high end of the range.

4.9 In our view, the most appropriate methodology for excluding outliers would be **option 4** because it produces “reasonable” tariffs, i.e. mostly avoids being the lowest or highest of the 4 options and is based on a statistically valid measure of dispersion from the national average. It also causes the exclusion of the smallest proportion of the total data available. An alternative approach might be to mix and match options 3 and 4 according to each HRG’s individual population.

4.10 It should be stressed that these calculations are purely illustrative, for the purposes of assessing the potential impact of such a tariff, and it is not implied that these reflect DH policy.

Testing the Impact of an Indicative National Tariff

- 4.11 Comparing the 4 options above, it is reassuring to note that, for most HRGs, the tariff as calculated under each option are fairly close to each other. This suggests that the average of the national set of data is fairly robust and could provide a reasonable basis for a tariff.
- 4.12 Nonetheless, confidence in the robustness of average reference costs would be increased by excluding outlying data that is so distant from the national average that it would be reasonable to conclude that it is erroneous in some way.
- 4.13 At **Appendix 7**, the potential impact that such a tariff (using Option 4 above) could have on each provider in terms of the income they would receive has been calculated. Each provider's income is calculated by taking their activity data as submitted in 2010/11 reference costs, multiplying this by the relevant tariff and adding each provider's 2011/12 PbR MFF. By comparing this indicative income to submitted reference costs, a projected gain or loss can be calculated.
- 4.14 This suggests that many providers could be affected significantly if such a tariff were to be introduced, assuming reference costs reflects accurately the true cost of delivering their chemotherapy service and is indicative of the income received for these services. In reality, some providers would be funded for significantly more than their reported costs and some significantly less. In order to see the true financial impact on providers, the income shown at **Appendix 7** would need to be compared to current income being received by providers for chemotherapy.
- 4.15 One other factor that may be of concern is that there is a trend for the larger providers in peer groups 1 and 2 to attract tariff income in excess of their reported costs, whereas the smaller providers in peer groups 3 to 8 mostly attract income below their reported costs. This can be verified by the peer group averages shown in Tables 2 and 3 above, where the average unit costs for peer groups 1 and 2 are mostly below the national average and those for peer groups 3 to 8 are mostly above the national average. This implies that larger providers would benefit financially from the introduction of tariffs, at the expense of smaller ones.
- 4.16 The impact analysis, therefore, reinforces the need for all chemotherapy providers to have a good understanding of the costs of providing their service and of the data they submit to reference costs. If providers can identify instances where their average unit costs are outliers compared to peer group and national averages and work to understand these variances, they will be able to prepare themselves for the impact of a tariff system on their income.
- 4.17 In addition, the conclusions reached in our June 2011 report remain pertinent. Any tariffs introduced based on national, regional or peer group benchmarks would need to be introduced with extreme care and with further refinements over and above a simple average price, so as not to destabilise the service financially. For example, the following issues may need to be considered:
- Unavoidable costs over and above the MFF, such as those related to treatment of paediatrics and patients with co-morbidities
 - Unit costs potentially being higher at smaller providers, e.g. drugs may be purchased in smaller volumes and therefore not eligible for bulk purchase discounts
 - Data such as reference costs may need to be significantly "cleaned" of unexplained outlying data, using an approach similar to those proposed in section 4.6 above.

5 Conclusions

- 5.1 Many of the findings and recommendations from our June 2011 report remain relevant and these are shown as excerpts at **Appendices 8, 9 and 10** for ease of reference.
- 5.2 Some positive progress continues to be demonstrated from the analysis of the 2010/11 Reference Costs submission. Improvements in the consistency of costs reported can be seen, when compared to 2008/09 and 2009/10. In addition, aggregating the data for all England appears to provide a consistent set of averages, despite the presence of outlying data.
- 5.3 It is nonetheless worrying that a significant number of extreme outliers remain and these will continue to throw doubt upon the quality of the costing of chemotherapy services. Those organisations that are a significant distance from national and peer group averages will need to ensure that they have a clear understanding of the reasons behind their reported position.
- 5.4 The extension of PbR to chemotherapy, with nationally mandated currencies based on HRGs being introduced in April 2012 for chemotherapy delivery, may pose a risk to the continued development of services. Any tariffs developed for chemotherapy services using national, regional or peer group average costs as a benchmark will need to be introduced with extreme care around issues such as those identified in section 4.17 above. Otherwise, the introduction of tariffs may impact adversely on funding for services.
- 5.5 Those providers with poor systems for counting and costing chemotherapy activity will suffer under the introduction of national HRG-based currencies and local volume-driven tariffs. A clear understanding of the cost of chemotherapy services, the drivers of that cost and the accurate recording of underlying activity will be key to ensuring the continued delivery of the best possible services for patients.

A Brief Guide to Coding, Counting and Reference Costs

Introduction

Reference Costs are collected annually each June by the DH from all NHS providers. They provide an historical statement of Trusts' costs based on their published annual accounts for the financial year that ended in the previous March. The data is published on the DH web site each year.

Reference Costs cover the vast majority of health services expenditure and provide the most complete and authoritative record of NHS Trusts' costs. They therefore provide a useful tool for analysing and benchmarking costs that can be used by Trusts, commissioners and other interested parts.

The currency for Reference Costs is Healthcare Resource Groups (HRGs). These are derived from clinical coding, as described below.

Clinical Coding

All hospital-based activity is coded for the patient's diagnoses (using a coding system known as ICD10) and for any procedures undertaken (using a coding system known as OPCS4).

For chemotherapy, only OPCS codes are relevant in terms of deriving the HRG. Chemotherapy OPCS codes are split into two parts: procurement (codes beginning with X70 and X71) and delivery (codes beginning with X72 and X73). The following OPCS codes (version 4.5) was available to record chemotherapy activity in 2009/10 and 2010/11:

Table 1: OPCS codes used to record chemotherapy procurement in 2009/10 and 2010/11

OPCS code	Description
<i>Chemotherapy Procurement</i>	
X701	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 1
X702	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 2
X703	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 3
X704	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 4
X705	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 5
X708	Other specified procurement of drugs for chemotherapy for neoplasm in Bands 1-5
X709	Unspecified procurement of drugs for chemotherapy for neoplasm in Bands 1-5
X711	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 6
X712	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 7
X713	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 8
X714	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 9
X715	Procurement of drugs for chemotherapy for neoplasm for regimens in Band 10
X718	Other specified procurement of drugs for chemotherapy for neoplasm in Bands 6-10
X719	Unspecified procurement of drugs for chemotherapy for neoplasm in Bands 6-10

Procurement deals with the purchase and supply of chemotherapy drugs, and any supporting therapy, when delivered as part of a chemotherapy regimen.

Table 2: OPCS codes used to record chemotherapy delivery in 2009/10 and 2010/11

OPCS code	Description
<i>Chemotherapy Delivery</i>	
X721	Delivery of complex chemotherapy for neoplasm including prolonged infusional treatment at first attendance
X722	Delivery of complex parenteral chemotherapy for neoplasm at first attendance
X723	Delivery of simple parenteral chemotherapy for neoplasm at first attendance
X724	Delivery of subsequent element of cycle of chemotherapy for neoplasm
X728	Other specified delivery of chemotherapy for neoplasm
X729	Unspecified delivery of chemotherapy for neoplasm
X731	Delivery of exclusively oral chemotherapy for neoplasm
X738	Other specified delivery of oral chemotherapy for neoplasm
X739	Unspecified delivery of oral chemotherapy for neoplasm

Delivery refers to the delivery of a part of or all of a chemotherapy cycle.

These codes were updated in 2009/10 (version 4.5) so as to reflect more accurately ongoing developments in chemotherapy treatments and to improve the mapping of individual regimens to OPCS codes.

Healthcare Resource Groups (HRGs)

Healthcare Resource Groups (HRGs) are standard groupings of clinically similar treatments which use comparable levels of healthcare resource. i.e. cost a similar amount to provide.

HRGs offer organisations the ability to understand their activity in terms of the types of patients they care for, and the treatments they undertake. They enable the comparison of activity within and between different organisations and provide an opportunity to benchmark treatments and services to support trend analysis over time.

A useful introduction to HRGs can be found at:

[http://www.ic.nhs.uk/webfiles/Services/casemix/Prep%20HRG4/Introduction%20to%20HRG4 January%202008.pdf](http://www.ic.nhs.uk/webfiles/Services/casemix/Prep%20HRG4/Introduction%20to%20HRG4%20January%202008.pdf)

HRGs are derived from the clinical coding described above. Software called the HRG Grouper processes the codes (ICD10 and OPCS4) on each patient record, together with other information such as age and length of stay, and calculates the applicable HRG.

For mainstream hospital services, a single “core HRG” is produced for each outpatient attendance or inpatient spell (i.e. the period from admission to discharge). However, chemotherapy is one of several “unbundled” services. This means that, when these services are delivered, additional HRGs are generated for the spell or attendance which describes the unbundled activity. For a chemotherapy patient, the core HRG will describe the patient’s diagnosis and any surgical procedures undertaken, while the additional unbundled chemotherapy HRGs will describe the chemotherapy activity.

Chemotherapy HRGs are derived from procedure coding (OPCS4) only and other information about the patient (e.g. diagnosis, age) is not taken into account – this would be reflected only in the core HRG for the spell.

The HRGs for chemotherapy therefore follow a similar structure to the OPCS codes. There is a section for procurement and a section for delivery. There is also a third section that covers day or outpatient attendances in addition to the above.

Procurement HRGs

These cover the costs of all drugs dispensed during the course of the regimen (including supportive therapy, where part of the delivery of the regimen) plus the costs of procuring the drugs themselves (e.g. Pharmacy staff, delivery and storage). There are 11 procurement HRGs, 10 bands for recognised national regimens plus a further band for drugs not forming part of an identified national regimen:

HRG code	HRG label
SB01Z	Procure Chemotherapy drugs for regimens in Band 1
SB02Z	Procure Chemotherapy drugs for regimens in Band 2
SB03Z	Procure Chemotherapy drugs for regimens in Band 3
SB04Z	Procure Chemotherapy drugs for regimens in Band 4
SB05Z	Procure Chemotherapy drugs for regimens in Band 5
SB06Z	Procure Chemotherapy drugs for regimens in Band 6
SB07Z	Procure Chemotherapy drugs for regimens in Band 7
SB08Z	Procure Chemotherapy drugs for regimens in Band 8
SB09Z	Procure Chemotherapy drugs for regimens in Band 9
SB10Z	Procure Chemotherapy drugs for regimens in Band 10
SB16Z	Procure Chemotherapy drugs for regimens not on the national list

The bands broadly correlate to the cost, so band 1 is procurement of the cheapest drugs and band 10 the most expensive.

The unit of measurement for procurement is cycles. A cycle of treatment may cover more than one attendance at hospital and more than one dispensation of any given drug.

Delivery HRGs

These cover the costs of delivering the chemotherapy, such as the staff and premises used. There are 6 delivery HRGs as follows:

HRG code	HRG label
SB11Z	Deliver exclusively Oral Chemotherapy
SB12Z	Deliver simple Parenteral Chemotherapy at first attendance
SB13Z	Deliver more complex Parenteral Chemotherapy at first attendance
SB14Z	Deliver complex Chemotherapy, including prolonged infusional treatment at first attendance
SB15Z	Deliver subsequent elements of a Chemotherapy cycle
SB17Z	Deliver chemotherapy for regimens not on the national list

Again, these broadly correlate to cost. SB11Z is normally the cheapest with an oral prescription issued to the patients, often in an outpatient setting.

The remaining HRGs cover parenteral chemotherapy.

- SB12Z and SB13Z generally cover injections
- SB14Z covers longer infusional treatments
- SB15Z covers all follow-up treatments within an existing cycle
- SB17Z covers all deliveries of a regimen not identified on the national list.

For inpatients, the costs of delivery do not have to be separately identified. They remain a component of the total cost of the inpatient spell. However, the majority of chemotherapy is dispensed in a day attendance or outpatient setting, where the primary reason for the patient attending hospital is to receive chemotherapy. For such attendances, the cost of delivery is identified separately.

Providers generally records this activity in attendances. An attendance is broadly the same as a delivery for Reference Costs purposes, with the following notes:

- If a patient receives both oral and parenteral chemotherapy in one attendance, this was counted as 2 deliveries until 2008/9 – one SB11Z for the oral delivery and one HRG from SB12Z to SB15Z for the parenteral delivery. Since 2009/10 the parenteral delivery determines the OPCS coding and the HRG;
- If a patient is on more than one regimen concurrently, a delivery is recorded for each regimen as appropriate. For example, if a patient is on 3 regimens concurrently, each attendance could consist of more than 1 delivery, depending on the make up of each regimen (e.g. if treatment days coincide).

Attendance HRG

From 2009/10, an attendance HRG (SB97Z – same day chemotherapy admission/attendance) was also added. This is generated as the core HRG when a patient is admitted as a day case or attends as an outpatient or day attender solely for the purpose of the delivery of chemotherapy, i.e. there are no other OPCS codes recorded other than the procurement and/or delivery of chemotherapy. Prior to 2009/10, various core HRGs were generated by this type of activity, which then had to be ignored for costing purposes.

Reference costs guidance states that “it is expected that there will be a zero cost submitted for this activity” because all costs should be included in the procurement and delivery HRGs.

If the patient is admitted as inpatient, a core HRG other than SB97Z will be generated depending on the coding of the spell. Also, if a day case, day attender or outpatient includes treatment other than chemotherapy, a core HRG other than SB97Z will be generated.

Chemotherapy Reference Costs

Chemotherapy has a dedicated section within the Reference Costs collection, which records the “unbundled” cost of chemotherapy as described above. This means the costs directly associated with procurement or delivery. These do not include, for example:

- outpatient clinics attended by patients undergoing chemotherapy treatment
- ward costs, if a patient undergoing chemotherapy treatment is admitted to a bed
- multi-disciplinary team meetings regarding patients’ progress
- post-treatment administration and follow up

The units of measurement for chemotherapy are based on regimens and are as follows:

- Procurement is measured in cycles. These refer to the number of repetitions of treatment specified in the regimen.
- Delivery is measured in deliveries. These are broadly similar to attendances, except where a patient undergoes more than one regimen in a single attendance, which would generate a separate delivery for each regimen.

Providers will record their chemotherapy activity with the OPCS codes described in Table 1. The HRG grouper will process these records and calculate the appropriate HRG from the list in Table 2.

Providers calculate the cost of providing each of the HRGs using their costing systems, which take costs from their accounting ledgers and allocate them across all the activities they undertake. Dividing these costs by the recorded activity volumes by HRG gives the average unit costs by HRG that are submitted for Reference Costs.

Implications of Reference Costs and HRGs for a Chemotherapy Tariff

In mainstream acute services, the national tariff is based on previous years’ Reference Costs, adjusted for known changes since the date of submission. HRGs therefore provide the currency that provides reimbursement under the national tariff.

In chemotherapy, HRGs have a much shorter history and are still subject to development each year in response to feedback from providers. Nonetheless, it is expected that any future national tariff for chemotherapy would also be based on activity recorded by HRG.

**2010/11 Chemotherapy Reference Costs
Provider Peer Groups**

Org code	Organisation name	2010/11					2009/10			2008/09		
		+/- since 09/10		+/- since 09/10		Overall Peer Group	Cycles	Delivs	Overall Peer Group	Cycles	Delivs	
		Cycles	Deliveries	Deliveries	Attends							
RBV	THE CHRISTIE NHS FOUNDATION TRUST	44,939	-2%	47,823	12%	47,823	1	45,684	42,720	1	44,855	38,998
REN	CLATTERBRIDGE CENTRE FOR ONCOLOGY NHS FOUNDATION TRUST	27,774	-13%	30,592	6%	0	1	31,813	28,820	1	29,079	29,680
RYJ	IMPERIAL COLLEGE HEALTHCARE NHS TRUST	24,756	-6%	22,859	7%	2,882	1	26,427	21,341	1	9,845	9,845
RHQ	SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	21,932	-5%	21,457	-7%	21,457	1	23,077	23,065	1	24,178	25,081
RPY	THE ROYAL MARSDEN NHS FOUNDATION TRUST	18,535	-2%	25,316	-2%	25,316	1	19,010	25,784	1	18,324	18,845
RJ1	GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	16,202	-	17,755	-	17,755	1	submitted no data		submitted no data		
RTE	GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST	15,337	8%	15,995	0%	0	1	14,189	15,973	1	15,633	17,304
RWH	EAST AND NORTH HERTFORDSHIRE NHS TRUST	14,982	13%	14,435	20%	22,381	1	13,305	12,030	1	11,472	10,514
RXF	MID YORKSHIRE HOSPITALS NHS TRUST	13,021	-8%	8,701	-13%	8,711	1	14,199	9,951	1	15,105	9,217
RWE	UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST	12,045	-12%	12,062	-4%	11,938	1	13,746	12,630	1	13,746	12,082
RGT	CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	11,776	24%	10,735	3%	10,932	1	9,527	10,451	1	9,552	9,871
RRK	UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST	11,204	1734%	9,803	21%	0	1	611	8,083	2	9,260	9,258
RR8	LEEDS TEACHING HOSPITALS NHS TRUST	11,150	-5%	14,880	4%	0	1	11,744	14,370	1	15,653	214
RTH	OXFORD RADCLIFFE HOSPITALS NHS TRUST	10,812	55%	10,661	30%	0	1	6,960	8,218	2	41,209	41,209
RX1	NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST	10,171	3%	12,803	2%	11,166	1	9,868	12,528	1	9,795	12,123
RTD	THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	10,129	-24%	11,884	-6%	10,569	1	13,291	12,609	1	5,444	4,452
RNS	NORTHAMPTON GENERAL HOSPITAL NHS TRUST	9,984	100%	5,691	1%	5,828	2	4,998	5,614	4	5,077	5,707
RR1	HEART OF ENGLAND NHS FOUNDATION TRUST	9,899	15%	10,548	21%	9,560	1	8,581	8,685	2	8,304	9,034
RM1	NORFOLK AND NORWICH UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	9,688	9%	9,661	6%	8,920	2	8,856	9,156	2	8,530	9,001
RA2	ROYAL SURREY COUNTY HOSPITAL NHS FOUNDATION TRUST	9,685	11%	9,131	-21%	21,388	1	8,749	11,624	1	14,379	14,164
RRV	UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	9,674	30%	11,061	36%	10,955	1	7,470	8,148	2	7,716	8,653
RTG	DERBY HOSPITALS NHS FOUNDATION TRUST	9,174	19%	8,038	2%	8,464	2	7,681	7,888	2	7,754	7,057
RHU	PORTSMOUTH HOSPITALS NHS TRUST	9,128	6%	9,960	4%	9,919	2	8,648	9,584	2	7,333	8,343
RC1	BEDFORD HOSPITAL NHS TRUST	8,955	44%	1,930	-3%	0	2	6,240	1,999	3	8,486	0
RH8	ROYAL DEVON AND EXETER NHS FOUNDATION TRUST	8,954	57%	7,787	15%	6,010	2	5,686	6,751	3	5,981	6,798
RWD	UNITED LINCOLNSHIRE HOSPITALS NHS TRUST	8,678	-7%	9,038	-5%	8,170	2	9,364	9,509	2	9,496	9,598
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST	8,451	6%	7,607	6%	370	2	7,996	7,198	2	7,903	6,896
RNJ	BARTS AND THE LONDON NHS TRUST	8,372	0%	10,088	0%	6,284	1	8,372	10,088	1	8,372	10,088
RHM	SOUTHAMPTON UNIVERSITY HOSPITALS NHS TRUST	8,014	59%	8,629	51%	0	2	5,028	5,724	4	5,016	4,776
RWA	HULL AND EAST YORKSHIRE HOSPITALS NHS TRUST	7,807	7%	8,888	0%	9,435	2	7,268	8,847	2	7,670	8,197
RVV	EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST	7,592	-0%	8,473	-2%	7,642	2	7,626	8,621	2	6,549	6,436
RTR	SOUTH TEES HOSPITALS NHS FOUNDATION TRUST	7,389	-45%	8,226	38%	0	2	13,397	5,968	1	11,148	12,492
RVW	NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUST	7,384	17%	3,628	2%	3,425	2	6,319	3,548	3	7,132	3,885
RJE	UNIVERSITY HOSPITAL OF NORTH STAFFORDSHIRE NHS TRUST	7,067	9%	8,156	8%	7,235	2	6,476	7,537	2	6,644	7,239
RXW	SHREWSBURY AND TELFORD HOSPITAL NHS TRUST	6,972	6%	7,473	36%	6,844	2	6,585	5,482	3	7,159	7,606
RAJ	SOUTHEND UNIVERSITY HOSPITAL NHS FOUNDATION TRUST	6,912	-	7,755	20%	7,104	2	0	6,462	3	0	6,462
RA7	UNIVERSITY HOSPITALS BRISTOL NHS FOUNDATION TRUST	6,868	10%	8,778	12%	462	2	6,226	7,866	2	5,930	8,318
RK9	PLYMOUTH HOSPITALS NHS TRUST	6,469	7%	6,437	6%	6,443	3	6,026	6,099	3	7,994	7,565
RXC	EAST SUSSEX HOSPITALS NHS TRUST	6,257	-19%	3,969	-7%	3,993	3	7,718	4,255	2	7,516	4,465
RJL	NORTHERN LINCOLNSHIRE AND GOOLE HOSPITALS NHS FOUNDATION TRUST	6,082	42%	5,553	-32%	5,343	3	4,284	8,199	2	5,926	5,806
RL4	THE ROYAL WOLVERHAMPTON HOSPITALS NHS TRUST	6,037	-9%	7,044	-8%	6,897	2	6,602	7,677	2	6,996	8,073
RNA	THE DUDLEY GROUP OF HOSPITALS NHS FOUNDATION TRUST	6,003	3%	6,004	3%	6,004	3	5,843	5,843	3	4,975	6,341
RXK	SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST	5,947	5%	6,999	22%	5,628	3	5,680	5,758	3	5,586	5,594
RDE	COLCHESTER HOSPITAL UNIVERSITY NHS FOUNDATION TRUST	5,940	26%	5,928	-	0	3	4,699	0	4	5,728	5,824
RKB	UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE NHS TRUST	5,741	-3%	6,530	0%	6,417	3	5,893	6,520	3	6,902	7,858
RLT	GEORGE ELIOT HOSPITAL NHS TRUST	5,622	20%	2,433	3%	2,084	3	4,693	2,371	4	3,007	2,090
RTF	NORTHUMBRIA HEALTHCARE NHS FOUNDATION TRUST	5,620	-4%	6,350	-0%	5,554	3	5,828	6,378	3	5,835	6,416
RF4	BARKING, HAVERING AND REDBRIDGE UNIVERSITY HOSPITALS NHS TRUST	5,587	107%	606	-93%	6,922	3	2,698	8,201	2	1,949	8,179
REF	ROYAL CORNWALL HOSPITALS NHS TRUST	5,501	11%	6,320	19%	5,628	3	4,956	5,320	4	6,273	5,757

**2010/11 Chemotherapy Reference Costs
Provider Peer Groups**

Org code	Organisation name	2010/11					2009/10			2008/09		
		+/- Cycles	+/- since 09/10	+/- Deliveries	+/- since 09/10	Attends	Overall Peer Group	Cycles	Delivs	Overall Peer Group	Cycles	Delivs
RYQ	SOUTH LONDON HEALTHCARE NHS TRUST	5,367	-4%	2,891	860%	4,227	3	5,583	301	4	7,440	3,137
RBA	TAUNTON AND SOMERSET NHS FOUNDATION TRUST	5,360	49%	2,874	-24%	4,249	3	3,594	3,773	5	4,508	4,508
RJF	BURTON HOSPITALS NHS FOUNDATION TRUST	5,198	-13%	3,406	5%	3,412	3	5,981	3,257	3	3,439	3,395
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST	5,187	31%	4,937	1%	3,626	3	3,967	4,877	4	submitted no data	
RCB	YORK TEACHING HOSPITAL NHS FOUNDATION TRUST	5,094	-32%	0	-	653	3	7,453	0	3	2,116	0
RJC	SOUTH WARWICKSHIRE NHS FOUNDATION TRUST	4,995	67%	6,279	491%	2,966	3	2,988	1,063	6	2,555	2,051
RXH	BRIGHTON AND SUSSEX UNIVERSITY HOSPITALS NHS TRUST	4,960	391%	5,934	-32%	0	3	1,010	8,685	2	1,010	8,685
RXQ	BUCKINGHAMSHIRE HEALTHCARE NHS TRUST	4,526	-25%	4,515	-	4,512	4	6,051	0	3	5,909	5,187
RWF	MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST	4,514	-21%	4,965	-6%	4,357	4	5,715	5,307	4	8,124	8,124
RTX	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST	4,469	1%	5,067	0%	23	3	4,408	5,042	4	4,099	4,246
RWY	CALDERDALE AND HUDDERSFIELD NHS FOUNDATION TRUST	4,099	-12%	4,986	-10%	4,403	4	4,646	5,510	4	5,171	5,819
RQ8	MID ESSEX HOSPITAL SERVICES NHS TRUST	4,096	0%	4,778	5%	0	4	4,096	4,549	4	2,811	2,773
RGQ	IPSWICH HOSPITAL NHS TRUST	4,088	97%	6,987	-4%	6,986	3	2,076	7,260	3	2,026	5,853
RW3	CENTRAL MANCHESTER UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	4,029	-3%	3,238	-3%	2,924	4	4,147	3,337	5	3,779	3,148
RWP	WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST	3,995	32%	4,242	-20%	3,710	4	3,037	5,289	4	2,488	4,121
RHW	ROYAL BERKSHIRE NHS FOUNDATION TRUST	3,840	482%	3,840	-16%	0	5	660	4,569	4	460	459
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST	3,784	8%	4,185	3%	51	4	3,497	4,064	5	3,984	552
RAP	NORTH MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST	3,739	18%	3,797	16%	0	5	3,182	3,261	5	3,020	3,522
RXP	COUNTY DURHAM AND DARLINGTON NHS FOUNDATION TRUST	3,719	2%	4,097	4%	4,184	4	3,640	3,955	5	4,216	4,723
RD3	POOLE HOSPITAL NHS FOUNDATION TRUST	3,672	-37%	4,126	-40%	4,003	4	5,818	6,847	3	7,253	10,774
RNQ	KETTERING GENERAL HOSPITAL NHS FOUNDATION TRUST	3,618	166%	3,516	144%	3,607	5	1,359	1,441	7	1,736	3,482
RCF	AIREDALE NHS FOUNDATION TRUST	3,546	35%	4,023	12%	3,316	4	2,619	3,605	5	2,295	6,122
RA9	SOUTH DEVON HEALTHCARE NHS FOUNDATION TRUST	3,459	-17%	4,203	-11%	0	4	4,190	4,697	4	4,073	5,055
RN3	GREAT WESTERN HOSPITALS NHS FOUNDATION TRUST	3,434	5%	3,492	984%	3,448	5	3,256	322	5	2,225	2,441
RNL	NORTH CUMBRIA UNIVERSITY HOSPITALS NHS TRUST	3,426	243%	3,792	140%	2,939	5	998	1,578	7	2,210	1,735
RAE	BRADFORD TEACHING HOSPITALS NHS FOUNDATION TRUST	3,424	-2%	3,981	3%	3,612	5	3,510	3,859	5	3,835	647
RGR	WEST SUFFOLK HOSPITALS NHS TRUST	3,402	10%	2,776	-8%	0	5	3,082	3,018	6	2,967	2,659
RJ7	ST GEORGE'S HEALTHCARE NHS TRUST	3,339	-24%	4,633	-9%	0	4	4,377	5,087	4	2,664	4,576
RV8	NORTH WEST LONDON HOSPITALS NHS TRUST	3,214	0%	4,079	27%	532	4	3,211	3,213	6	2,411	2,410
RBK	WALSALL HEALTHCARE NHS TRUST	3,161	4%	3,345	6%	3,345	5	3,044	3,165	6	3,567	3,525
RGP	JAMES PAGET UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	3,118	-5%	4,229	-1%	3,981	4	3,291	4,273	5	3,481	4,328
RGN	PETERBOROUGH AND STAMFORD HOSPITALS NHS FOUNDATION TRUST	3,072	-53%	3,359	-6%	1,966	5	6,503	3,561	3	8,378	3,318
RCD	HARROGATE AND DISTRICT NHS FOUNDATION TRUST	3,032	-11%	2,058	-32%	0	5	3,422	3,010	5	2,183	2,314
RYR	WESTERN SUSSEX HOSPITALS NHS TRUST	2,984	-38%	3,821	-11%	3,181	5	4,803	4,314	4	4,167	4,305
RLN	CITY HOSPITALS SUNDERLAND NHS FOUNDATION TRUST	2,971	623%	1,568	-53%	4,083	4	411	3,348	5	411	3,348
SQT	ISLE OF WIGHT NHS PCT	2,970	2%	3,893	68%	34	5	2,918	2,316	6	2,097	2,187
RBZ	NORTHERN DEVON HEALTHCARE NHS TRUST	2,912	-80%	2,641	-54%	2,641	6	14,764	5,797	1	13,420	5,797
RDZ	THE ROYAL BOURNEMOUTH AND CHRISTCHURCH HOSPITALS NHS FOUNDATION TRUST	2,889	-20%	4,453	-2%	0	4	3,602	4,526	4	2,904	0
RW6	PENNINE ACUTE HOSPITALS NHS TRUST	2,872	12%	2,776	17%	2,776	6	2,555	2,367	6	2,429	2,339
RCX	THE QUEEN ELIZABETH HOSPITAL, KING'S LYNN. NHS FOUNDATION TRUST	2,871	-13%	3,246	59%	2,344	5	3,318	2,043	5	2,742	0
RD1	ROYAL UNITED HOSPITAL BATH NHS TRUST	2,817	-27%	2,817	-25%	844	6	3,841	3,779	5	3,702	3,702
RPA	MEDWAY NHS FOUNDATION TRUST	2,643	129%	2,704	174%	2,695	6	1,156	988	7	405	0
RLQ	WYE VALLEY NHS TRUST	2,622	80%	2,126	71%	187	6	1,459	1,243	7	980	605
RN1	WINCHESTER AND EASTLEIGH HEALTHCARE NHS TRUST	2,564	33%	4,046	138%	100	4	1,926	1,697	6	1,757	1,887
RJD	MID STAFFORDSHIRE NHS FOUNDATION TRUST	2,559	8%	3,253	3%	3,242	5	2,380	3,156	6	2,182	609
RCU	SHEFFIELD CHILDREN'S NHS FOUNDATION TRUST	2,555	-19%	2,255	7954%	27	6	3,157	28	6	1,861	1,192
RR7	GATESHEAD HEALTH NHS FOUNDATION TRUST	2,454	337%	3,346	37%	0	5	561	2,450	6	556	660
RBD	DORSET COUNTY HOSPITAL NHS FOUNDATION TRUST	2,191	12%	2,599	12%	2,605	6	1,960	2,322	6	2,050	2,379
RTP	SURREY AND SUSSEX HEALTHCARE NHS TRUST	2,125	-4%	4,015	-1%	4,014	4	2,215	4,066	5	3,321	5,456

**2010/11 Chemotherapy Reference Costs
Provider Peer Groups**

Org code	Organisation name	2010/11					2009/10			2008/09		
		+/- Cycles	+/- since 09/10	+/- Deliveries	+/- since 09/10	Attends	Overall Peer Group	Cycles	Delivs	Overall Peer Group	Cycles	Delivs
RTK	ASHFORD AND ST PETER'S HOSPITALS NHS FOUNDATION TRUST	2,092	4%	1,053	-	636	6	2,015	0	6	1,767	1,576
RC9	LUTON AND DUNSTABLE HOSPITAL NHS FOUNDATION TRUST	2,029	0%	0	-100%	68	6	2,027	2,424	6	1,815	2,078
RA4	YEOVIL DISTRICT HOSPITAL NHS FOUNDATION TRUST	2,003	11%	2,468	21%	2,168	6	1,810	2,046	6	1,853	2,192
RBN	ST HELENS AND KNOWSLEY HOSPITALS NHS TRUST	1,881	16%	5,496	71%	0	3	1,618	3,221	6	1,815	3,511
RCC	SCARBOROUGH AND NORTH EAST YORKSHIRE HEALTH CARE NHS TRUST	1,877	-0%	1,999	-1%	1,803	6	1,880	2,029	6	1,564	1,661
RVL	BARNET AND CHASE FARM HOSPITALS NHS TRUST	1,850	-18%	2,018	-12%	1,457	6	2,249	2,284	6	1,925	0
RRF	WRIGHTINGTON, WIGAN AND LEIGH NHS FOUNDATION TRUST	1,701	24%	1,669	28%	1,346	6	1,372	1,299	7	2,342	2,155
RAL	ROYAL FREE HAMPSTEAD NHS TRUST	1,634	-22%	3,588	-0%	0	5	2,103	3,595	5	3,181	1,590
RD8	MILTON KEYNES HOSPITAL NHS FOUNDATION TRUST	1,616	20%	1,922	23%	1,677	6	1,342	1,567	7	1,338	1,413
RVY	SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST	1,591	11%	872	33%	515	7	1,427	655	7	1,642	809
RFF	BARNSELY HOSPITAL NHS FOUNDATION TRUST	1,564	14%	390	-41%	390	7	1,368	666	7	1,602	1,532
RQ6	ROYAL LIVERPOOL AND BROADGREEN UNIVERSITY HOSPITALS NHS TRUST	1,557	44%	1,204	-15%	987	7	1,079	1,423	7	1,122	789
RN7	DARTFORD AND GRAVESHAM NHS TRUST	1,554	358%	1,569	380%	1,764	6	339	327	8	682	635
REM	AINTREE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	1,538	-8%	604	-57%	0	7	1,674	1,393	7	696	117
RBT	MID CHESHIRE HOSPITALS NHS FOUNDATION TRUST	1,530	197%	1,430	-	718	7	515	0	8	783	374
RQQ	HINCHINGBROOKE HEALTH CARE NHS TRUST	1,528	-11%	1,535	-11%	1,569	7	1,726	1,729	7	1,602	1,983
RDU	FRIMLEY PARK HOSPITAL NHS FOUNDATION TRUST	1,512	31%	1,334	30%	952	7	1,153	1,026	7	1,751	1,097
RE9	SOUTH TYNESIDE NHS FOUNDATION TRUST	1,417	-17%	1,599	-19%	1,607	6	1,707	1,974	6	1,607	1,950
RP5	DONCASTER AND BASSETLAW HOSPITALS NHS FOUNDATION TRUST	1,299	-6%	1,157	-3%	17	7	1,383	1,197	7	1,922	1,482
RBL	WIRRAL UNIVERSITY TEACHING HOSPITAL NHS FOUNDATION TRUST	1,124	21%	1,466	60%	497	7	929	918	8	1,094	998
RJZ	KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	1,101	27%	2,489	-43%	2,351	6	867	4,350	5	918	7,133
RKE	THE WHITTINGTON HOSPITAL NHS TRUST	1,018	5%	1,287	5%	48	7	965	1,230	7	1,198	1,260
RWG	WEST HERTFORDSHIRE HOSPITALS NHS TRUST	1,013	16%	2,272	13%	560	6	877	2,018	6	938	880
RJR	COUNTESS OF CHESTER HOSPITAL NHS FOUNDATION TRUST	871	40%	701	-7%	418	8	621	752	8	submitted no data	
RAX	KINGSTON HOSPITAL NHS TRUST	844	-32%	449	-56%	549	8	1,238	1,013	7	1,126	382
RFS	CHESTERFIELD ROYAL HOSPITAL NHS FOUNDATION TRUST	802	52%	652	10%	294	8	527	594	8	368	708
RNH	NEWHAM UNIVERSITY HOSPITAL NHS TRUST	791	-0%	1,020	1%	0	7	793	1,014	7	900	1,083
RM3	SALFORD ROYAL NHS FOUNDATION TRUST	735	45%	734	36%	729	8	508	539	8	3,891	3
RNZ	SALISBURY NHS FOUNDATION TRUST	709	-78%	3,425	-5%	0	5	3,186	3,592	5	3,094	3,267
RC3	EALING HOSPITAL NHS TRUST	706	-21%	755	-22%	0	8	890	965	8	604	759
RVJ	NORTH BRISTOL NHS TRUST	694	41%	922	480%	901	8	491	159	8	574	692
RJ6	CROYDON HEALTH SERVICES NHS TRUST	637	0%	702	0%	216	8	637	702	8	865	978
RJ2	LEWISHAM HEALTHCARE NHS TRUST	623	-21%	698	-14%	0	8	785	816	8	512	705
RGC	WHIPPS CROSS UNIVERSITY HOSPITAL NHS TRUST	615	-	951	-	685	8	submitted no data		71	588	
RBS	ALDER HEY CHILDREN'S NHS FOUNDATION TRUST	605	-10%	1,544	-1%	1,575	7	675	1,557	7	1,444	881
RD7	HEATHERWOOD AND WEXHAM PARK HOSPITALS NHS FOUNDATION TRUST	521	-84%	3,670	19%	1,050	5	3,352	3,087	5	1,892	545
RQ3	BIRMINGHAM CHILDREN'S HOSPITAL NHS FOUNDATION TRUST	516	-	1,153	-	0	7	submitted no data		1,457	1,088	
RQW	THE PRINCESS ALEXANDRA HOSPITAL NHS TRUST	423	0%	3,301	0%	0	5	423	3,301	5	423	3,301
RMC	ROYAL BOLTON HOSPITAL NHS FOUNDATION TRUST	351	30%	345	16%	0	8	270	297	8	86	0
RAS	THE HILLINGDON HOSPITAL NHS TRUST	331	6%	528	19%	0	8	313	445	8	708	389
RM4	TRAFFORD HEALTHCARE NHS TRUST	178	-52%	198	-32%	202	8	372	293	8	262	211
RFR	THE ROTHERHAM NHS FOUNDATION TRUST	162	5%	366	4%	346	8	154	353	8	351	443
RMP	TAMESIDE HOSPITAL NHS FOUNDATION TRUST	28	-15%	230	-31%	0	8	33	335	8	24	288
RA3	WESTON AREA HEALTH NHS TRUST	27	-99%	1,644	-60%	0	6	4,135	4,082	5	3,244	664
RDD	BASILDON AND THURROCK UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	0	-100%	1,488	161%	1,098	7	834	571	8	5,367	0
RN5	BASINGSTOKE AND NORTH HAMPSHIRE NHS FOUNDATION TRUST	0	-100%	0	-	2,422	6	2,292	0	6	2,557	0
RP4	GREAT ORMOND STREET HOSPITAL FOR CHILDREN NHS TRUST	0	-100%	1,365	-9%	16	7	1,489	1,500	7	1,833	2,534
RM2	UNIVERSITY HOSPITAL OF SOUTH MANCHESTER NHS FOUNDATION TRUST	0	-	0	-	1,233	7	0	0	8	submitted no data	
RVR	EPSOM AND ST HELIER UNIVERSITY HOSPITALS NHS TRUST	0	-	0	-	1,207	7	submitted no data		submitted no data		

**2010/11 Chemotherapy Reference Costs
Provider Peer Groups**

Org code	Organisation name	2010/11					2009/10			2008/09			
		+/- since 09/10		+/- since 09/10		Overall Peer Group	Overall Peer Group						
		Cycles	Deliveries	Attends	Peer Group	Cycles	Delivs	Peer Group	Cycles	Delivs			
RFW	WEST MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST	0	-100%	0	-100%	1,057	7	661	921	8	636	887	
RWJ	STOCKPORT NHS FOUNDATION TRUST	0	-	523	22%	516	8	0	427	8	513	1,230	
RQM	CHELSEA AND WESTMINSTER HOSPITAL NHS FOUNDATION TRUST	0	-	0	-	905	8	0	0	8	325	0	
RJN	EAST CHESHIRE NHS TRUST	0	-	0	-	360	8	<i>submitted no data</i>			<i>submitted no data</i>		
RWW	WARRINGTON AND HALTON HOSPITALS NHS FOUNDATION TRUST	0	-	0	-	135	8	0	0	8	<i>submitted no data</i>		
RRJ	THE ROYAL ORTHOPAEDIC HOSPITAL NHS FOUNDATION TRUST	0	-	0	-	2	8	0	0	8	<i>submitted no data</i>		
5PP	CAMBRIDGESHIRE PCT	<i>submitted no data</i>					<i>submitted no data</i>			0	37		
Grand Total		744,391		771,454		536,709		702,478	712,394		728,117	700,444	

Peer Group	Boundary
1	>=10000 cycles, deliveries or attendances
2	>=7000 cycles, deliveries or attendances
3	>=5000 cycles, deliveries or attendances
4	>=4000 cycles, deliveries or attendances
5	>=3000 cycles, deliveries or attendances
6	>=1600 cycles, deliveries or attendances
7	>=1000 cycles, deliveries or attendances
8	<1000 cycles, deliveries or attendances

**2010/11 Chemotherapy Reference Costs
Provider Key Data**

Org code	Organisation name	Peer Group	Procurement		Delivery		Attendance		TOTAL
			Cycles	Cost (MFF adj)	Deliveries	Cost (MFF adj)	Attends	Cost (MFF adj)	Cost (MFF adj)
RBV	THE CHRISTIE NHS FOUNDATION TRUST	1	44,939	£32.8m	47,823	£10.7m	47,823	£0.0m	£43.5m
REN	CLATTERBRIDGE CENTRE FOR ONCOLOGY NHS FOUNDATION TRUST	1	27,774	£18.4m	30,592	£6.6m	0	£0.0m	£25.0m
RYJ	IMPERIAL COLLEGE HEALTHCARE NHS TRUST	1	24,756	£8.1m	22,859	£2.0m	2,882	£1.2m	£11.3m
RHQ	SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	1	21,932	£19.0m	21,457	£5.2m	21,457	£0.0m	£24.2m
RPY	THE ROYAL MARSDEN NHS FOUNDATION TRUST	1	18,535	£20.1m	25,316	£6.1m	25,316	£0.0m	£26.2m
RJ1	GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	1	16,202	£8.0m	17,755	£7.8m	17,755	£0.0m	£15.8m
RTE	GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST	1	15,337	£15.5m	15,995	£2.3m	0	£0.0m	£17.8m
RWH	EAST AND NORTH HERTFORDSHIRE NHS TRUST	1	14,982	£12.4m	14,435	£3.0m	22,381	£0.0m	£15.4m
RXF	MID YORKSHIRE HOSPITALS NHS TRUST	1	13,021	£6.0m	8,701	£1.8m	8,711	£0.0m	£7.9m
RWE	UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST	1	12,045	£8.4m	12,062	£3.7m	11,938	£0.8m	£12.9m
RGT	CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	1	11,776	£12.2m	10,735	£2.5m	10,932	£0.0m	£14.7m
RRK	UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST	1	11,204	£8.0m	9,803	£4.0m	0	£0.0m	£12.1m
RR8	LEEDS TEACHING HOSPITALS NHS TRUST	1	11,150	£8.4m	14,880	£5.5m	0	£0.0m	£13.9m
RTH	OXFORD RADCLIFFE HOSPITALS NHS TRUST	1	10,812	£11.7m	10,661	£4.6m	0	£0.0m	£16.3m
RX1	NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST	1	10,171	£5.9m	12,803	£1.6m	11,166	£4.5m	£12.0m
RTD	THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	1	10,129	£4.4m	11,884	£1.9m	10,569	£1.5m	£7.7m
RR1	HEART OF ENGLAND NHS FOUNDATION TRUST	1	9,899	£6.1m	10,548	£1.8m	9,560	£0.0m	£7.9m
RA2	ROYAL SURREY COUNTY HOSPITAL NHS FOUNDATION TRUST	1	9,685	£4.9m	9,131	£2.0m	21,388	£0.0m	£6.9m
RRV	UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	1	9,674	£7.8m	11,061	£4.5m	10,955	£0.0m	£12.3m
RNJ	BARTS AND THE LONDON NHS TRUST	1	8,372	£4.5m	10,088	£3.6m	6,284	£0.4m	£8.5m
Sub-total, Peer Group 1			312,395	£222.6m	328,589	£81.3m	239,117	£8.4m	£312.3m
RNS	NORTHAMPTON GENERAL HOSPITAL NHS TRUST	2	9,984	£2.6m	5,691	£0.8m	5,828	£1.0m	£4.5m
RM1	NORFOLK AND NORWICH UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	2	9,688	£7.3m	9,661	£1.1m	8,920	£0.0m	£8.4m
RTG	DERBY HOSPITALS NHS FOUNDATION TRUST	2	9,174	£8.0m	8,038	£1.9m	8,464	£0.0m	£10.0m
RHU	PORTSMOUTH HOSPITALS NHS TRUST	2	9,128	£7.0m	9,960	£2.7m	9,919	£0.0m	£9.7m
RC1	BEDFORD HOSPITAL NHS TRUST	2	8,955	£2.3m	1,930	£0.8m	0	£0.0m	£3.0m
RH8	ROYAL DEVON AND EXETER NHS FOUNDATION TRUST	2	8,954	£8.1m	7,787	£1.5m	6,010	£0.0m	£9.6m
RWD	UNITED LINCOLNSHIRE HOSPITALS NHS TRUST	2	8,678	£4.6m	9,038	£1.1m	8,170	£0.0m	£5.7m
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST	2	8,451	£4.6m	7,607	£0.8m	370	£0.0m	£5.5m
RHM	SOUTHAMPTON UNIVERSITY HOSPITALS NHS TRUST	2	8,014	£7.9m	8,629	£2.4m	0	£0.0m	£10.3m
RWA	HULL AND EAST YORKSHIRE HOSPITALS NHS TRUST	2	7,807	£5.9m	8,888	£2.4m	9,435	£0.0m	£8.3m
RVV	EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST	2	7,592	£7.2m	8,473	£1.9m	7,642	£0.0m	£9.1m
RTR	SOUTH TEES HOSPITALS NHS FOUNDATION TRUST	2	7,389	£7.9m	8,226	£2.4m	0	£0.0m	£10.3m

**2010/11 Chemotherapy Reference Costs
Provider Key Data**

Org code	Organisation name	Peer Group	Procurement		Delivery		Attendance		TOTAL
			Cycles	Cost (MFF adj)	Deliveries	Cost (MFF adj)	Attends	Cost (MFF adj)	Cost (MFF adj)
RVW	NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUST	2	7,384	£5.0m	3,628	£0.8m	3,425	£0.0m	£5.8m
RJE	UNIVERSITY HOSPITAL OF NORTH STAFFORDSHIRE NHS TRUST	2	7,067	£5.1m	8,156	£2.1m	7,235	£0.9m	£8.1m
RXW	SHREWSBURY AND TELFORD HOSPITAL NHS TRUST	2	6,972	£6.3m	7,473	£2.0m	6,844	£2.1m	£10.5m
RAJ	SOUTHEND UNIVERSITY HOSPITAL NHS FOUNDATION TRUST	2	6,912	£1.6m	7,755	£1.8m	7,104	£0.9m	£4.2m
RA7	UNIVERSITY HOSPITALS BRISTOL NHS FOUNDATION TRUST	2	6,868	£9.3m	8,778	£2.4m	462	£0.3m	£12.0m
RL4	THE ROYAL WOLVERHAMPTON HOSPITALS NHS TRUST	2	6,037	£4.1m	7,044	£1.4m	6,897	£0.0m	£5.5m
Sub-total, Peer Group 2			145,054	£104.8m	136,762	£30.5m	96,725	£5.2m	£140.6m
RK9	PLYMOUTH HOSPITALS NHS TRUST	3	6,469	£5.5m	6,437	£1.9m	6,443	£0.0m	£7.4m
RXC	EAST SUSSEX HOSPITALS NHS TRUST	3	6,257	£1.8m	3,969	£0.8m	3,993	£0.0m	£2.6m
RJL	NORTHERN LINCOLNSHIRE AND GOOLE HOSPITALS NHS FOUNDATION TRUST	3	6,082	£6.6m	5,553	£0.5m	5,343	£0.0m	£7.1m
RNA	THE DUDLEY GROUP OF HOSPITALS NHS FOUNDATION TRUST	3	6,003	£3.5m	6,004	£1.3m	6,004	£0.0m	£4.8m
RXK	SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST	3	5,947	£6.5m	6,999	£2.1m	5,628	£0.0m	£8.6m
RDE	COLCHESTER HOSPITAL UNIVERSITY NHS FOUNDATION TRUST	3	5,940	£5.9m	5,928	£1.5m	0	£0.0m	£7.4m
RKB	UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE NHS TRUST	3	5,741	£6.1m	6,530	£2.1m	6,417	£0.0m	£8.2m
RLT	GEORGE ELIOT HOSPITAL NHS TRUST	3	5,622	£2.1m	2,433	£0.8m	2,084	£0.0m	£3.0m
RTF	NORTHUMBRIA HEALTHCARE NHS FOUNDATION TRUST	3	5,620	£6.1m	6,350	£1.0m	5,554	£0.0m	£7.1m
RF4	BARKING, HAVERING AND REDBRIDGE UNIVERSITY HOSPITALS NHS TRUST	3	5,587	£6.8m	606	£0.1m	6,922	£2.9m	£9.8m
REF	ROYAL CORNWALL HOSPITALS NHS TRUST	3	5,501	£5.1m	6,320	£2.0m	5,628	£0.0m	£7.1m
RYQ	SOUTH LONDON HEALTHCARE NHS TRUST	3	5,367	£3.3m	2,891	£0.9m	4,227	£1.7m	£6.0m
RBA	TAUNTON AND SOMERSET NHS FOUNDATION TRUST	3	5,360	£2.7m	2,874	£2.8m	4,249	£0.9m	£6.4m
RJF	BURTON HOSPITALS NHS FOUNDATION TRUST	3	5,198	£3.8m	3,406	£0.8m	3,412	£0.0m	£4.7m
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST	3	5,187	£2.8m	4,937	£0.6m	3,626	£0.0m	£3.4m
RCB	YORK TEACHING HOSPITAL NHS FOUNDATION TRUST	3	5,094	£4.0m	0	£0.0m	653	£0.1m	£4.1m
RJC	SOUTH WARWICKSHIRE NHS FOUNDATION TRUST	3	4,995	£3.0m	6,279	£1.1m	2,966	£0.2m	£4.3m
RXH	BRIGHTON AND SUSSEX UNIVERSITY HOSPITALS NHS TRUST	3	4,960	£6.0m	5,934	£2.1m	0	£0.0m	£8.1m
RTX	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST	3	4,469	£5.7m	5,067	£1.3m	23	£0.0m	£7.0m
RGQ	IPSWICH HOSPITAL NHS TRUST	3	4,088	£5.7m	6,987	£0.5m	6,986	£2.9m	£9.2m
RBN	ST HELENS AND KNOWSLEY HOSPITALS NHS TRUST	3	1,881	£1.7m	5,496	£1.2m	0	£0.0m	£2.8m
Sub-total, Peer Group 3			111,368	£94.9m	101,000	£25.5m	80,158	£8.6m	£128.9m
RXQ	BUCKINGHAMSHIRE HEALTHCARE NHS TRUST	4	4,526	£4.5m	4,515	£0.4m	4,512	£0.0m	£4.9m
RWF	MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST	4	4,514	£6.5m	4,965	£1.7m	4,357	£0.0m	£8.2m
RWY	CALDERDALE AND HUDDERSFIELD NHS FOUNDATION TRUST	4	4,099	£4.5m	4,986	£1.2m	4,403	£0.0m	£5.7m

**2010/11 Chemotherapy Reference Costs
Provider Key Data**

Org code	Organisation name	Peer Group	Procurement		Delivery		Attendance		TOTAL
			Cycles	Cost (MFF adj)	Deliveries	Cost (MFF adj)	Attends	Cost (MFF adj)	Cost (MFF adj)
RQ8	MID ESSEX HOSPITAL SERVICES NHS TRUST	4	4,096	£3.4m	4,778	£0.8m	0	£0.0m	£4.2m
RW3	CENTRAL MANCHESTER UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	4	4,029	£3.4m	3,238	£0.5m	2,924	£1.5m	£5.5m
RWP	WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST	4	3,995	£4.6m	4,242	£1.2m	3,710	£0.0m	£5.8m
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST	4	3,784	£3.1m	4,185	£2.3m	51	£0.0m	£5.5m
RXP	COUNTY DURHAM AND DARLINGTON NHS FOUNDATION TRUST	4	3,719	£6.3m	4,097	£1.0m	4,184	£0.0m	£7.3m
RD3	POOLE HOSPITAL NHS FOUNDATION TRUST	4	3,672	£2.8m	4,126	£1.1m	4,003	£0.0m	£3.9m
RCF	AIREDALE NHS FOUNDATION TRUST	4	3,546	£2.9m	4,023	£0.9m	3,316	£0.0m	£3.8m
RA9	SOUTH DEVON HEALTHCARE NHS FOUNDATION TRUST	4	3,459	£2.5m	4,203	£1.4m	0	£0.0m	£3.9m
RJ7	ST GEORGE'S HEALTHCARE NHS TRUST	4	3,339	£2.7m	4,633	£1.6m	0	£0.0m	£4.4m
RV8	NORTH WEST LONDON HOSPITALS NHS TRUST	4	3,214	£2.6m	4,079	£0.9m	532	£0.2m	£3.7m
RGP	JAMES PAGET UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	4	3,118	£2.1m	4,229	£0.9m	3,981	£0.0m	£3.0m
RLN	CITY HOSPITALS SUNDERLAND NHS FOUNDATION TRUST	4	2,971	£2.4m	1,568	£1.3m	4,083	£0.0m	£3.7m
RDZ	THE ROYAL BOURNEMOUTH AND CHRISTCHURCH HOSPITALS NHS FOUNDATION TRUST	4	2,889	£4.1m	4,453	£1.2m	0	£0.0m	£5.4m
RN1	WINCHESTER AND EASTLEIGH HEALTHCARE NHS TRUST	4	2,564	£2.1m	4,046	£1.1m	100	£0.0m	£3.2m
RTP	SURREY AND SUSSEX HEALTHCARE NHS TRUST	4	2,125	£1.7m	4,015	£1.0m	4,014	£0.0m	£2.7m
Sub-total, Peer Group 4			63,659	£62.3m	74,381	£20.6m	44,170	£1.8m	£84.8m
RHW	ROYAL BERKSHIRE NHS FOUNDATION TRUST	5	3,840	£2.0m	3,840	£1.2m	0	£0.0m	£3.2m
RAP	NORTH MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST	5	3,739	£2.5m	3,797	£0.7m	0	£0.0m	£3.2m
RNQ	KETTERING GENERAL HOSPITAL NHS FOUNDATION TRUST	5	3,618	£2.4m	3,516	£0.7m	3,607	£0.0m	£3.1m
RN3	GREAT WESTERN HOSPITALS NHS FOUNDATION TRUST	5	3,434	£2.6m	3,492	£0.8m	3,448	£2.0m	£5.4m
RNL	NORTH CUMBRIA UNIVERSITY HOSPITALS NHS TRUST	5	3,426	£3.8m	3,792	£0.7m	2,939	£0.3m	£4.7m
RAE	BRADFORD TEACHING HOSPITALS NHS FOUNDATION TRUST	5	3,424	£1.9m	3,981	£0.8m	3,612	£0.0m	£2.7m
RGR	WEST SUFFOLK HOSPITALS NHS TRUST	5	3,402	£2.8m	2,776	£0.9m	0	£0.0m	£3.7m
RBK	WALSALL HEALTHCARE NHS TRUST	5	3,161	£3.5m	3,345	£0.7m	3,345	£0.0m	£4.2m
RGN	PETERBOROUGH AND STAMFORD HOSPITALS NHS FOUNDATION TRUST	5	3,072	£2.2m	3,359	£0.6m	1,966	£0.8m	£3.6m
RCD	HARROGATE AND DISTRICT NHS FOUNDATION TRUST	5	3,032	£2.5m	2,058	£0.7m	0	£0.0m	£3.2m
RYR	WESTERN SUSSEX HOSPITALS NHS TRUST	5	2,984	£1.4m	3,821	£3.6m	3,181	£0.0m	£5.1m
5QT	ISLE OF WIGHT NHS PCT	5	2,970	£1.7m	3,893	£0.4m	34	£0.0m	£2.2m
RCX	THE QUEEN ELIZABETH HOSPITAL, KING'S LYNN. NHS FOUNDATION TRUST	5	2,871	£3.3m	3,246	£0.5m	2,344	£0.3m	£4.1m
RJD	MID STAFFORDSHIRE NHS FOUNDATION TRUST	5	2,559	£3.7m	3,253	£0.8m	3,242	£0.0m	£4.4m
RR7	GATESHEAD HEALTH NHS FOUNDATION TRUST	5	2,454	£3.0m	3,346	£0.6m	0	£0.0m	£3.6m
RAL	ROYAL FREE HAMPSTEAD NHS TRUST	5	1,634	£2.3m	3,588	£1.2m	0	£0.0m	£3.5m
RNZ	SALISBURY NHS FOUNDATION TRUST	5	709	£2.8m	3,425	£0.6m	0	£0.0m	£3.4m

**2010/11 Chemotherapy Reference Costs
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Org code	Organisation name	Peer Group	Procurement		Delivery		Attendance		TOTAL
			Cycles	Cost (MFF adj)	Deliveries	Cost (MFF adj)	Attends	Cost (MFF adj)	Cost (MFF adj)
RD7	HEATHERWOOD AND WEXHAM PARK HOSPITALS NHS FOUNDATION TRUST	5	521	£2.7m	3,670	£0.9m	1,050	£0.0m	£3.6m
RQW	THE PRINCESS ALEXANDRA HOSPITAL NHS TRUST	5	423	£1.0m	3,301	£2.5m	0	£0.0m	£3.5m
Sub-total, Peer Group 5			51,273	£48.1m	65,499	£19.0m	28,768	£3.4m	£70.4m
RBZ	NORTHERN DEVON HEALTHCARE NHS TRUST	6	2,912	£3.3m	2,641	£0.8m	2,641	£0.5m	£4.6m
RW6	PENNINE ACUTE HOSPITALS NHS TRUST	6	2,872	£1.7m	2,776	£0.6m	2,776	£0.2m	£2.4m
RD1	ROYAL UNITED HOSPITAL BATH NHS TRUST	6	2,817	£2.9m	2,817	£1.0m	844	£0.1m	£4.0m
RPA	MEDWAY NHS FOUNDATION TRUST	6	2,643	£1.5m	2,704	£0.9m	2,695	£1.4m	£3.8m
RLQ	WYE VALLEY NHS TRUST	6	2,622	£1.2m	2,126	£0.6m	187	£0.1m	£1.9m
RCU	SHEFFIELD CHILDREN'S NHS FOUNDATION TRUST	6	2,555	£0.9m	2,255	£1.0m	27	£0.0m	£1.9m
RBD	DORSET COUNTY HOSPITAL NHS FOUNDATION TRUST	6	2,191	£0.6m	2,599	£0.5m	2,605	£0.0m	£1.0m
RTK	ASHFORD AND ST PETER'S HOSPITALS NHS FOUNDATION TRUST	6	2,092	£0.3m	1,053	£0.3m	636	£0.0m	£0.6m
RC9	LUTON AND DUNSTABLE HOSPITAL NHS FOUNDATION TRUST	6	2,029	£2.7m	0	£0.0m	68	£0.0m	£2.7m
RA4	YEovil DISTRICT HOSPITAL NHS FOUNDATION TRUST	6	2,003	£1.9m	2,468	£0.8m	2,168	£0.0m	£2.8m
RCC	SCARBOROUGH AND NORTH EAST YORKSHIRE HEALTH CARE NHS TRUST	6	1,877	£1.1m	1,999	£0.2m	1,803	£0.2m	£1.4m
RVL	BARNET AND CHASE FARM HOSPITALS NHS TRUST	6	1,850	£2.7m	2,018	£0.6m	1,457	£0.0m	£3.3m
RRF	WRIGHTINGTON, WIGAN AND LEIGH NHS FOUNDATION TRUST	6	1,701	£1.4m	1,669	£0.7m	1,346	£0.2m	£2.4m
RD8	MILTON KEYNES HOSPITAL NHS FOUNDATION TRUST	6	1,616	£1.4m	1,922	£0.8m	1,677	£0.9m	£3.0m
RN7	DARTFORD AND GRAVESHAM NHS TRUST	6	1,554	£0.5m	1,569	£0.4m	1,764	£0.5m	£1.4m
RE9	SOUTH TYNESIDE NHS FOUNDATION TRUST	6	1,417	£2.2m	1,599	£0.3m	1,607	£0.0m	£2.5m
RJZ	KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	6	1,101	£1.0m	2,489	£0.8m	2,351	£0.0m	£1.8m
RWG	WEST HERTFORDSHIRE HOSPITALS NHS TRUST	6	1,013	£1.0m	2,272	£0.4m	560	£0.0m	£1.4m
RA3	WESTON AREA HEALTH NHS TRUST	6	27	£0.7m	1,644	£0.7m	0	£0.0m	£1.5m
RN5	BASINGSTOKE AND NORTH HAMPSHIRE NHS FOUNDATION TRUST	6	0	£0.0m	0	£0.0m	2,422	£2.7m	£2.7m
Sub-total, Peer Group 6			36,892	£28.8m	38,620	£11.4m	29,634	£6.7m	£47.0m
RVY	SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST	7	1,591	£1.8m	872	£0.2m	515	£0.0m	£1.9m
RFF	BARNsLEY HOSPITAL NHS FOUNDATION TRUST	7	1,564	£1.3m	390	£0.1m	390	£0.0m	£1.4m
RQ6	ROYAL LIVERPOOL AND BROADGREEN UNIVERSITY HOSPITALS NHS TRUST	7	1,557	£0.8m	1,204	£0.4m	987	£0.1m	£1.3m
REM	AINTREE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	7	1,538	£1.8m	604	£0.2m	0	£0.0m	£2.0m
RBT	MID CHESHIRE HOSPITALS NHS FOUNDATION TRUST	7	1,530	£0.9m	1,430	£0.5m	718	£0.3m	£1.8m
RQQ	HINCHINGBROOKE HEALTH CARE NHS TRUST	7	1,528	£1.7m	1,535	£0.4m	1,569	£0.8m	£2.8m
RDU	FRIMLEY PARK HOSPITAL NHS FOUNDATION TRUST	7	1,512	£1.5m	1,334	£0.4m	952	£0.0m	£1.9m
RP5	DONCASTER AND BASSETLAW HOSPITALS NHS FOUNDATION TRUST	7	1,299	£1.6m	1,157	£0.2m	17	£0.0m	£1.8m

**2010/11 Chemotherapy Reference Costs
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			Cycles	Cost (MFF adj)	Deliveries	Cost (MFF adj)	Attends	Cost (MFF adj)	Cost (MFF adj)
RBL	WIRRAL UNIVERSITY TEACHING HOSPITAL NHS FOUNDATION TRUST	7	1,124	£1.8m	1,466	£0.5m	497	£0.0m	£2.3m
RKE	THE WHITTINGTON HOSPITAL NHS TRUST	7	1,018	£1.0m	1,287	£0.8m	48	£0.0m	£1.9m
RNH	NEWHAM UNIVERSITY HOSPITAL NHS TRUST	7	791	£0.7m	1,020	£0.2m	0	£0.0m	£1.0m
RBS	ALDER HEY CHILDREN'S NHS FOUNDATION TRUST	7	605	£0.3m	1,544	£0.5m	1,575	£0.0m	£0.9m
RQ3	BIRMINGHAM CHILDREN'S HOSPITAL NHS FOUNDATION TRUST	7	516	£1.9m	1,153	£1.1m	0	£0.0m	£2.9m
RDD	BASILDON AND THURROCK UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	7	0	£0.0m	1,488	£0.4m	1,098	£0.1m	£0.5m
RP4	GREAT ORMOND STREET HOSPITAL FOR CHILDREN NHS TRUST	7	0	£0.0m	1,365	£0.8m	16	£0.0m	£0.8m
RM2	UNIVERSITY HOSPITAL OF SOUTH MANCHESTER NHS FOUNDATION TRUST	7	0	£0.0m	0	£0.0m	1,233	£0.5m	£0.5m
RVR	EPSOM AND ST HELIER UNIVERSITY HOSPITALS NHS TRUST	7	0	£0.0m	0	£0.0m	1,207	£0.1m	£0.1m
RFW	WEST MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST	7	0	£0.0m	0	£0.0m	1,057	£0.5m	£0.5m
Sub-total, Peer Group 7			16,173	£17.1m	17,849	£6.8m	11,879	£2.5m	£26.4m
RJR	COUNTESS OF CHESTER HOSPITAL NHS FOUNDATION TRUST	8	871	£1.0m	701	£0.2m	418	£0.0m	£1.1m
RAX	KINGSTON HOSPITAL NHS TRUST	8	844	£0.7m	449	£0.9m	549	£0.3m	£1.9m
RFS	CHESTERFIELD ROYAL HOSPITAL NHS FOUNDATION TRUST	8	802	£0.8m	652	£0.3m	294	£0.0m	£1.1m
RM3	SALFORD ROYAL NHS FOUNDATION TRUST	8	735	£0.8m	734	£0.1m	729	£0.0m	£0.9m
RC3	EALING HOSPITAL NHS TRUST	8	706	£0.8m	755	£0.1m	0	£0.0m	£1.0m
RVJ	NORTH BRISTOL NHS TRUST	8	694	£0.2m	922	£0.1m	901	£0.2m	£0.4m
RJ6	CROYDON HEALTH SERVICES NHS TRUST	8	637	£0.5m	702	£0.4m	216	£0.1m	£1.0m
RJ2	LEWISHAM HEALTHCARE NHS TRUST	8	623	£0.1m	698	£0.0m	0	£0.0m	£0.2m
RGC	WHIPPS CROSS UNIVERSITY HOSPITAL NHS TRUST	8	615	£0.5m	951	£0.2m	685	£0.2m	£0.9m
RMC	ROYAL BOLTON HOSPITAL NHS FOUNDATION TRUST	8	351	£0.3m	345	£0.4m	0	£0.0m	£0.7m
RAS	THE HILLINGDON HOSPITAL NHS TRUST	8	331	£0.4m	528	£0.2m	0	£0.0m	£0.6m
RM4	TRAFFORD HEALTHCARE NHS TRUST	8	178	£0.1m	198	£0.3m	202	£0.0m	£0.4m
RFR	THE ROTHERHAM NHS FOUNDATION TRUST	8	162	£0.1m	366	£0.9m	346	£0.0m	£1.0m
RMP	TAMESIDE HOSPITAL NHS FOUNDATION TRUST	8	28	£0.0m	230	£0.0m	0	£0.0m	£0.0m
RWJ	STOCKPORT NHS FOUNDATION TRUST	8	0	£0.0m	523	£0.2m	516	£0.0m	£0.2m
RQM	CHELSEA AND WESTMINSTER HOSPITAL NHS FOUNDATION TRUST	8	0	£0.0m	0	£0.0m	905	£0.3m	£0.3m
RJN	EAST CHESHIRE NHS TRUST	8	0	£0.0m	0	£0.0m	360	£0.0m	£0.0m
RWW	WARRINGTON AND HALTON HOSPITALS NHS FOUNDATION TRUST	8	0	£0.0m	0	£0.0m	135	£0.1m	£0.1m
RRJ	THE ROYAL ORTHOPAEDIC HOSPITAL NHS FOUNDATION TRUST	8	0	£0.0m	0	£0.0m	2	£0.0m	£0.0m
Sub-total, Peer Group 8			7,577	£6.3m	8,754	£4.2m	6,258	£1.2m	£11.8m
Grand Total			744,391	£585.0m	771,454	£199.3m	536,709	£37.9m	£822.2m

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Provider Key Ratios**

Org code	Organisation name	Peer Group	Cost per cycle	Cost per delivery	Cycles per delivery	Procure Cost %	Delivery Cost %	Attend Cost %
RBV	THE CHRISTIE NHS FOUNDATION TRUST	1	£730	£224	0.9	75%	25%	0%
REN	CLATTERBRIDGE CENTRE FOR ONCOLOGY NHS FOUNDATION TRUST	1	£663	£215	0.9	74%	26%	0%
RYJ	IMPERIAL COLLEGE HEALTHCARE NHS TRUST	1	£327	£86	1.1	72%	17%	11%
RHQ	SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	1	£868	£242	1.0	79%	21%	0%
RPY	THE ROYAL MARSDEN NHS FOUNDATION TRUST	1	£1,087	£240	0.7	77%	23%	0%
RJ1	GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	1	£496	£440	0.9	51%	49%	0%
RTE	GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST	1	£1,009	£143	1.0	87%	13%	0%
RWH	EAST AND NORTH HERTFORDSHIRE NHS TRUST	1	£830	£206	1.0	81%	19%	0%
RXF	MID YORKSHIRE HOSPITALS NHS TRUST	1	£463	£213	1.5	77%	23%	0%
RWE	UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST	1	£695	£310	1.0	65%	29%	6%
RGT	CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	1	£1,033	£233	1.1	83%	17%	0%
RRK	UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST	1	£717	£413	1.1	67%	33%	0%
RR8	LEEDS TEACHING HOSPITALS NHS TRUST	1	£751	£369	0.7	60%	40%	0%
RTH	OXFORD RADCLIFFE HOSPITALS NHS TRUST	1	£1,082	£436	1.0	72%	28%	0%
RX1	NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST	1	£580	£126	0.8	49%	13%	37%
RTD	THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	1	£430	£157	0.9	57%	24%	19%
RR1	HEART OF ENGLAND NHS FOUNDATION TRUST	1	£612	£174	0.9	77%	23%	0%
RA2	ROYAL SURREY COUNTY HOSPITAL NHS FOUNDATION TRUST	1	£506	£222	1.1	71%	29%	0%
RRV	UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	1	£806	£406	0.9	63%	37%	0%
RNJ	BARTS AND THE LONDON NHS TRUST	1	£537	£357	0.8	53%	42%	5%
Sub-total, Peer Group 1			£713	£247	1.0	71%	26%	3%
RNS	NORTHAMPTON GENERAL HOSPITAL NHS TRUST	2	£264	£147	1.8	59%	19%	22%
RM1	NORFOLK AND NORWICH UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	2	£754	£117	1.0	87%	13%	0%
RTG	DERBY HOSPITALS NHS FOUNDATION TRUST	2	£873	£242	1.1	80%	20%	0%
RHU	PORTSMOUTH HOSPITALS NHS TRUST	2	£770	£273	0.9	72%	28%	0%
RC1	BEDFORD HOSPITAL NHS TRUST	2	£253	£402	4.6	74%	26%	0%
RH8	ROYAL DEVON AND EXETER NHS FOUNDATION TRUST	2	£903	£196	1.1	84%	16%	0%
RWD	UNITED LINCOLNSHIRE HOSPITALS NHS TRUST	2	£531	£118	1.0	81%	19%	0%
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST	2	£547	£112	1.1	84%	16%	0%
RHM	SOUTHAMPTON UNIVERSITY HOSPITALS NHS TRUST	2	£982	£283	0.9	76%	24%	0%

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RWA	HULL AND EAST YORKSHIRE HOSPITALS NHS TRUST	2	£755	£271	0.9	71%	29%	0%
RVV	EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST	2	£952	£226	0.9	79%	21%	0%
RTR	SOUTH TEES HOSPITALS NHS FOUNDATION TRUST	2	£1,064	£291	0.9	77%	23%	0%
RVW	NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUST	2	£675	£232	2.0	86%	14%	0%
RJE	UNIVERSITY HOSPITAL OF NORTH STAFFORDSHIRE NHS TRUST	2	£724	£255	0.9	63%	26%	11%
RXW	SHREWSBURY AND TELFORD HOSPITAL NHS TRUST	2	£907	£268	0.9	60%	19%	20%
RAJ	SOUTHEND UNIVERSITY HOSPITAL NHS FOUNDATION TRUST	2	£231	£226	0.9	38%	41%	21%
RA7	UNIVERSITY HOSPITALS BRISTOL NHS FOUNDATION TRUST	2	£1,351	£272	0.8	78%	20%	3%
RL4	THE ROYAL WOLVERHAMPTON HOSPITALS NHS TRUST	2	£681	£203	0.9	74%	26%	0%
Sub-total, Peer Group 2			£723	£223	1.1	75%	22%	4%
RK9	PLYMOUTH HOSPITALS NHS TRUST	3	£852	£294	1.0	74%	26%	0%
RXC	EAST SUSSEX HOSPITALS NHS TRUST	3	£291	£202	1.6	69%	31%	0%
RJL	NORTHERN LINCOLNSHIRE AND GOOLE HOSPITALS NHS FOUNDATION TRUST	3	£1,093	£82	1.1	94%	6%	0%
RNA	THE DUDLEY GROUP OF HOSPITALS NHS FOUNDATION TRUST	3	£586	£218	1.0	73%	27%	0%
RXK	SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST	3	£1,090	£302	0.8	75%	25%	0%
RDE	COLCHESTER HOSPITAL UNIVERSITY NHS FOUNDATION TRUST	3	£998	£246	1.0	80%	20%	0%
RKB	UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE NHS TRUST	3	£1,067	£316	0.9	75%	25%	0%
RLT	GEORGE ELIOT HOSPITAL NHS TRUST	3	£379	£347	2.3	72%	28%	0%
RTF	NORTHUMBRIA HEALTHCARE NHS FOUNDATION TRUST	3	£1,080	£164	0.9	85%	15%	0%
RF4	BARKING, HAVERING AND REDBRIDGE UNIVERSITY HOSPITALS NHS TRUST	3	£1,212	£239	9.2	69%	1%	29%
REF	ROYAL CORNWALL HOSPITALS NHS TRUST	3	£929	£313	0.9	72%	28%	0%
RYQ	SOUTH LONDON HEALTHCARE NHS TRUST	3	£623	£322	1.9	56%	15%	29%
RBA	TAUNTON AND SOMERSET NHS FOUNDATION TRUST	3	£499	£979	1.9	42%	44%	14%
RJF	BURTON HOSPITALS NHS FOUNDATION TRUST	3	£733	£247	1.5	82%	18%	0%
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST	3	£532	£131	1.1	81%	19%	0%
RCB	YORK TEACHING HOSPITAL NHS FOUNDATION TRUST	3	£782	£0	0.0	98%	0%	2%
RJC	SOUTH WARWICKSHIRE NHS FOUNDATION TRUST	3	£608	£169	0.8	71%	25%	4%
RXH	BRIGHTON AND SUSSEX UNIVERSITY HOSPITALS NHS TRUST	3	£1,210	£359	0.8	74%	26%	0%
RTX	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST	3	£1,277	£252	0.9	82%	18%	0%
RGQ	IPSWICH HOSPITAL NHS TRUST	3	£1,401	£73	0.6	63%	6%	32%

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RBN	ST HELENS AND KNOWSLEY HOSPITALS NHS TRUST	3	£897	£209	0.3	59%	41%	0%
Sub-total, Peer Group 3			£852	£252	1.1	74%	20%	7%
RXQ	BUCKINGHAMSHIRE HEALTHCARE NHS TRUST	4	£1,002	£84	1.0	92%	8%	0%
RWF	MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST	4	£1,443	£334	0.9	80%	20%	0%
RWY	CALDERDALE AND HUDDERSFIELD NHS FOUNDATION TRUST	4	£1,087	£242	0.8	79%	21%	0%
RQ8	MID ESSEX HOSPITAL SERVICES NHS TRUST	4	£818	£172	0.9	80%	20%	0%
RW3	CENTRAL MANCHESTER UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	4	£847	£166	1.2	62%	10%	28%
RWP	WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST	4	£1,163	£281	0.9	80%	20%	0%
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST	4	£817	£559	0.9	57%	43%	1%
RXP	COUNTY DURHAM AND DARLINGTON NHS FOUNDATION TRUST	4	£1,690	£245	0.9	86%	14%	0%
RD3	POOLE HOSPITAL NHS FOUNDATION TRUST	4	£770	£262	0.9	72%	28%	0%
RCF	AIREDALE NHS FOUNDATION TRUST	4	£819	£233	0.9	76%	24%	0%
RA9	SOUTH DEVON HEALTHCARE NHS FOUNDATION TRUST	4	£716	£333	0.8	64%	36%	0%
RJ7	ST GEORGE'S HEALTHCARE NHS TRUST	4	£822	£355	0.7	63%	37%	0%
RV8	NORTH WEST LONDON HOSPITALS NHS TRUST	4	£810	£215	0.8	70%	24%	6%
RGP	JAMES PAGET UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	4	£671	£223	0.7	69%	31%	0%
RLN	CITY HOSPITALS SUNDERLAND NHS FOUNDATION TRUST	4	£821	£821	1.9	65%	35%	0%
RDZ	THE ROYAL BOURNEMOUTH AND CHRISTCHURCH HOSPITALS NHS FOUNDATION TRUST	4	£1,433	£280	0.6	77%	23%	0%
RN1	WINCHESTER AND EASTLEIGH HEALTHCARE NHS TRUST	4	£837	£260	0.6	67%	33%	1%
RTP	SURREY AND SUSSEX HEALTHCARE NHS TRUST	4	£794	£246	0.5	63%	37%	0%
Sub-total, Peer Group 4			£979	£277	0.9	74%	24%	2%
RHW	ROYAL BERKSHIRE NHS FOUNDATION TRUST	5	£533	£311	1.0	63%	37%	0%
RAP	NORTH MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST	5	£672	£179	1.0	79%	21%	0%
RNQ	KETTERING GENERAL HOSPITAL NHS FOUNDATION TRUST	5	£657	£195	1.0	77%	22%	1%
RN3	GREAT WESTERN HOSPITALS NHS FOUNDATION TRUST	5	£769	£238	1.0	49%	15%	36%
RNL	NORTH CUMBRIA UNIVERSITY HOSPITALS NHS TRUST	5	£1,101	£185	0.9	80%	15%	6%
RAE	BRADFORD TEACHING HOSPITALS NHS FOUNDATION TRUST	5	£556	£198	0.9	71%	29%	0%
RGR	WEST SUFFOLK HOSPITALS NHS TRUST	5	£819	£330	1.2	75%	25%	0%
RBK	WALSALL HEALTHCARE NHS TRUST	5	£1,110	£207	0.9	84%	16%	0%

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RGN	PETERBOROUGH AND STAMFORD HOSPITALS NHS FOUNDATION TRUST	5	£720	£189	0.9	61%	18%	21%
RCD	HARROGATE AND DISTRICT NHS FOUNDATION TRUST	5	£810	£364	1.5	77%	23%	0%
RYR	WESTERN SUSSEX HOSPITALS NHS TRUST	5	£480	£952	0.8	28%	72%	0%
5QT	ISLE OF WIGHT NHS PCT	5	£585	£112	0.8	80%	20%	0%
RCX	THE QUEEN ELIZABETH HOSPITAL, KING'S LYNN. NHS FOUNDATION TRUST	5	£1,135	£146	0.9	80%	12%	8%
RJD	MID STAFFORDSHIRE NHS FOUNDATION TRUST	5	£1,437	£232	0.8	83%	17%	0%
RR7	GATESHEAD HEALTH NHS FOUNDATION TRUST	5	£1,232	£165	0.7	85%	15%	0%
RAL	ROYAL FREE HAMPSTEAD NHS TRUST	5	£1,388	£341	0.5	65%	35%	0%
RNZ	SALISBURY NHS FOUNDATION TRUST	5	£3,956	£183	0.2	82%	18%	0%
RD7	HEATHERWOOD AND WEXHAM PARK HOSPITALS NHS FOUNDATION TRUST	5	£5,104	£253	0.1	74%	26%	0%
RQW	THE PRINCESS ALEXANDRA HOSPITAL NHS TRUST	5	£2,460	£742	0.1	30%	70%	0%
Sub-total, Peer Group 5			£939	£289	0.8	68%	27%	5%
RBZ	NORTHERN DEVON HEALTHCARE NHS TRUST	6	£1,129	£300	1.1	72%	17%	10%
RW6	PENNINE ACUTE HOSPITALS NHS TRUST	6	£575	£210	1.0	69%	24%	7%
RD1	ROYAL UNITED HOSPITAL BATH NHS TRUST	6	£1,031	£359	1.0	72%	25%	3%
RPA	MEDWAY NHS FOUNDATION TRUST	6	£572	£327	1.0	40%	23%	36%
RLQ	WYE VALLEY NHS TRUST	6	£444	£306	1.2	62%	35%	3%
RCU	SHEFFIELD CHILDREN'S NHS FOUNDATION TRUST	6	£348	£463	1.1	46%	54%	1%
RBD	DORSET COUNTY HOSPITAL NHS FOUNDATION TRUST	6	£253	£184	0.8	54%	46%	0%
RTK	ASHFORD AND ST PETER'S HOSPITALS NHS FOUNDATION TRUST	6	£148	£284	2.0	51%	49%	0%
RC9	LUTON AND DUNSTABLE HOSPITAL NHS FOUNDATION TRUST	6	£1,309	£0	0.0	100%	0%	0%
RA4	YEOVIL DISTRICT HOSPITAL NHS FOUNDATION TRUST	6	£967	£339	0.8	70%	30%	0%
RCC	SCARBOROUGH AND NORTH EAST YORKSHIRE HEALTH CARE NHS TRUST	6	£569	£83	0.9	75%	12%	13%
RVL	BARNET AND CHASE FARM HOSPITALS NHS TRUST	6	£1,457	£289	0.9	82%	18%	0%
RRF	WRIGHTINGTON, WIGAN AND LEIGH NHS FOUNDATION TRUST	6	£841	£425	1.0	60%	30%	10%
RD8	MILTON KEYNES HOSPITAL NHS FOUNDATION TRUST	6	£847	£402	0.8	46%	26%	29%
RN7	DARTFORD AND GRAVESHAM NHS TRUST	6	£304	£261	1.0	34%	29%	37%
RE9	SOUTH TYNESIDE NHS FOUNDATION TRUST	6	£1,534	£184	0.9	88%	12%	0%
RJZ	KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	6	£894	£341	0.4	54%	46%	0%
RWG	WEST HERTFORDSHIRE HOSPITALS NHS TRUST	6	£1,036	£157	0.4	75%	25%	0%

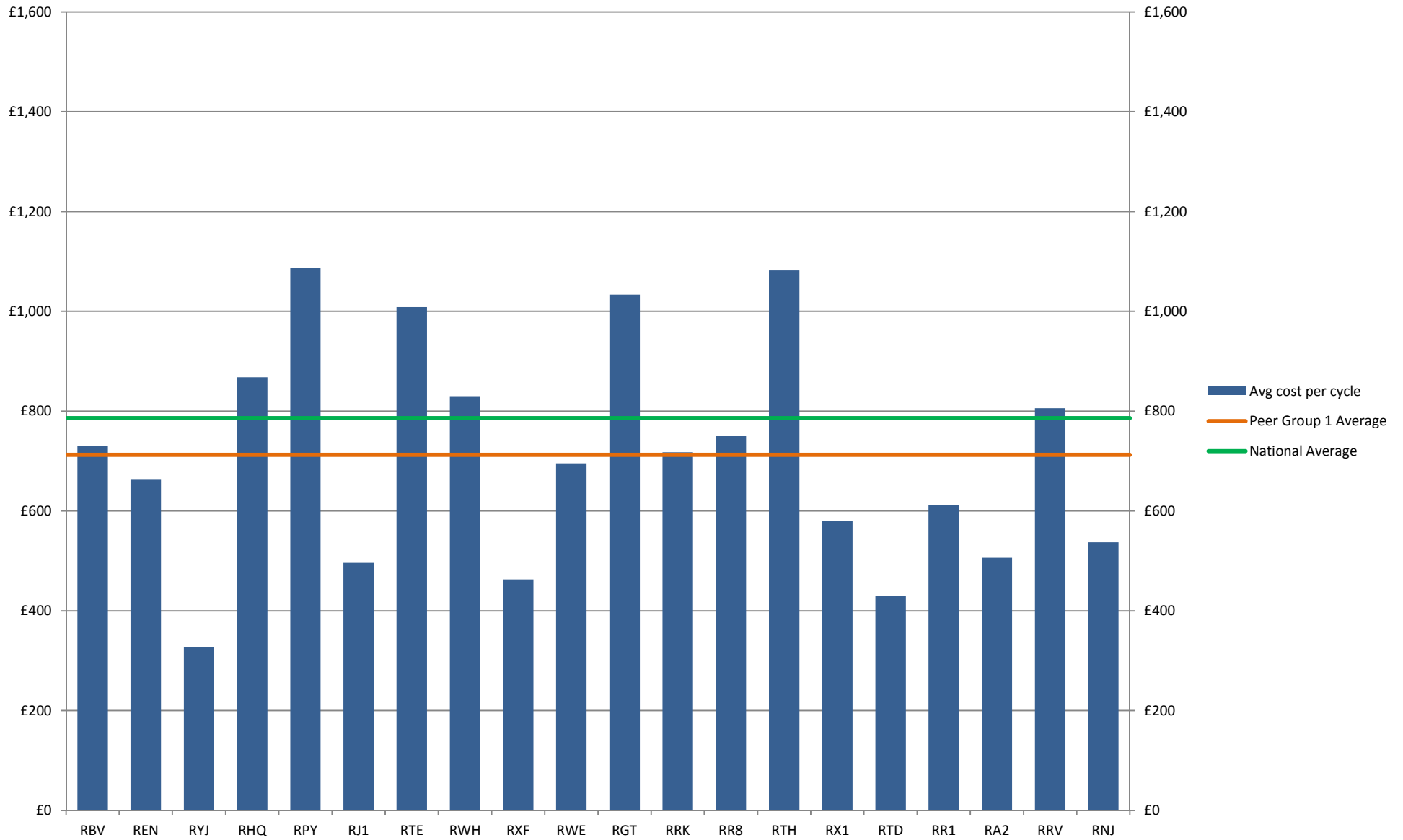
**2010/11 Chemotherapy Reference Costs
Provider Key Ratios**

Org code	Organisation name	Peer Group	Cost per cycle	Cost per delivery	Cycles per delivery	Procure Cost %	Delivery Cost %	Attend Cost %
RA3	WESTON AREA HEALTH NHS TRUST	6	£26,939	£445	0.0	50%	50%	0%
RN5	BASINGSTOKE AND NORTH HAMPSHIRE NHS FOUNDATION TRUST	6	£0	£0	0.0	0%	0%	100%
Sub-total, Peer Group 6			£762	£296	1.0	61%	24%	14%
RVY	SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST	7	£1,108	£191	1.8	91%	9%	0%
RFF	BARNSLEY HOSPITAL NHS FOUNDATION TRUST	7	£850	£264	4.0	93%	7%	0%
RQ6	ROYAL LIVERPOOL AND BROADGREEN UNIVERSITY HOSPITALS NHS TRUST	7	£492	£335	1.3	60%	31%	9%
REM	AINTREE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	7	£1,143	£407	2.5	88%	12%	0%
RBT	MID CHESHIRE HOSPITALS NHS FOUNDATION TRUST	7	£618	£371	1.1	52%	29%	19%
RQQ	HINCHINGBROOKE HEALTH CARE NHS TRUST	7	£1,080	£233	1.0	58%	13%	29%
RDU	FRIMLEY PARK HOSPITAL NHS FOUNDATION TRUST	7	£1,002	£315	1.1	78%	22%	0%
RP5	DONCASTER AND BASSETLAW HOSPITALS NHS FOUNDATION TRUST	7	£1,228	£158	1.1	89%	10%	0%
RBL	WIRRAL UNIVERSITY TEACHING HOSPITAL NHS FOUNDATION TRUST	7	£1,608	£366	0.8	77%	23%	0%
RKE	THE WHITTINGTON HOSPITAL NHS TRUST	7	£987	£652	0.8	54%	45%	2%
RNH	NEWHAM UNIVERSITY HOSPITAL NHS TRUST	7	£915	£237	0.8	75%	25%	0%
RBS	ALDER HEY CHILDREN'S NHS FOUNDATION TRUST	7	£565	£348	0.4	39%	61%	0%
RQ3	BIRMINGHAM CHILDREN'S HOSPITAL NHS FOUNDATION TRUST	7	£3,609	£917	0.4	64%	36%	0%
RDD	BASILDON AND THURROCK UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	7	£0	£244	0.0	0%	79%	21%
RP4	GREAT ORMOND STREET HOSPITAL FOR CHILDREN NHS TRUST	7	£0	£584	0.0	0%	95%	5%
RM2	UNIVERSITY HOSPITAL OF SOUTH MANCHESTER NHS FOUNDATION TRUST	7	£0	£0	0.0	0%	0%	100%
RVR	EPSOM AND ST HELIER UNIVERSITY HOSPITALS NHS TRUST	7	£0	£0	0.0	0%	0%	100%
RFW	WEST MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST	7	£0	£0	0.0	0%	0%	100%
Sub-total, Peer Group 7			£1,055	£380	0.9	65%	26%	10%
RJR	COUNTESS OF CHESTER HOSPITAL NHS FOUNDATION TRUST	8	£1,097	£227	1.2	86%	14%	0%
RAX	KINGSTON HOSPITAL NHS TRUST	8	£840	£1,971	1.9	38%	48%	14%
RFS	CHESTERFIELD ROYAL HOSPITAL NHS FOUNDATION TRUST	8	£1,050	£388	1.2	77%	23%	0%
RM3	SALFORD ROYAL NHS FOUNDATION TRUST	8	£1,115	£115	1.0	86%	9%	5%
RC3	EALING HOSPITAL NHS TRUST	8	£1,192	£186	0.9	86%	14%	0%
RVJ	NORTH BRISTOL NHS TRUST	8	£238	£69	0.8	42%	16%	42%
RJ6	CROYDON HEALTH SERVICES NHS TRUST	8	£822	£521	0.9	52%	36%	12%

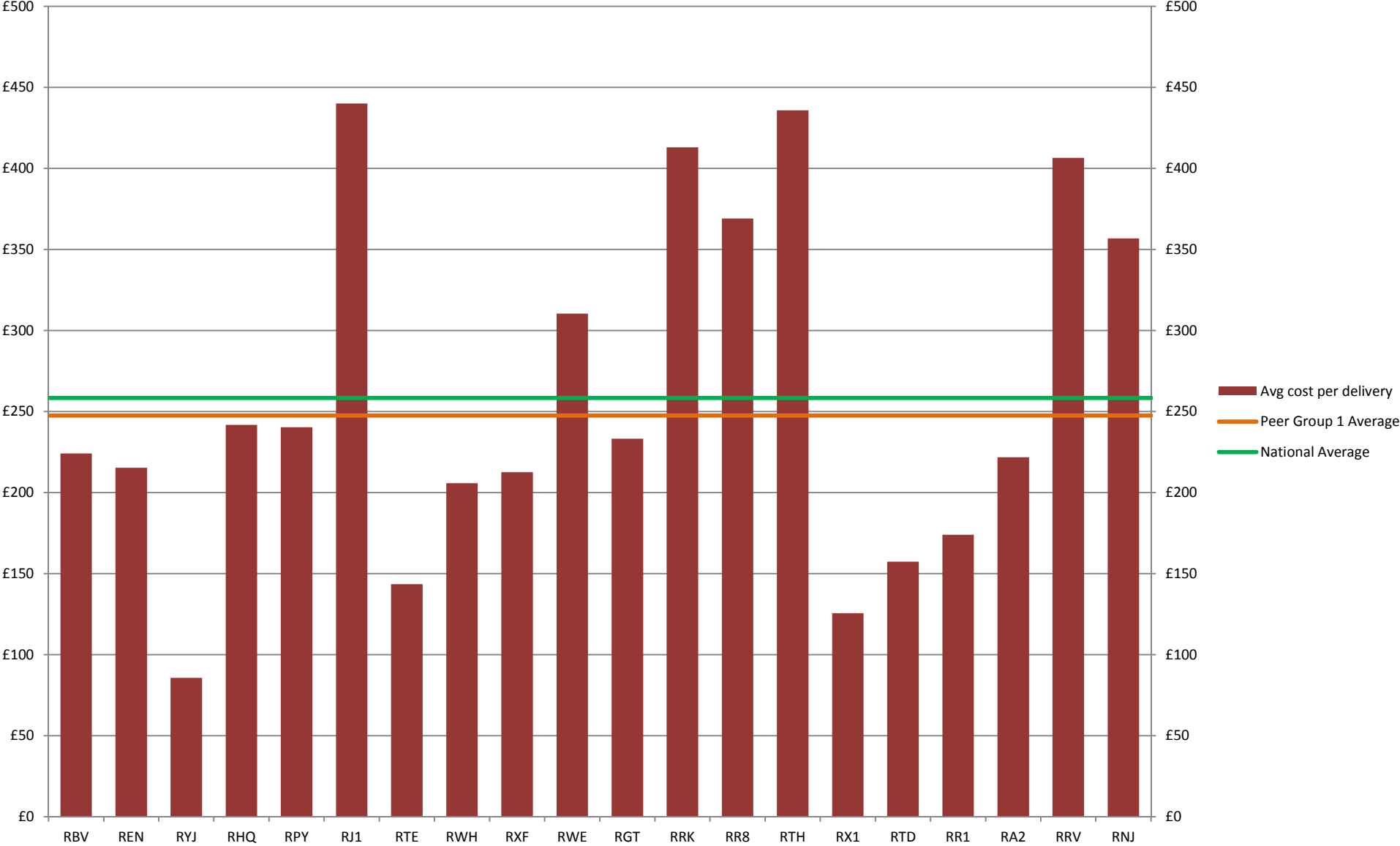
**2010/11 Chemotherapy Reference Costs
Provider Key Ratios**

Org code	Organisation name	Peer Group	Cost per cycle	Cost per delivery	Cycles per delivery	Procure Cost %	Delivery Cost %	Attend Cost %
RJ2	LEWISHAM HEALTHCARE NHS TRUST	8	£195	£56	0.9	76%	24%	0%
RGC	WHIPPS CROSS UNIVERSITY HOSPITAL NHS TRUST	8	£765	£263	0.6	53%	28%	19%
RMC	ROYAL BOLTON HOSPITAL NHS FOUNDATION TRUST	8	£910	£1,177	1.0	44%	56%	0%
RAS	THE HILLINGDON HOSPITAL NHS TRUST	8	£1,077	£406	0.6	62%	38%	0%
RM4	TRAFFORD HEALTHCARE NHS TRUST	8	£425	£1,653	0.9	19%	81%	0%
RFR	THE ROTHERHAM NHS FOUNDATION TRUST	8	£813	£2,398	0.4	13%	87%	0%
RMP	TAMESIDE HOSPITAL NHS FOUNDATION TRUST	8	£578	£100	0.1	41%	59%	0%
RWJ	STOCKPORT NHS FOUNDATION TRUST	8	£0	£290	0.0	0%	100%	0%
RQM	CHELSEA AND WESTMINSTER HOSPITAL NHS FOUNDATION TRUST	8	£0	£0	0.0	0%	0%	100%
RJN	EAST CHESHIRE NHS TRUST	8	£0	£0	0.0	0%	0%	100%
RWW	WARRINGTON AND HALTON HOSPITALS NHS FOUNDATION TRUST	8	£0	£0	0.0	0%	0%	100%
RRJ	THE ROYAL ORTHOPAEDIC HOSPITAL NHS FOUNDATION TRUST	8	£0	£0	0.0	0%	0%	100%
Sub-total, Peer Group 8			£838	£484	0.9	54%	36%	10%
National Averages			£786	£258	1.0	71%	24%	5%
Ranges (excluding items marked in red):								
	Lowest value		£0	£0	0.0			
	Highest value		£5,104	£2,398	9.2			
	Range		£5,104	£2,398	9.2			
	Lower quartile		£567	£183				
	Upper quartile		£1,072	£335				
	Inter-quartile range		£505	£152				
	Standard deviation		£625	£304				
	Coefficient of variation		80%	118%				

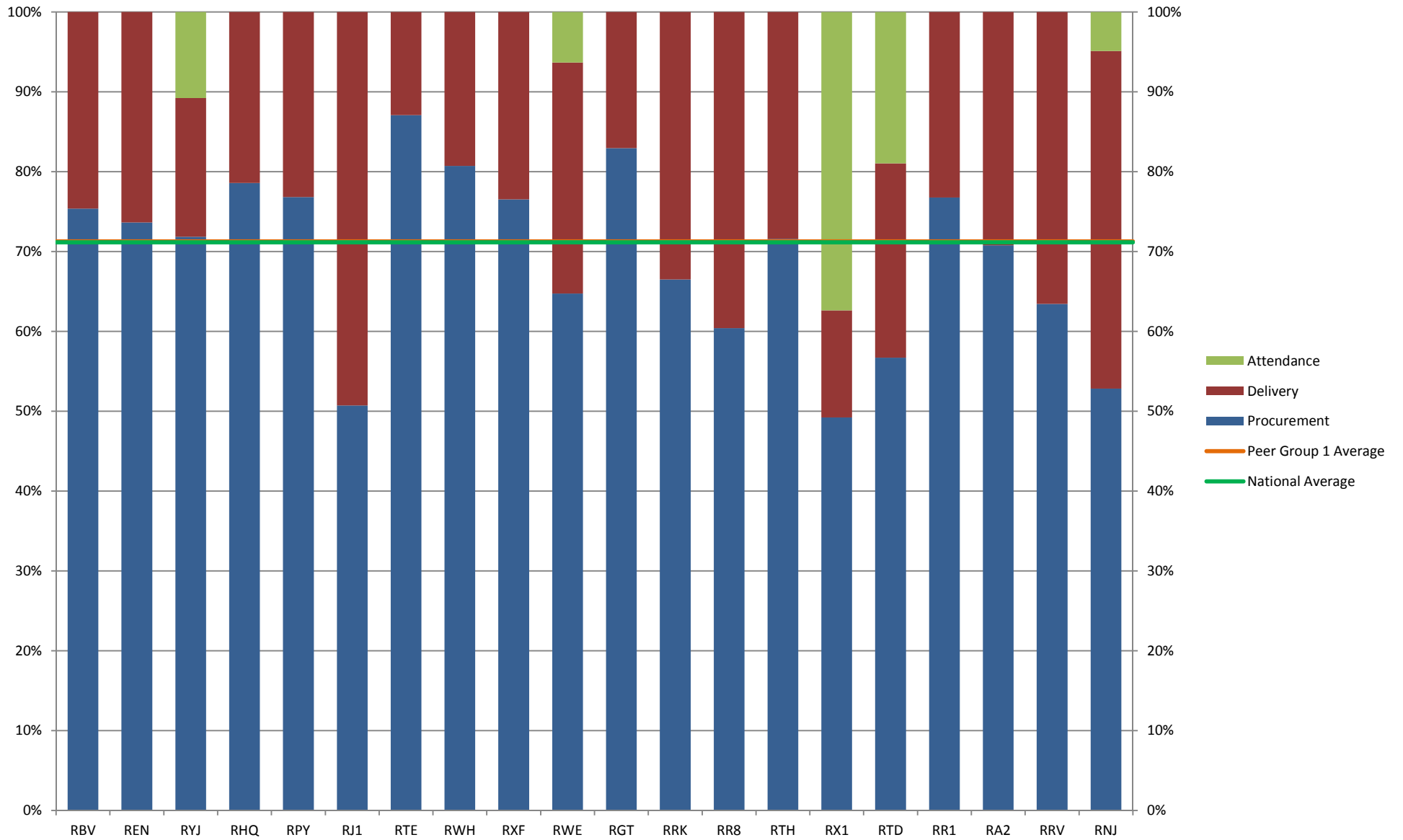
Peer Group 1 - Average cost per cycle of chemotherapy



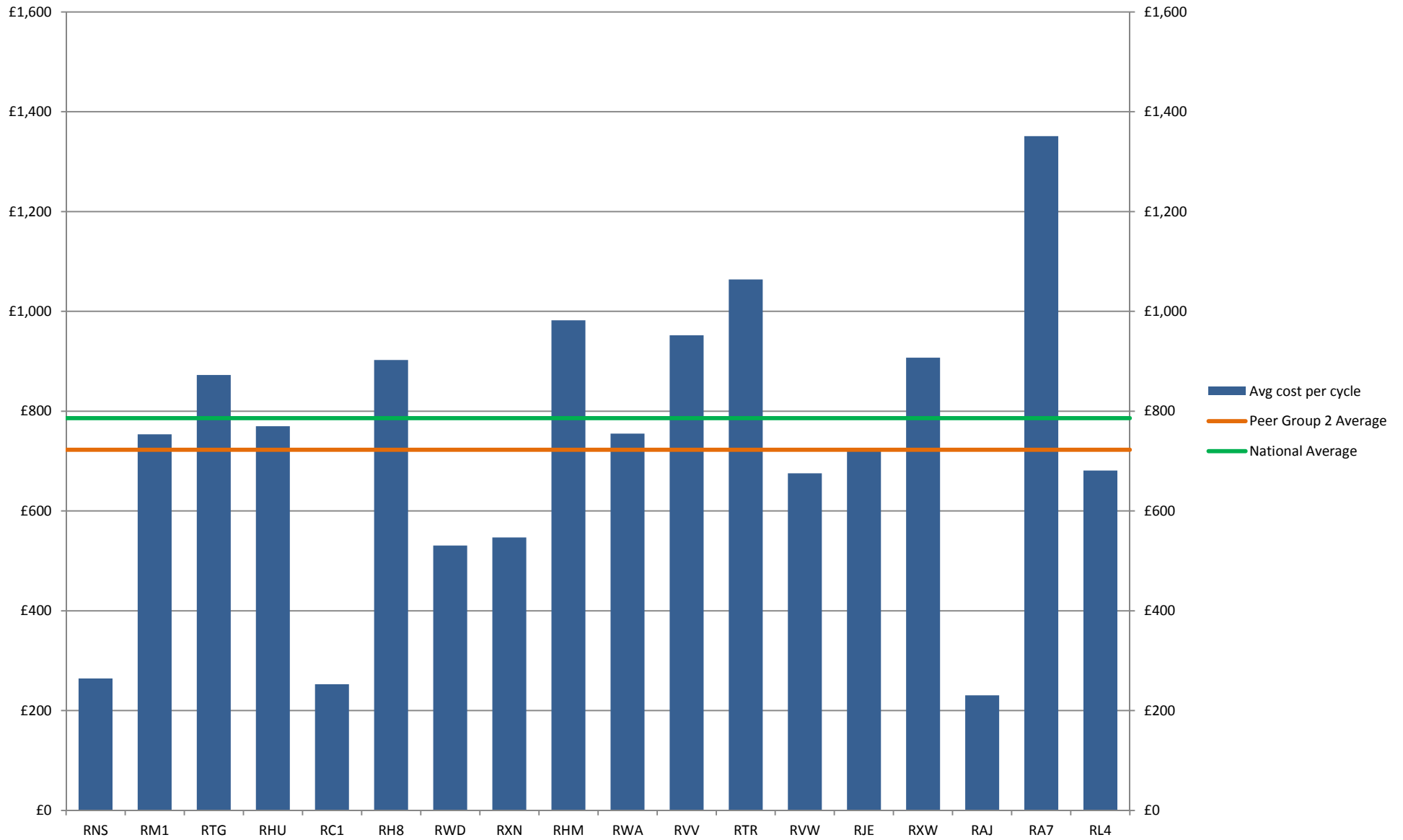
Peer Group 1 - Average cost per delivery of chemotherapy



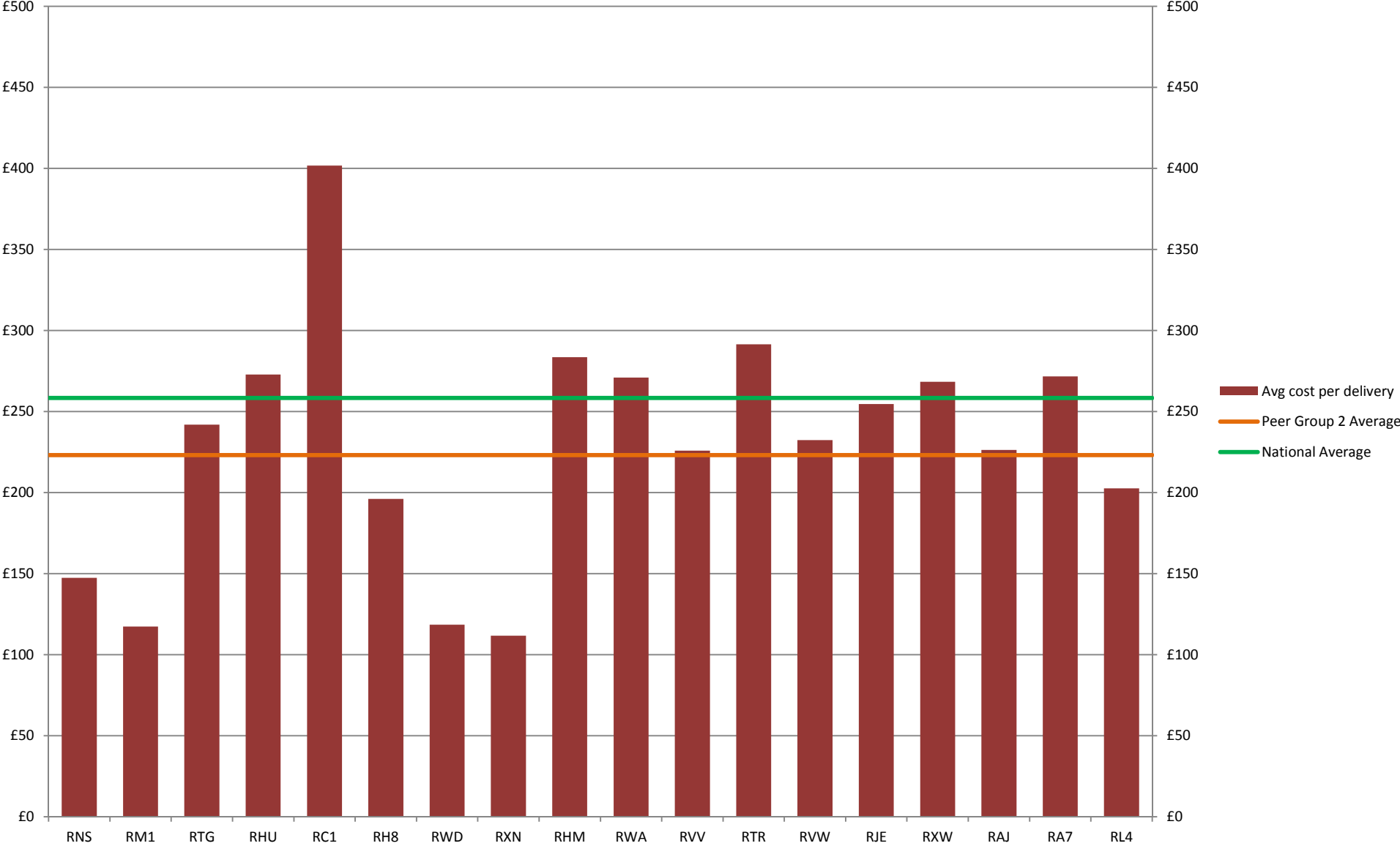
Peer Group 1 - Split of total costs



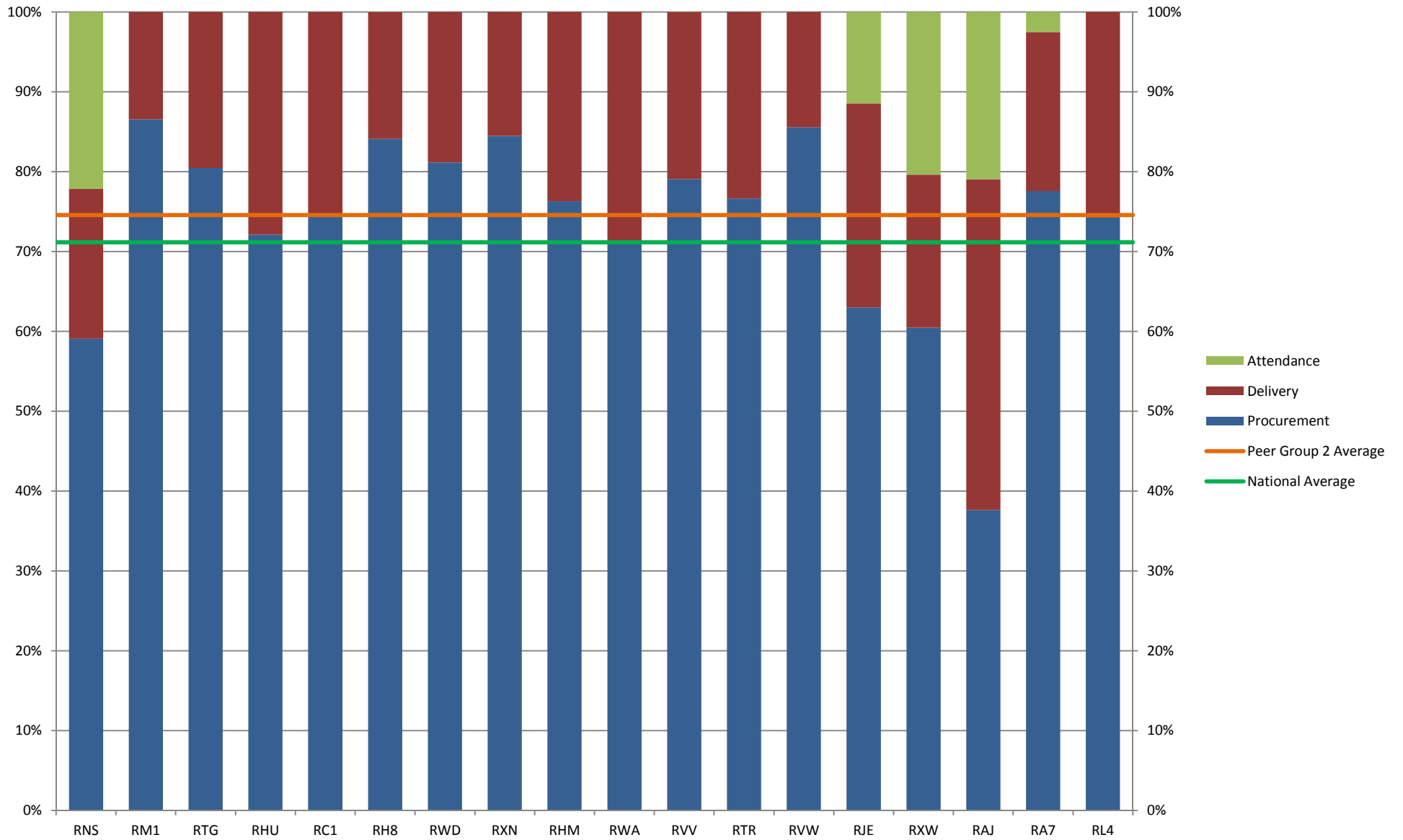
Peer Group 2 - Average cost per cycle of chemotherapy



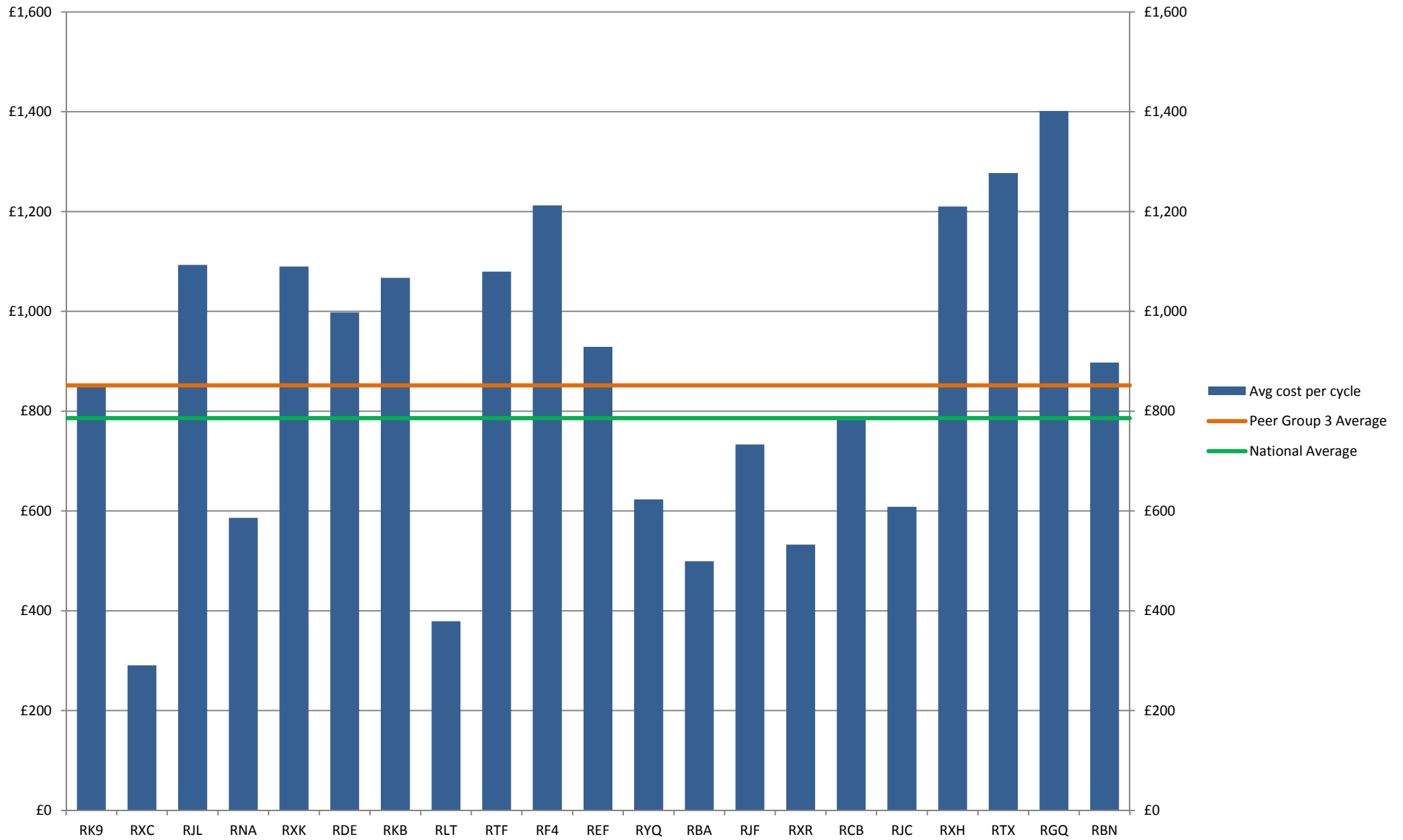
Peer Group 2 - Average cost per delivery of chemotherapy



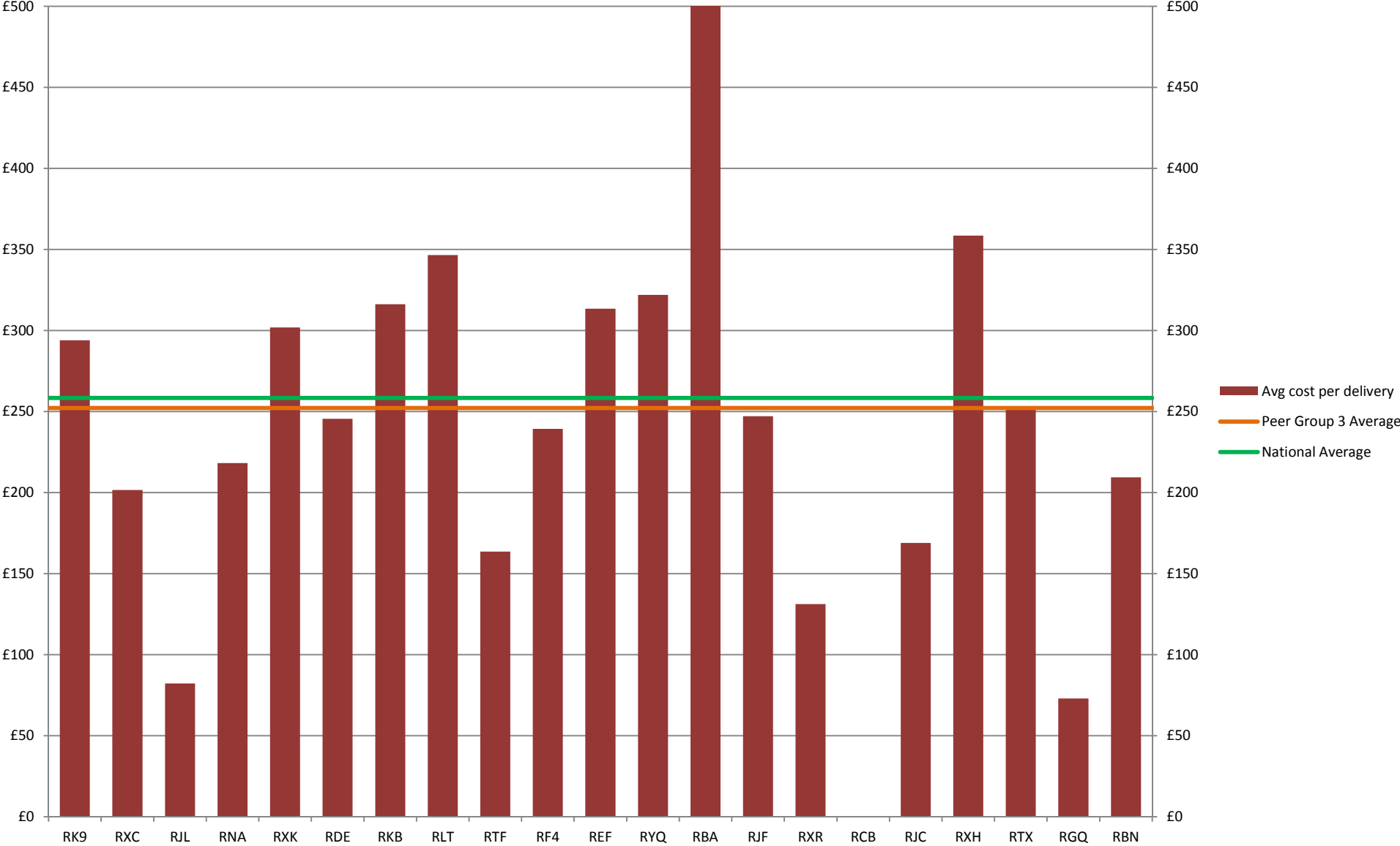
Peer Group 2 - Split of total costs



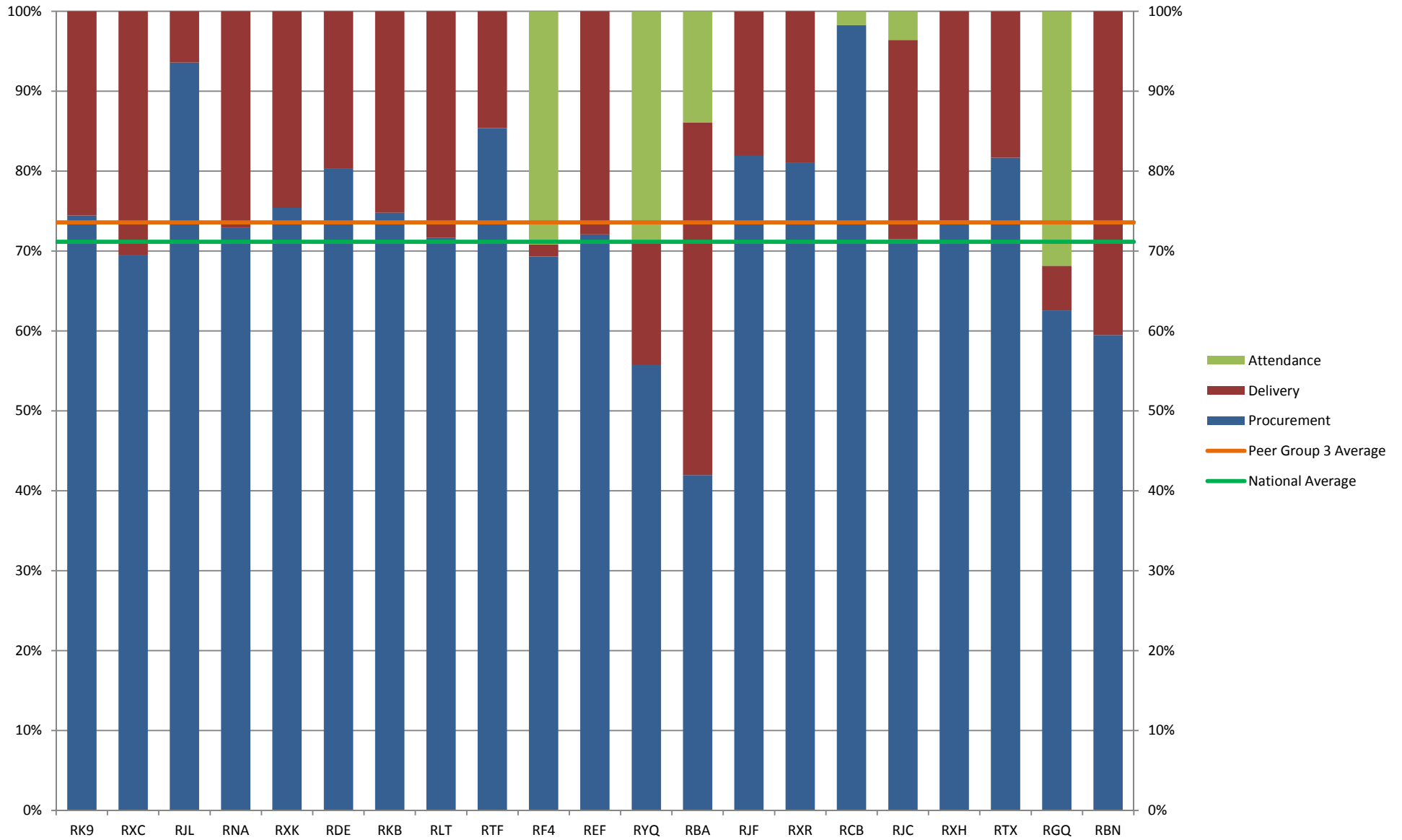
Peer Group 3 - Average cost per cycle of chemotherapy



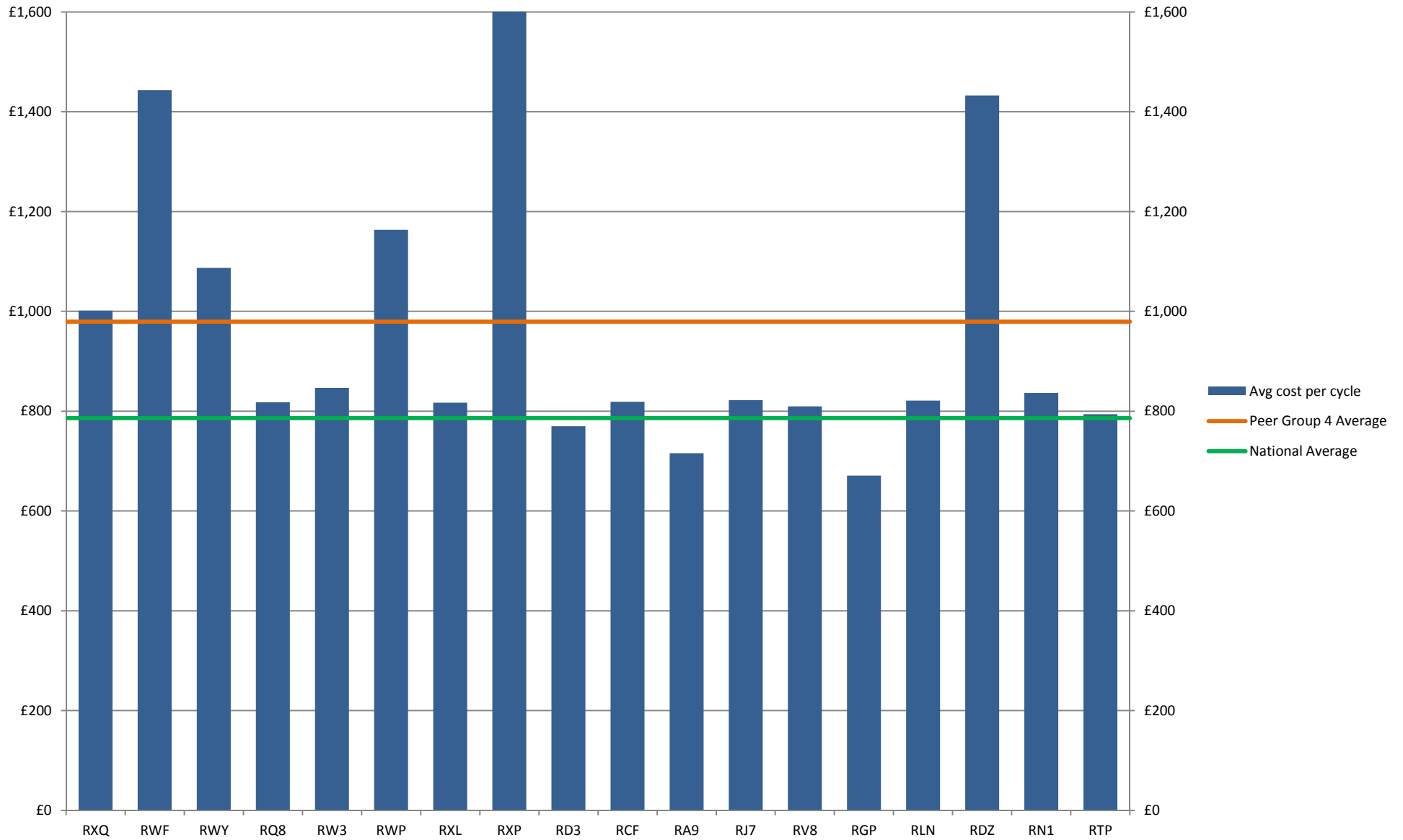
Peer Group 3 - Average cost per delivery of chemotherapy



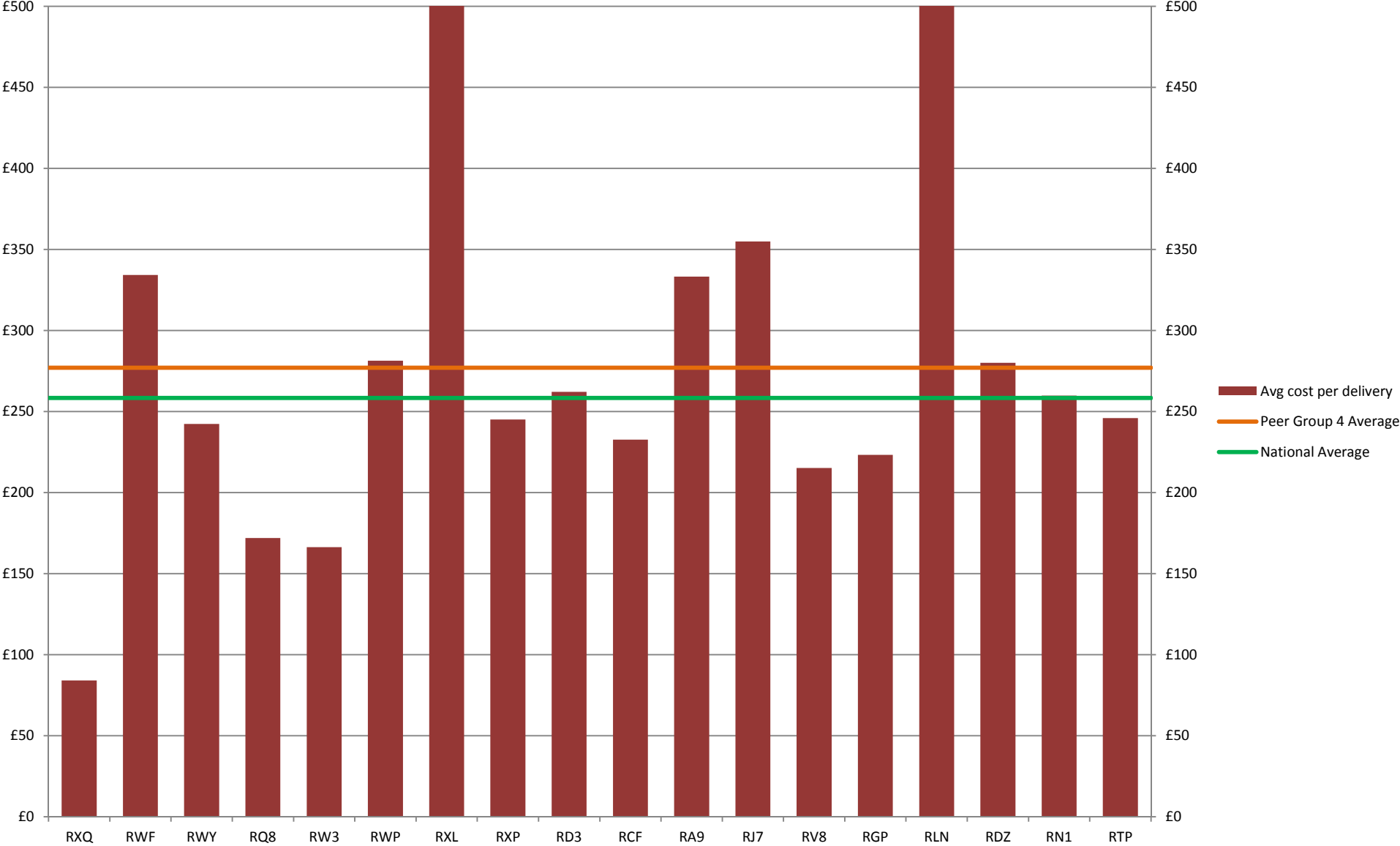
Peer Group 3 - Split of total costs



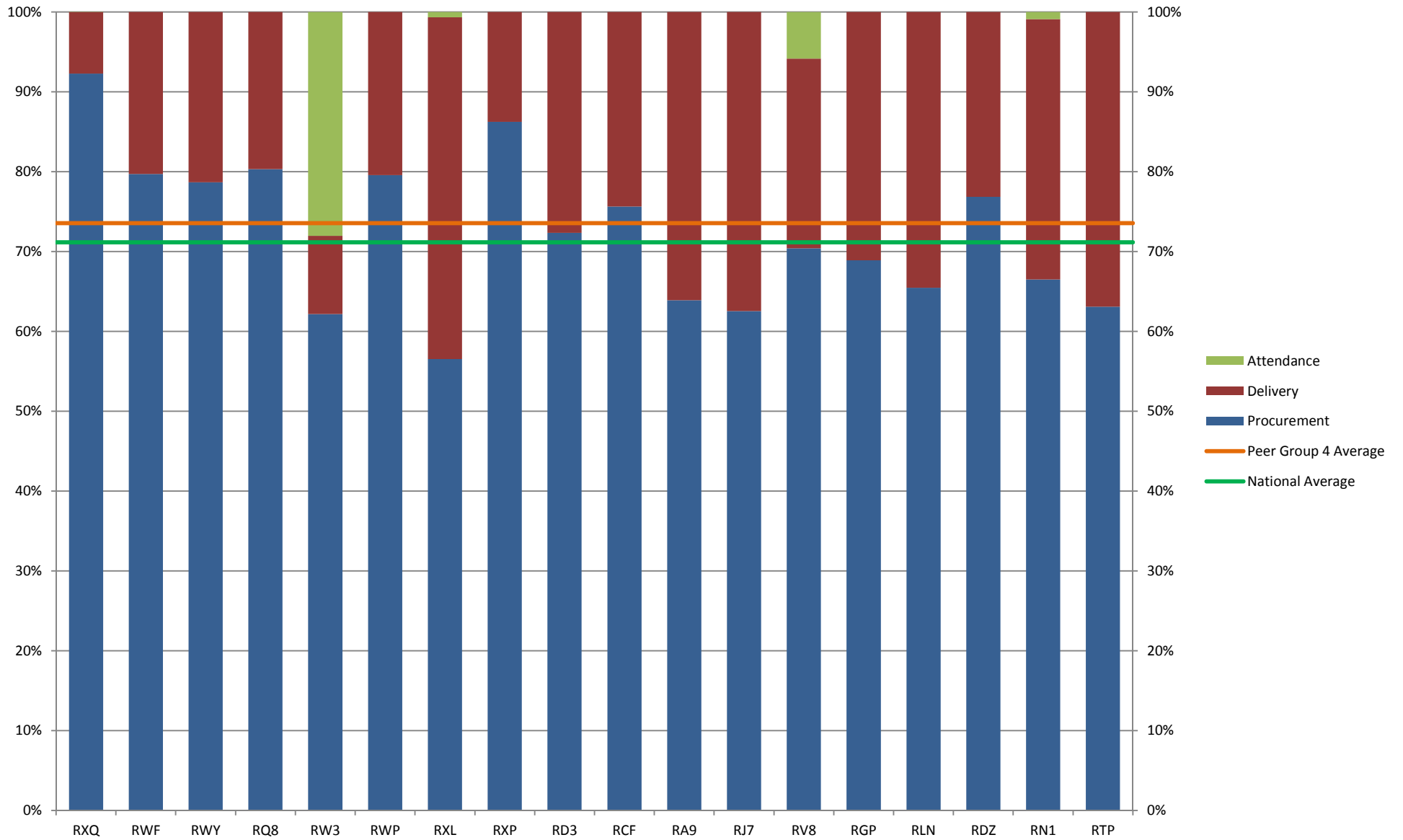
Peer Group 4 - Average cost per cycle of chemotherapy



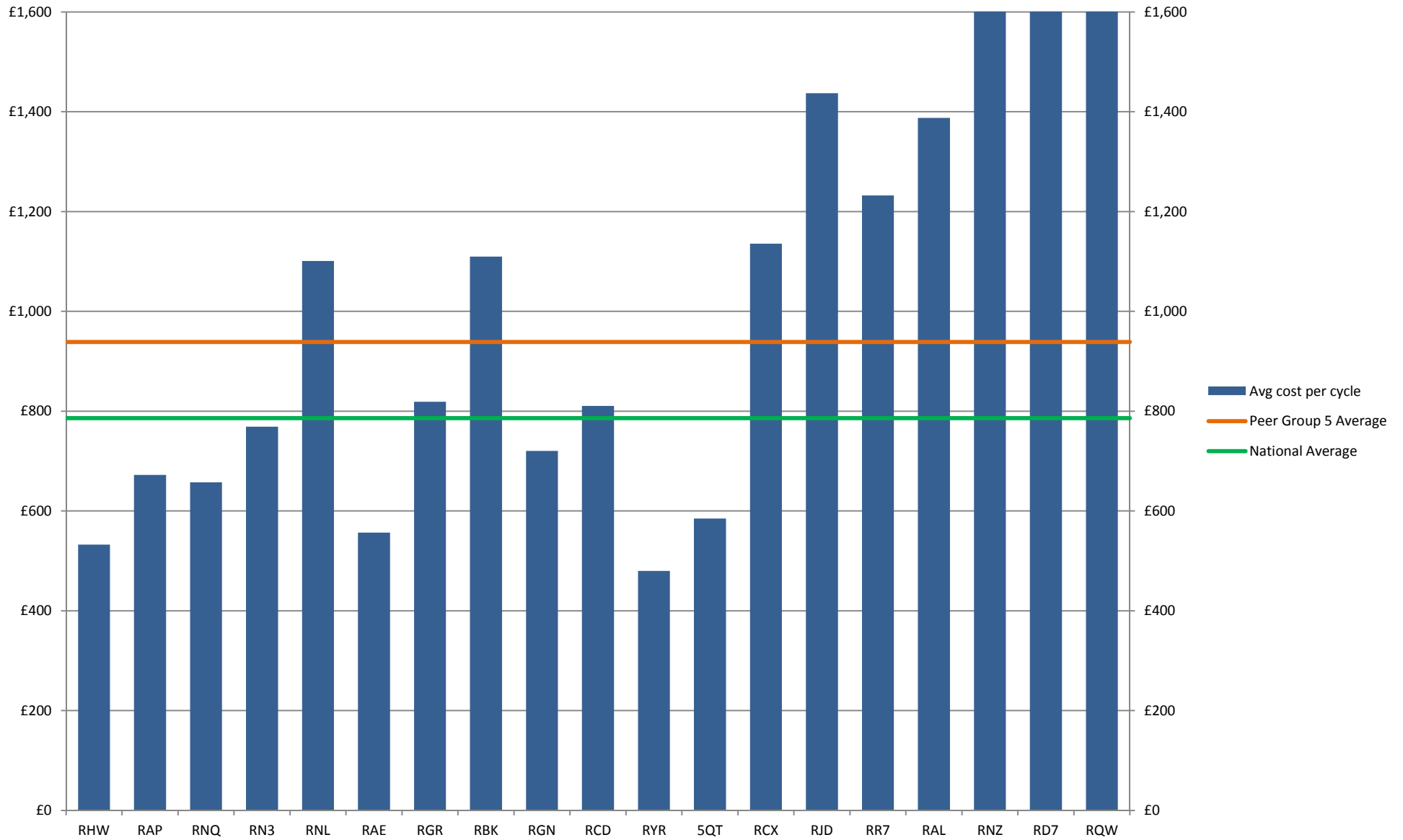
Peer Group 4 - Average cost per delivery of chemotherapy



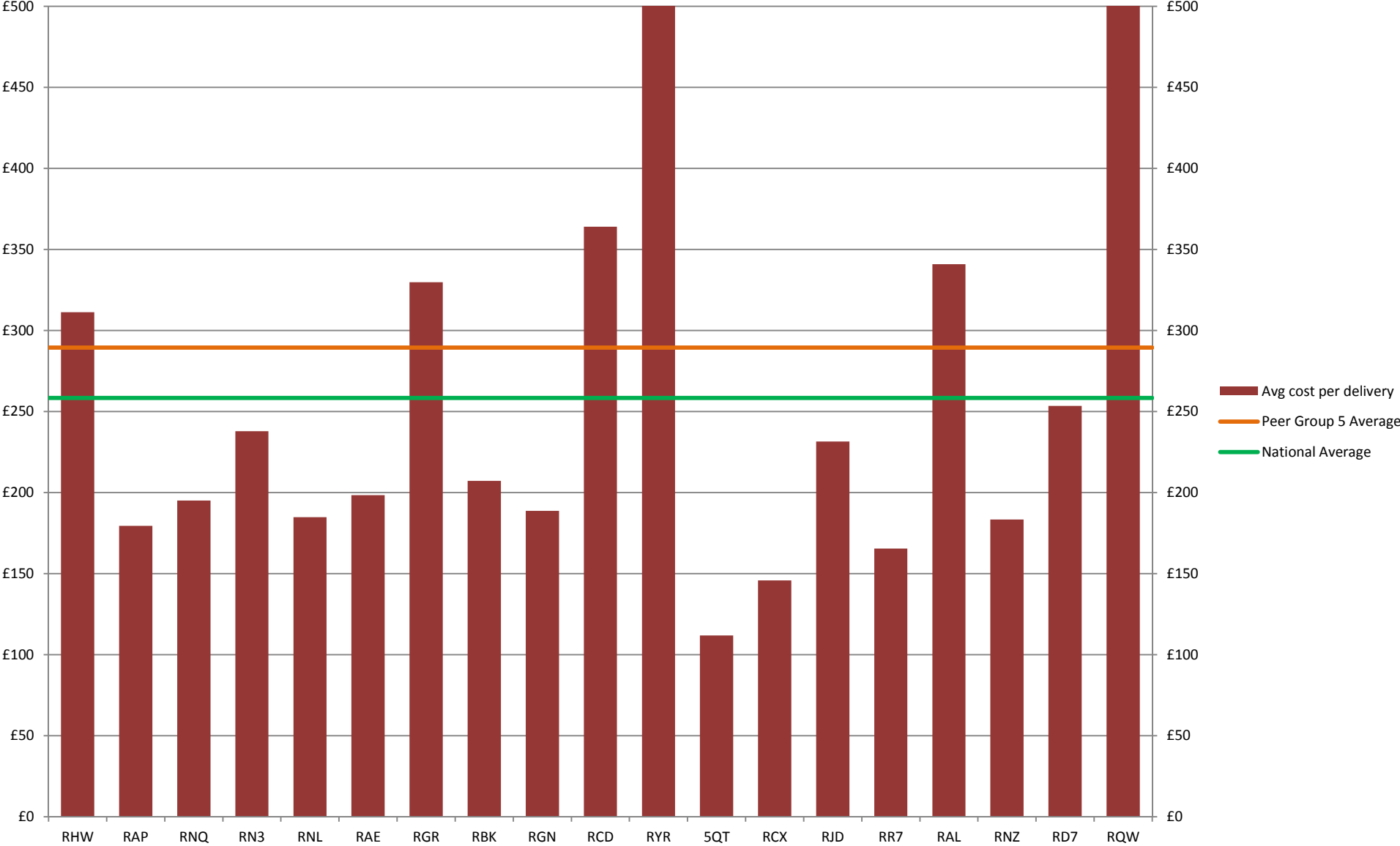
Peer Group 4 - Split of total costs



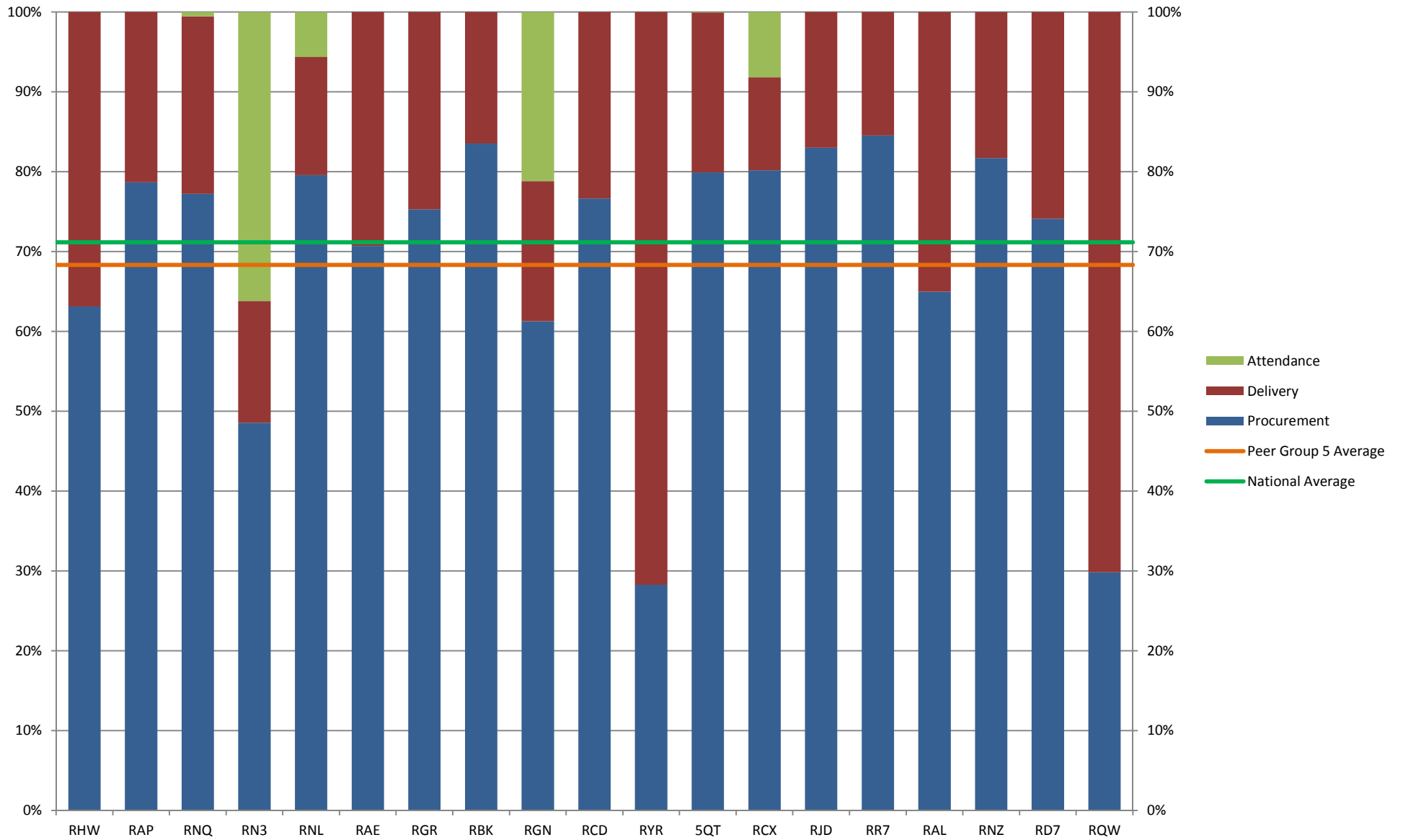
Peer Group 5 - Average cost per cycle of chemotherapy



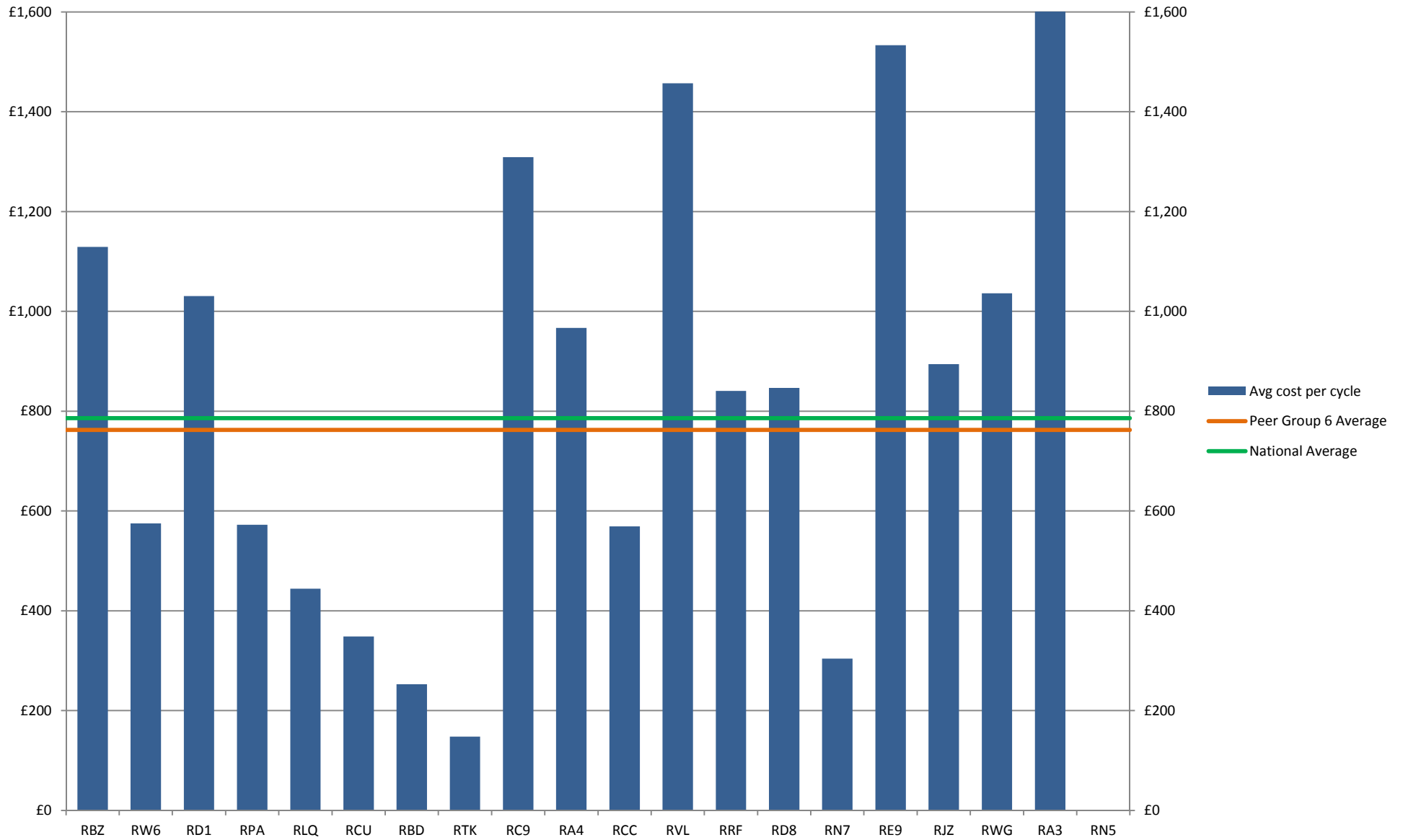
Peer Group 5 - Average cost per delivery of chemotherapy



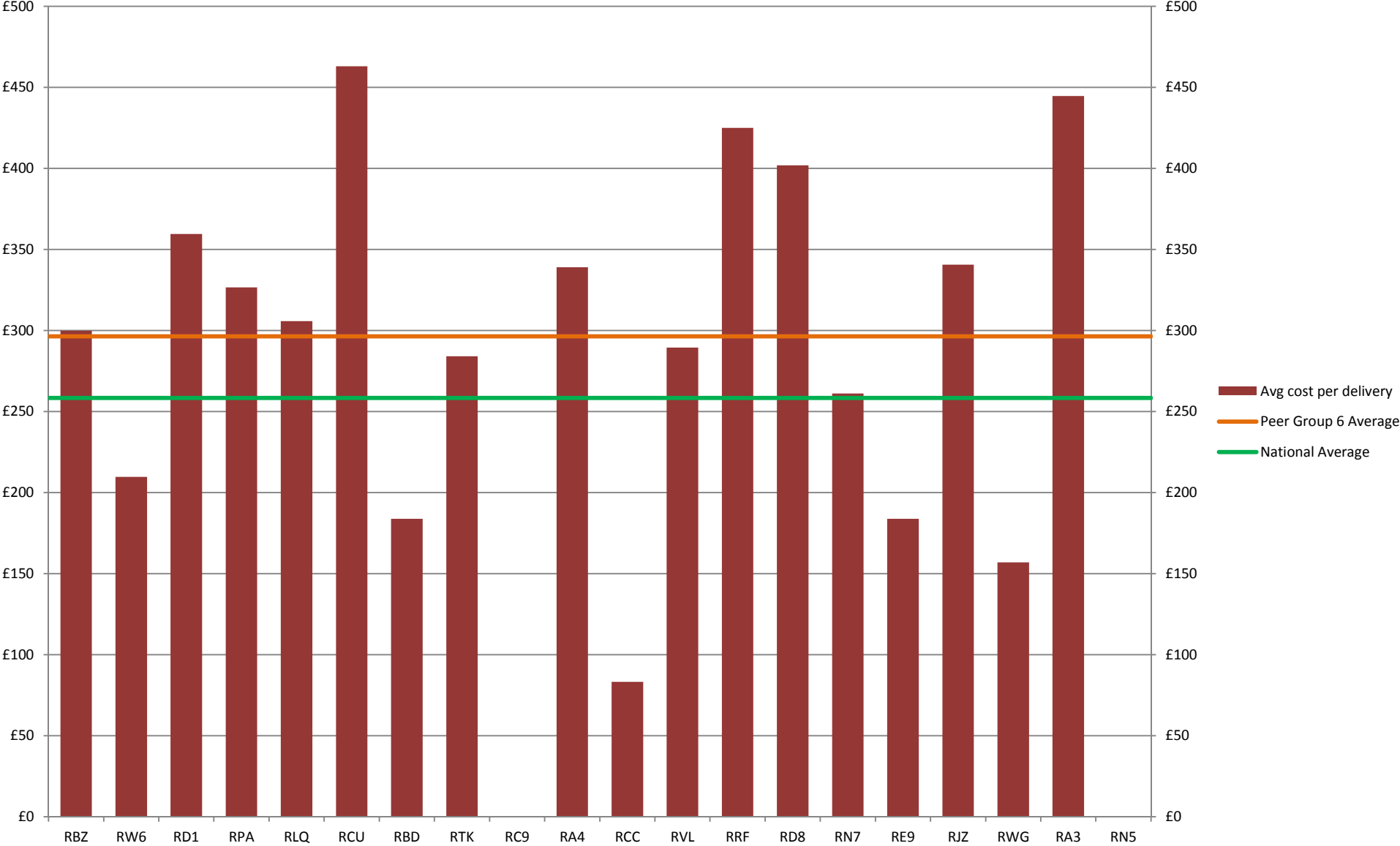
Peer Group 5 - Split of total costs



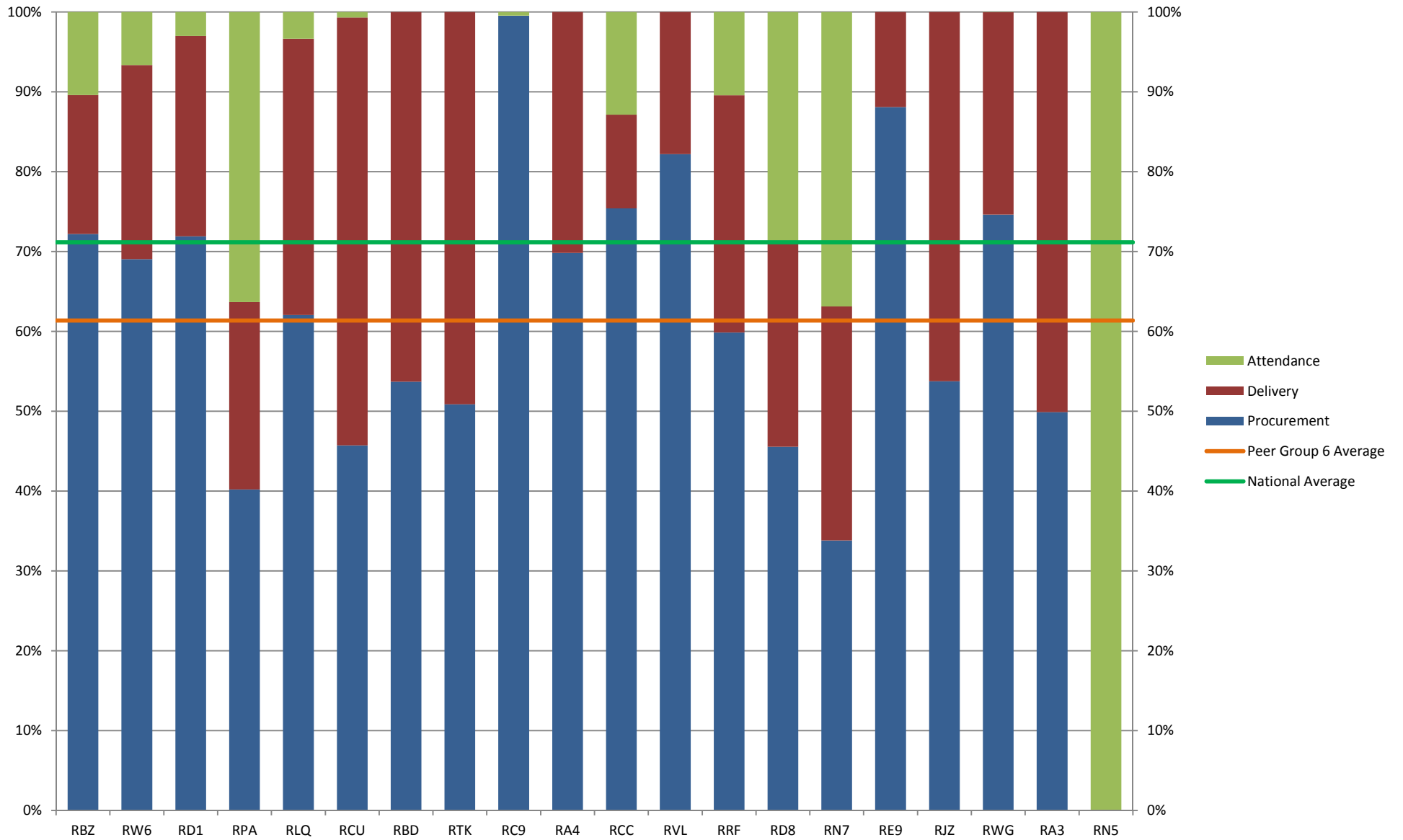
Peer Group 6 - Average cost per cycle of chemotherapy



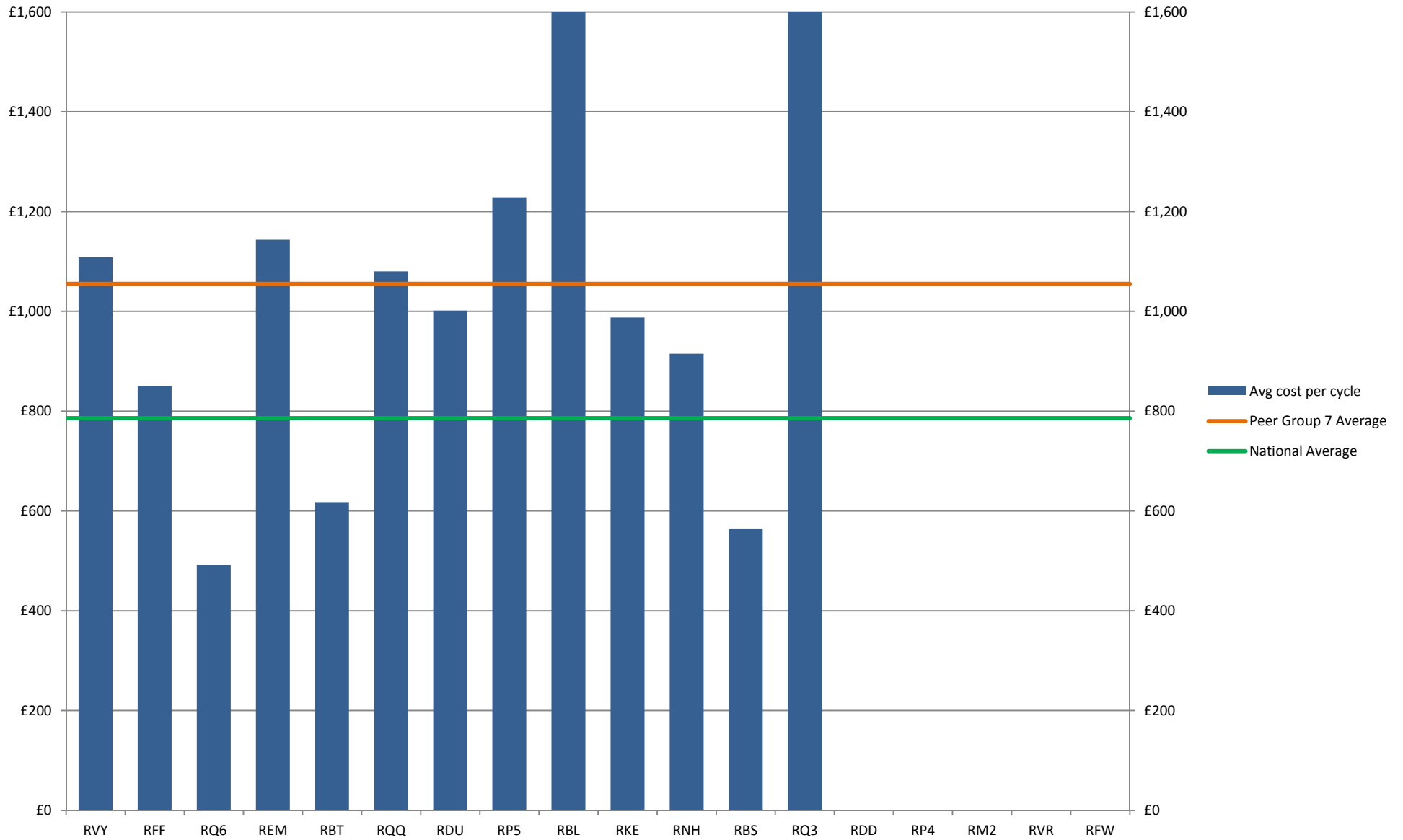
Peer Group 6 - Average cost per delivery of chemotherapy



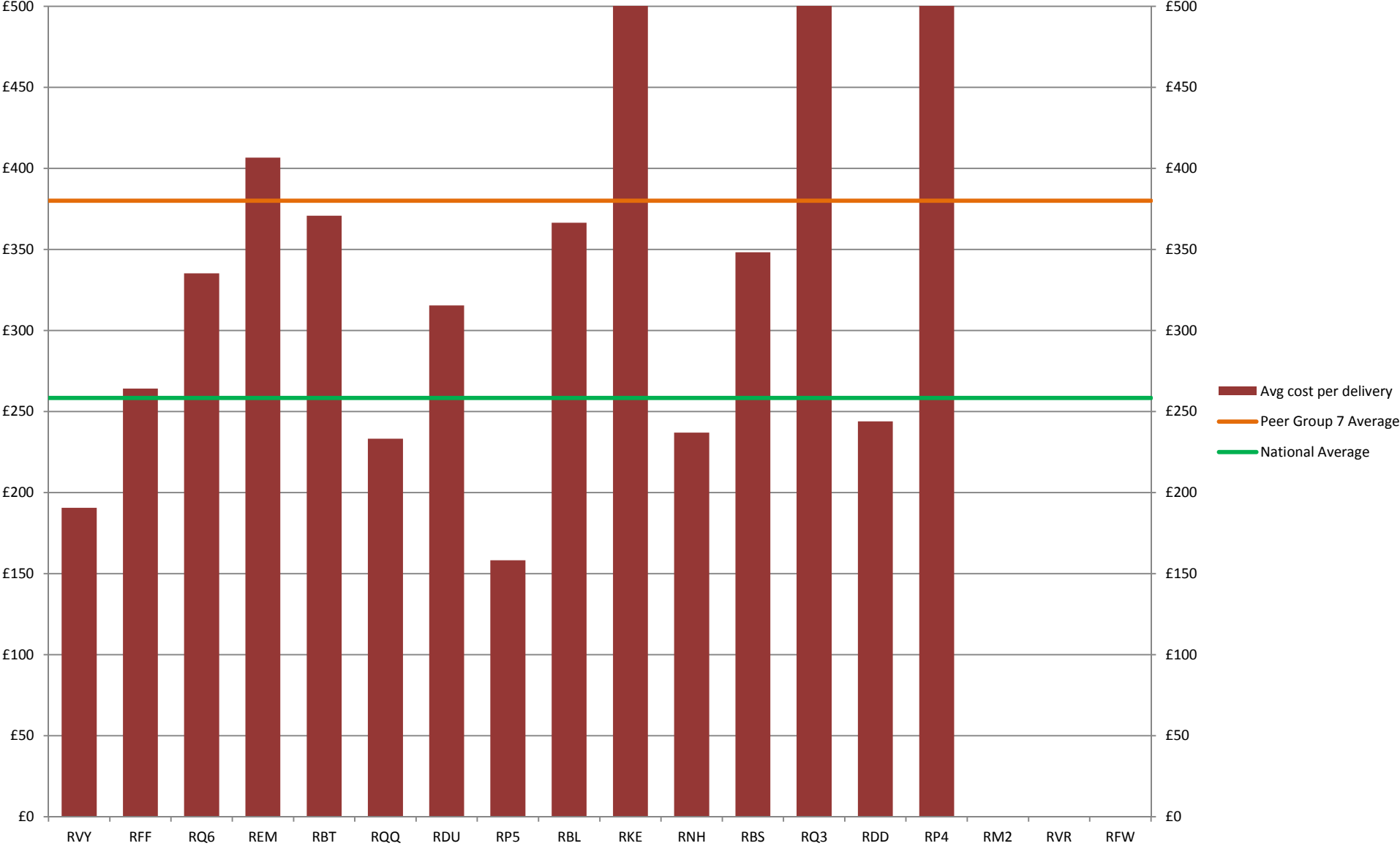
Peer Group 6 - Split of total costs



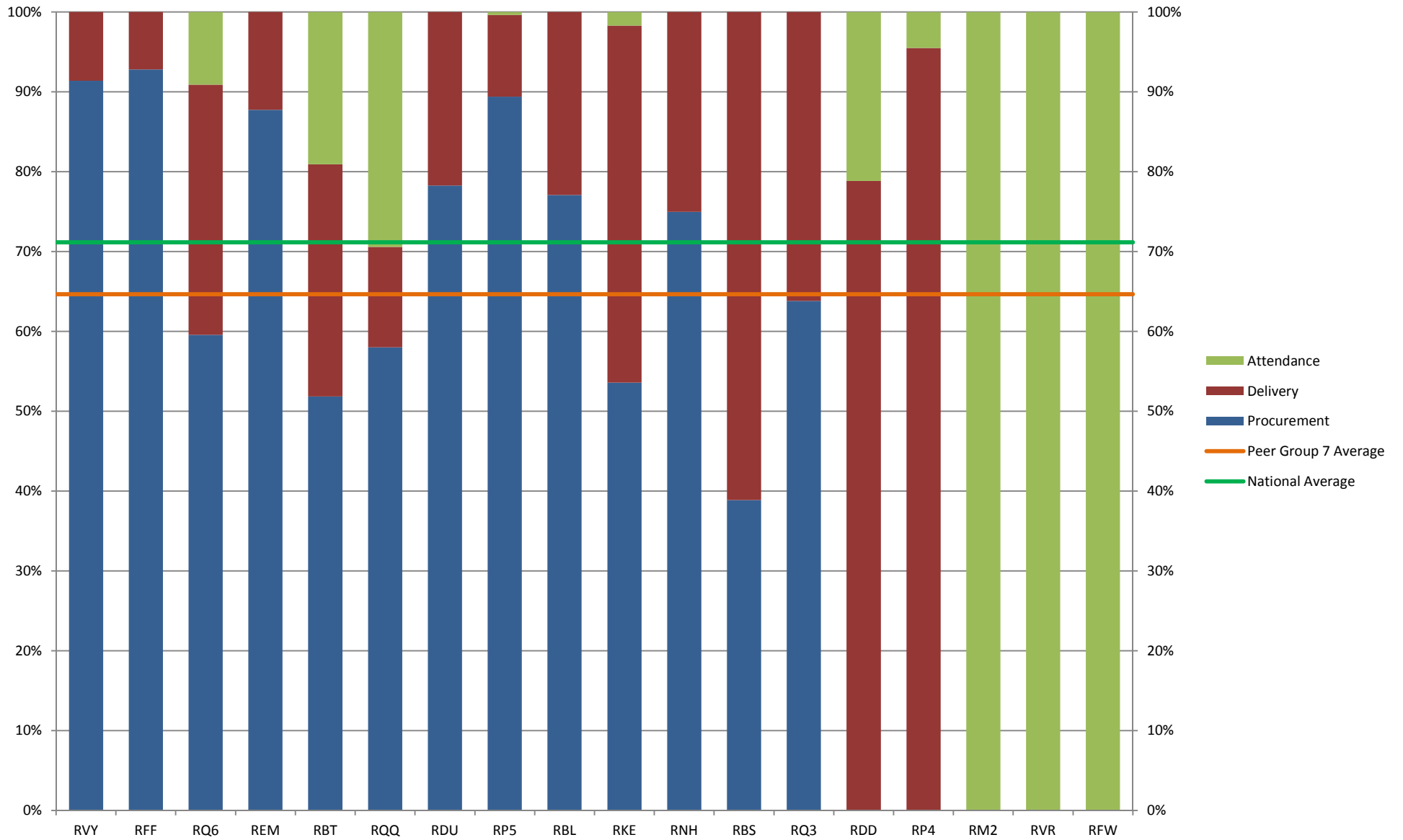
Peer Group 7 - Average cost per cycle of chemotherapy



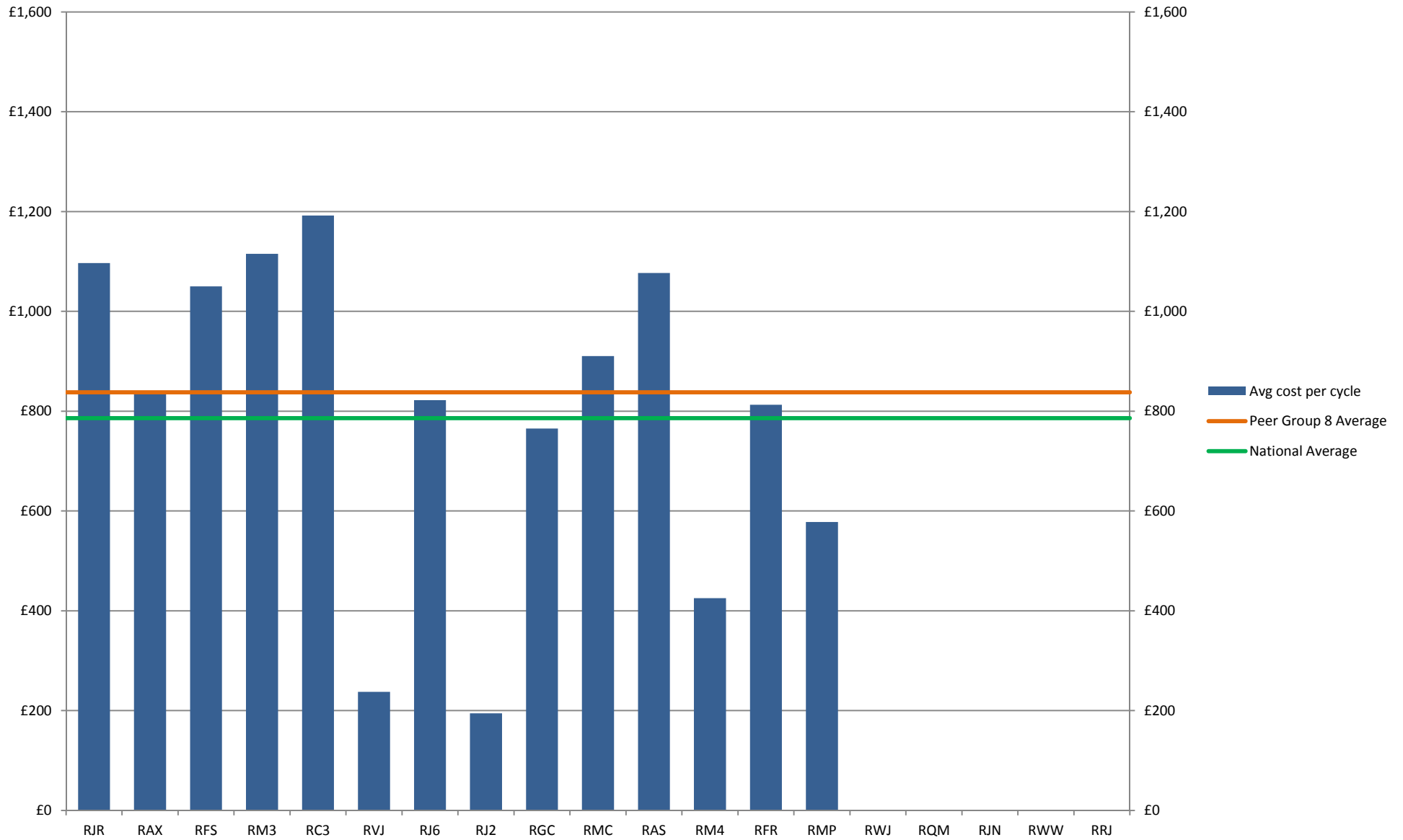
Peer Group 7 - Average cost per delivery of chemotherapy



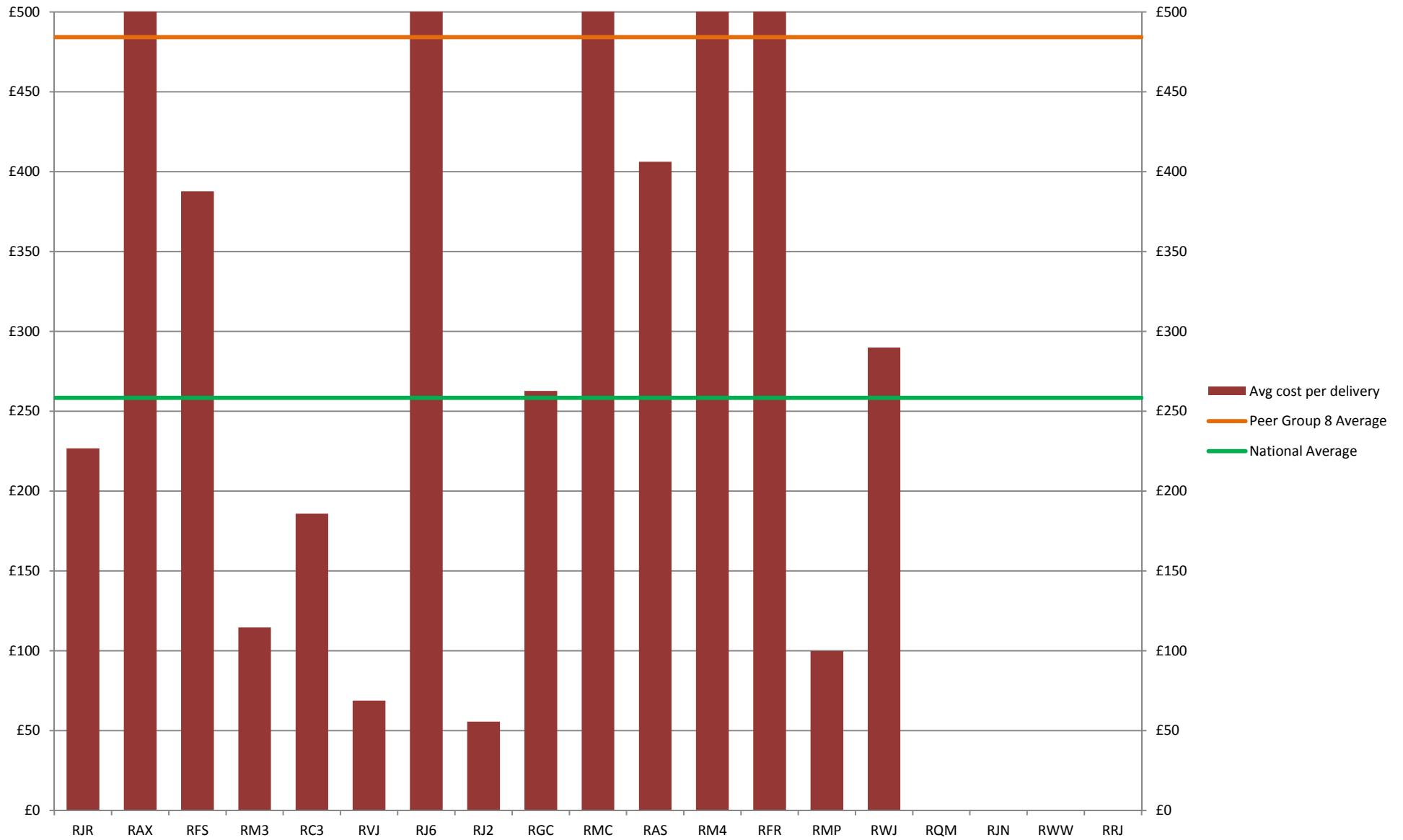
Peer Group 7 - Split of total costs



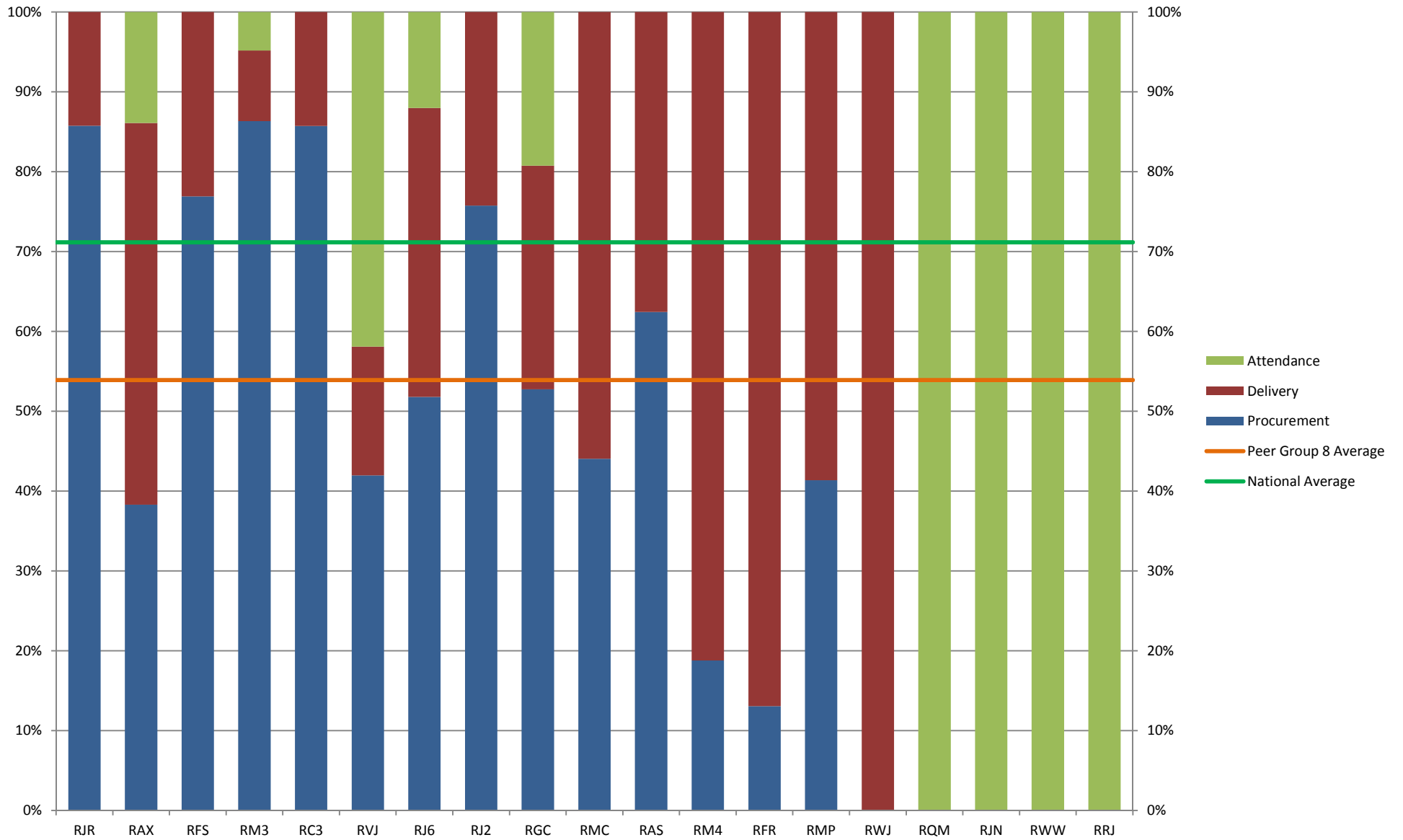
Peer Group 8 - Average cost per cycle of chemotherapy



Peer Group 8 - Average cost per delivery of chemotherapy



Peer Group 8 - Split of total costs



Options for a Potential Chemotherapy Tariff

HRG code and description	Option 1 All data (except RA3 cycles)	Option 2 Only data between upper and lower quartiles	Option 3 Only data between 10th and 90th percentiles	Option 4 Only data within 1 std dev from mean	Lowest Tariff	Highest Tariff	Range
Procurement:							
SB01Z Procure Chemotherapy drugs for regimens in Band 1	£201	£178	£174	£174	£174	£201	£27
SB02Z Procure Chemotherapy drugs for regimens in Band 2	£292	£303	£294	£298	£292	£303	£11
SB03Z Procure Chemotherapy drugs for regimens in Band 3	£437	£472	£441	£451	£437	£472	£35
SB04Z Procure Chemotherapy drugs for regimens in Band 4	£492	£594	£540	£509	£492	£594	£102
SB05Z Procure Chemotherapy drugs for regimens in Band 5	£564	£627	£595	£576	£564	£627	£63
SB06Z Procure Chemotherapy drugs for regimens in Band 6	£686	£695	£653	£661	£653	£695	£42
SB07Z Procure Chemotherapy drugs for regimens in Band 7	£776	£856	£816	£792	£776	£856	£80
SB08Z Procure Chemotherapy drugs for regimens in Band 8	£1,231	£1,315	£1,297	£1,340	£1,231	£1,340	£109
SB09Z Procure Chemotherapy drugs for regimens in Band 9	£1,318	£1,309	£1,314	£1,361	£1,309	£1,361	£52
SB10Z Procure Chemotherapy drugs for regimens in Band 10	£1,947	£1,914	£1,872	£1,996	£1,872	£1,996	£124
SB16Z Procure Chemotherapy drugs for regimens not on the national list	£706	£685	£705	£744	£685	£744	£59
Delivery:							
SB11Z Deliver exclusively Oral Chemotherapy	£182	£177	£170	£160	£160	£182	£22
SB12Z Deliver simple Parenteral Chemotherapy at first attendance	£225	£217	£227	£207	£207	£227	£20
SB13Z Deliver more complex Parenteral Chemotherapy at first attendance	£285	£271	£280	£262	£262	£285	£23
SB14Z Deliver complex Chemotherapy, including prolonged infusional treatment at first attendance	£359	£325	£361	£332	£325	£361	£36
SB15Z Deliver subsequent elements of a Chemotherapy cycle	£314	£271	£288	£275	£271	£314	£43
SB17Z Deliver chemotherapy for regimens not on the national list	£265	£241	£257	£250	£241	£265	£24

Lowest value
Highest value

**2010/11 Chemotherapy Reference Costs
Potential Tariff Impact by Peer Group**

Org code	Organisation name	Peer Group	Costs declared in Ref Costs 2010/11				Potential Tariff Income (option 4 incl MFF)				
			Procurement	Delivery	Attendance	TOTAL	Procurement	Delivery	TOTAL	Gain/(Loss)	
RBV	THE CHRISTIE NHS FOUNDATION TRUST	1	£32.2m	£10.5m	£0.0m	£42.8m	£38.2m	£12.9m	£51.1m	£8.3m	19%
REN	CLATTERBRIDGE CENTRE FOR ONCOLOGY NHS FOUNDATION TRUST	1	£17.6m	£6.3m	£0.0m	£23.9m	£22.6m	£8.3m	£30.9m	£7.0m	29%
RYJ	IMPERIAL COLLEGE HEALTHCARE NHS TRUST	1	£9.3m	£2.2m	£1.4m	£12.9m	£21.4m	£7.5m	£28.9m	£16.0m	124%
RHQ	SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	1	£18.1m	£4.9m	£0.0m	£23.0m	£17.0m	£5.1m	£22.1m	£-0.8m	-4%
RPY	THE ROYAL MARSDEN NHS FOUNDATION TRUST	1	£22.5m	£6.8m	£0.0m	£29.3m	£18.4m	£7.9m	£26.3m	£-3.1m	-10%
RJ1	GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	1	£9.5m	£9.2m	£0.0m	£18.7m	£14.0m	£6.2m	£20.2m	£1.5m	8%
RTE	GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST	1	£15.1m	£2.2m	£0.0m	£17.3m	£11.5m	£4.3m	£15.8m	£-1.5m	-9%
RWH	EAST AND NORTH HERTFORDSHIRE NHS TRUST	1	£13.1m	£3.1m	£0.0m	£16.2m	£12.7m	£3.9m	£16.5m	£0.3m	2%
RXF	MID YORKSHIRE HOSPITALS NHS TRUST	1	£5.8m	£1.8m	£0.0m	£7.6m	£5.8m	£1.9m	£7.7m	£0.1m	2%
RWE	UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST	1	£8.1m	£3.6m	£0.8m	£12.4m	£8.8m	£3.2m	£12.1m	£-0.4m	-3%
RGT	CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	1	£12.2m	£2.5m	£0.0m	£14.7m	£8.6m	£3.2m	£11.8m	£-2.9m	-20%
RRK	UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST	1	£7.7m	£3.9m	£0.0m	£11.6m	£7.0m	£2.6m	£9.7m	£-2.0m	-17%
RR8	LEEDS TEACHING HOSPITALS NHS TRUST	1	£8.1m	£5.3m	£0.0m	£13.4m	£8.7m	£4.1m	£12.8m	£-0.5m	-4%
RTH	OXFORD RADCLIFFE HOSPITALS NHS TRUST	1	£11.8m	£4.7m	£0.0m	£16.6m	£9.4m	£3.1m	£12.5m	£-4.1m	-25%
RX1	NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST	1	£5.6m	£1.5m	£4.3m	£11.5m	£7.2m	£3.6m	£10.8m	£-0.6m	-6%
RTD	THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	1	£4.2m	£1.8m	£1.4m	£7.3m	£8.0m	£3.2m	£11.2m	£3.9m	53%
RR1	HEART OF ENGLAND NHS FOUNDATION TRUST	1	£5.9m	£1.8m	£0.0m	£7.6m	£7.5m	£2.8m	£10.3m	£2.6m	35%
RA2	ROYAL SURREY COUNTY HOSPITAL NHS FOUNDATION TRUST	1	£5.2m	£2.2m	£0.0m	£7.4m	£9.8m	£2.4m	£12.2m	£4.8m	64%
RRV	UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	1	£9.3m	£5.4m	£0.0m	£14.7m	£11.0m	£3.8m	£14.9m	£0.2m	1%
RNJ	BARTS AND THE LONDON NHS TRUST	1	£5.1m	£4.1m	£0.5m	£9.6m	£5.5m	£3.1m	£8.6m	£-1.0m	-10%
Sub-total, Peer Group 1			£226.3m	£83.9m	£8.3m	£318.5m	£253.2m	£93.1m	£346.3m	£27.7m	9%
RNS	NORTHAMPTON GENERAL HOSPITAL NHS TRUST	2	£2.6m	£0.8m	£1.0m	£4.4m	£7.8m	£1.5m	£9.4m	£5.0m	115%
RM1	NORFOLK AND NORWICH UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	2	£6.8m	£1.1m	£0.0m	£7.9m	£6.7m	£2.5m	£9.2m	£1.3m	17%
RTG	DERBY HOSPITALS NHS FOUNDATION TRUST	2	£7.7m	£1.9m	£0.0m	£9.5m	£7.4m	£2.1m	£9.5m	£-0.0m	-0%
RHU	PORTSMOUTH HOSPITALS NHS TRUST	2	£7.1m	£2.7m	£0.0m	£9.8m	£8.3m	£2.7m	£10.9m	£1.2m	12%
RC1	BEDFORD HOSPITAL NHS TRUST	2	£2.3m	£0.8m	£0.0m	£3.0m	£4.6m	£0.5m	£5.1m	£2.0m	67%
RH8	ROYAL DEVON AND EXETER NHS FOUNDATION TRUST	2	£7.6m	£1.4m	£0.0m	£9.0m	£5.1m	£1.9m	£7.1m	£-2.0m	-22%
RWD	UNITED LINCOLNSHIRE HOSPITALS NHS TRUST	2	£4.3m	£1.0m	£0.0m	£5.3m	£6.3m	£2.4m	£8.7m	£3.4m	63%
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST	2	£4.4m	£0.8m	£0.0m	£5.2m	£6.2m	£2.0m	£8.1m	£2.9m	55%
RHM	SOUTHAMPTON UNIVERSITY HOSPITALS NHS TRUST	2	£7.9m	£2.5m	£0.0m	£10.3m	£6.4m	£2.6m	£9.0m	£-1.4m	-13%
RWA	HULL AND EAST YORKSHIRE HOSPITALS NHS TRUST	2	£5.5m	£2.3m	£0.0m	£7.8m	£5.9m	£2.4m	£8.3m	£0.5m	7%
RVV	EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST	2	£7.0m	£1.8m	£0.0m	£8.8m	£5.4m	£2.4m	£7.7m	£-1.1m	-12%
RTR	SOUTH TEES HOSPITALS NHS FOUNDATION TRUST	2	£7.5m	£2.3m	£0.0m	£9.7m	£6.2m	£2.2m	£8.4m	£-1.3m	-14%
RVW	NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUST	2	£4.7m	£0.8m	£0.0m	£5.5m	£9.7m	£1.0m	£10.6m	£5.1m	93%
RJE	UNIVERSITY HOSPITAL OF NORTH STAFFORDSHIRE NHS TRUST	2	£4.8m	£2.0m	£0.9m	£7.7m	£4.9m	£2.2m	£7.1m	£-0.5m	-7%
RXW	SHREWSBURY AND TELFORD HOSPITAL NHS TRUST	2	£6.0m	£1.9m	£2.0m	£9.9m	£5.5m	£1.9m	£7.4m	£-2.5m	-26%

**2010/11 Chemotherapy Reference Costs
Potential Tariff Impact by Peer Group**

Org code	Organisation name	Peer Group	Costs declared in Ref Costs 2010/11				Potential Tariff Income (option 4 incl MFF)				
			Procurement	Delivery	Attendance	TOTAL	Procurement	Delivery	TOTAL	Gain/(Loss)	
RAJ	SOUTHEND UNIVERSITY HOSPITAL NHS FOUNDATION TRUST	2	£1.6m	£1.7m	£0.9m	£4.2m	£6.2m	£2.2m	£8.4m	£4.2m	100%
RA7	UNIVERSITY HOSPITALS BRISTOL NHS FOUNDATION TRUST	2	£9.3m	£2.4m	£0.3m	£12.0m	£5.4m	£2.5m	£7.9m	£-4.0m	-34%
RL4	THE ROYAL WOLVERHAMPTON HOSPITALS NHS TRUST	2	£3.9m	£1.4m	£0.0m	£5.3m	£4.5m	£1.9m	£6.4m	£1.1m	21%
Sub-total, Peer Group 2			£100.8m	£29.5m	£5.0m	£135.3m	£112.2m	£37.0m	£149.2m	£13.9m	10%
RK9	PLYMOUTH HOSPITALS NHS TRUST	3	£5.2m	£1.8m	£0.0m	£6.9m	£5.1m	£1.7m	£6.8m	£-0.1m	-2%
RXC	EAST SUSSEX HOSPITALS NHS TRUST	3	£1.7m	£0.8m	£0.0m	£2.5m	£4.3m	£1.1m	£5.4m	£2.8m	113%
RJL	NORTHERN LINCOLNSHIRE AND GOOLE HOSPITALS NHS FOUNDATION TRUST	3	£6.3m	£0.4m	£0.0m	£6.7m	£5.2m	£1.5m	£6.7m	£-0.0m	-0%
RNA	THE DUDLEY GROUP OF HOSPITALS NHS FOUNDATION TRUST	3	£3.4m	£1.3m	£0.0m	£4.6m	£4.7m	£1.7m	£6.3m	£1.7m	37%
RXK	SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST	3	£6.2m	£2.0m	£0.0m	£8.2m	£5.6m	£1.9m	£7.5m	£-0.8m	-9%
RDE	COLCHESTER HOSPITAL UNIVERSITY NHS FOUNDATION TRUST	3	£5.8m	£1.4m	£0.0m	£7.2m	£5.0m	£1.6m	£6.6m	£-0.6m	-9%
RKB	UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE NHS TRUST	3	£6.0m	£2.0m	£0.0m	£8.0m	£4.2m	£1.8m	£6.1m	£-1.9m	-24%
RLT	GEORGE ELIOT HOSPITAL NHS TRUST	3	£2.1m	£0.8m	£0.0m	£2.9m	£3.4m	£0.6m	£4.1m	£1.2m	42%
RTF	NORTHUMBRIA HEALTHCARE NHS FOUNDATION TRUST	3	£5.8m	£1.0m	£0.0m	£6.7m	£4.5m	£1.6m	£6.2m	£-0.6m	-9%
RF4	BARKING, HAVERING AND REDBRIDGE UNIVERSITY HOSPITALS NHS TRUST	3	£7.3m	£0.2m	£3.1m	£10.6m	£5.4m	£0.2m	£5.6m	£-5.0m	-47%
REF	ROYAL CORNWALL HOSPITALS NHS TRUST	3	£4.7m	£1.8m	£0.0m	£6.6m	£4.6m	£1.7m	£6.3m	£-0.2m	-4%
RYQ	SOUTH LONDON HEALTHCARE NHS TRUST	3	£3.7m	£1.0m	£1.9m	£6.6m	£4.8m	£0.9m	£5.7m	£-0.9m	-13%
RBA	TAUNTON AND SOMERSET NHS FOUNDATION TRUST	3	£2.5m	£2.7m	£0.8m	£6.1m	£4.4m	£0.8m	£5.2m	£-0.8m	-14%
RJF	BURTON HOSPITALS NHS FOUNDATION TRUST	3	£3.7m	£0.8m	£0.0m	£4.5m	£4.2m	£0.9m	£5.1m	£0.7m	15%
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST	3	£2.6m	£0.6m	£0.0m	£3.2m	£4.1m	£1.3m	£5.4m	£2.2m	66%
RCB	YORK TEACHING HOSPITAL NHS FOUNDATION TRUST	3	£3.8m	£0.0m	£0.1m	£3.9m	£4.6m	£0.0m	£4.6m	£0.7m	18%
RJC	SOUTH WARWICKSHIRE NHS FOUNDATION TRUST	3	£3.0m	£1.0m	£0.1m	£4.1m	£3.5m	£1.5m	£5.0m	£0.9m	21%
RXH	BRIGHTON AND SUSSEX UNIVERSITY HOSPITALS NHS TRUST	3	£5.9m	£2.1m	£0.0m	£8.1m	£5.5m	£1.5m	£7.0m	£-1.1m	-13%
RTX	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST	3	£5.4m	£1.2m	£0.0m	£6.6m	£3.6m	£1.3m	£4.9m	£-1.7m	-26%
RGQ	IPSWICH HOSPITAL NHS TRUST	3	£5.5m	£0.5m	£2.8m	£8.8m	£3.7m	£2.1m	£5.8m	£-3.0m	-34%
RBN	ST HELENS AND KNOWSLEY HOSPITALS NHS TRUST	3	£1.6m	£1.1m	£0.0m	£2.7m	£1.1m	£1.5m	£2.6m	£-0.1m	-4%
Sub-total, Peer Group 3			£92.1m	£24.5m	£8.8m	£125.5m	£91.5m	£27.3m	£118.8m	£-6.7m	-5%
RXQ	BUCKINGHAMSHIRE HEALTHCARE NHS TRUST	4	£4.8m	£0.4m	£0.0m	£5.2m	£4.5m	£1.4m	£5.9m	£0.7m	14%
RWF	MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST	4	£6.7m	£1.7m	£0.0m	£8.4m	£5.1m	£1.5m	£6.6m	£-1.7m	-21%
RWY	CALDERDALE AND HUDDERSFIELD NHS FOUNDATION TRUST	4	£4.3m	£1.2m	£0.0m	£5.4m	£3.3m	£1.4m	£4.7m	£-0.7m	-13%
RQ8	MID ESSEX HOSPITAL SERVICES NHS TRUST	4	£3.4m	£0.8m	£0.0m	£4.2m	£2.9m	£1.4m	£4.3m	£0.1m	1%
RW3	CENTRAL MANCHESTER UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	4	£3.3m	£0.5m	£1.5m	£5.3m	£2.6m	£0.8m	£3.4m	£-1.9m	-36%
RWP	WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST	4	£4.4m	£1.1m	£0.0m	£5.6m	£3.0m	£1.1m	£4.2m	£-1.4m	-26%
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST	4	£2.9m	£2.2m	£0.0m	£5.2m	£3.1m	£1.1m	£4.2m	£-1.0m	-18%
RXP	COUNTY DURHAM AND DARLINGTON NHS FOUNDATION TRUST	4	£6.0m	£1.0m	£0.0m	£6.9m	£3.0m	£1.1m	£4.1m	£-2.8m	-40%
RD3	POOLE HOSPITAL NHS FOUNDATION TRUST	4	£2.8m	£1.1m	£0.0m	£3.8m	£2.9m	£1.2m	£4.1m	£0.3m	7%

**2010/11 Chemotherapy Reference Costs
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			Procurement	Delivery	Attendance	TOTAL	Procurement	Delivery	TOTAL	Gain/(Loss)	
RCF	AIREDALE NHS FOUNDATION TRUST	4	£2.8m	£0.9m	£0.0m	£3.6m	£2.2m	£1.1m	£3.3m	£-0.3m	-9%
RA9	SOUTH DEVON HEALTHCARE NHS FOUNDATION TRUST	4	£2.3m	£1.3m	£0.0m	£3.6m	£2.8m	£1.0m	£3.9m	£0.3m	7%
RJ7	ST GEORGE'S HEALTHCARE NHS TRUST	4	£3.1m	£1.8m	£0.0m	£4.9m	£3.7m	£1.5m	£5.1m	£0.2m	4%
RV8	NORTH WEST LONDON HOSPITALS NHS TRUST	4	£2.9m	£1.0m	£0.2m	£4.1m	£3.2m	£1.4m	£4.6m	£0.5m	13%
RGP	JAMES PAGET UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	4	£2.0m	£0.9m	£0.0m	£2.8m	£2.4m	£1.1m	£3.5m	£0.6m	22%
RLN	CITY HOSPITALS SUNDERLAND NHS FOUNDATION TRUST	4	£2.3m	£1.2m	£0.0m	£3.5m	£2.7m	£0.5m	£3.2m	£-0.4m	-10%
RDZ	THE ROYAL BOURNEMOUTH AND CHRISTCHURCH HOSPITALS NHS FOUNDATION TRUST	4	£4.1m	£1.2m	£0.0m	£5.3m	£2.2m	£1.2m	£3.5m	£-1.8m	-34%
RN1	WINCHESTER AND EASTLEIGH HEALTHCARE NHS TRUST	4	£2.2m	£1.1m	£0.0m	£3.3m	£2.2m	£1.2m	£3.4m	£0.1m	3%
RTP	SURREY AND SUSSEX HEALTHCARE NHS TRUST	4	£1.8m	£1.1m	£0.0m	£2.9m	£2.1m	£1.2m	£3.2m	£0.4m	13%
Sub-total, Peer Group 4			£61.8m	£20.4m	£1.8m	£84.1m	£54.0m	£21.2m	£75.2m	£-8.9m	-11%
RHW	ROYAL BERKSHIRE NHS FOUNDATION TRUST	5	£2.2m	£1.3m	£0.0m	£3.4m	£2.0m	£0.9m	£2.9m	£-0.5m	-15%
RAP	NORTH MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST	5	£2.8m	£0.8m	£0.0m	£3.5m	£3.4m	£1.2m	£4.6m	£1.1m	31%
RNQ	KETTERING GENERAL HOSPITAL NHS FOUNDATION TRUST	5	£2.3m	£0.7m	£0.0m	£3.0m	£2.6m	£0.9m	£3.5m	£0.5m	17%
RN3	GREAT WESTERN HOSPITALS NHS FOUNDATION TRUST	5	£2.7m	£0.8m	£2.0m	£5.5m	£3.2m	£1.0m	£4.2m	£-1.3m	-23%
RNL	NORTH CUMBRIA UNIVERSITY HOSPITALS NHS TRUST	5	£3.6m	£0.7m	£0.3m	£4.5m	£2.9m	£1.0m	£4.0m	£-0.5m	-12%
RAE	BRADFORD TEACHING HOSPITALS NHS FOUNDATION TRUST	5	£1.8m	£0.8m	£0.0m	£2.6m	£2.6m	£1.1m	£3.8m	£1.2m	46%
RGR	WEST SUFFOLK HOSPITALS NHS TRUST	5	£2.7m	£0.9m	£0.0m	£3.6m	£2.4m	£0.8m	£3.1m	£-0.4m	-12%
RBK	WALSALL HEALTHCARE NHS TRUST	5	£3.3m	£0.7m	£0.0m	£4.0m	£3.0m	£0.9m	£3.9m	£-0.1m	-4%
RGN	PETERBOROUGH AND STAMFORD HOSPITALS NHS FOUNDATION TRUST	5	£2.2m	£0.6m	£0.7m	£3.5m	£2.3m	£1.0m	£3.3m	£-0.3m	-7%
RCD	HARROGATE AND DISTRICT NHS FOUNDATION TRUST	5	£2.4m	£0.7m	£0.0m	£3.1m	£2.3m	£0.6m	£2.8m	£-0.2m	-7%
RYR	WESTERN SUSSEX HOSPITALS NHS TRUST	5	£1.4m	£3.6m	£0.0m	£5.0m	£2.9m	£1.1m	£3.9m	£-1.1m	-23%
SQT	ISLE OF WIGHT NHS PCT	5	£1.7m	£0.4m	£0.0m	£2.1m	£1.9m	£1.0m	£2.9m	£0.8m	37%
RCX	THE QUEEN ELIZABETH HOSPITAL, KING'S LYNN. NHS FOUNDATION TRUST	5	£3.1m	£0.4m	£0.3m	£3.8m	£2.6m	£0.9m	£3.4m	£-0.4m	-10%
RJD	MID STAFFORDSHIRE NHS FOUNDATION TRUST	5	£3.5m	£0.7m	£0.0m	£4.2m	£2.3m	£0.9m	£3.2m	£-1.1m	-25%
RR7	GATESHEAD HEALTH NHS FOUNDATION TRUST	5	£2.9m	£0.5m	£0.0m	£3.4m	£2.1m	£0.9m	£3.1m	£-0.3m	-9%
RAL	ROYAL FREE HAMPSTEAD NHS TRUST	5	£2.6m	£1.4m	£0.0m	£4.0m	£1.8m	£1.2m	£3.0m	£-1.0m	-25%
RNZ	SALISBURY NHS FOUNDATION TRUST	5	£2.8m	£0.6m	£0.0m	£3.4m	£0.6m	£0.9m	£1.5m	£-1.9m	-56%
RD7	HEATHERWOOD AND WEXHAM PARK HOSPITALS NHS FOUNDATION TRUST	5	£2.9m	£1.0m	£0.0m	£3.9m	£0.6m	£1.1m	£1.7m	£-2.2m	-56%
RQW	THE PRINCESS ALEXANDRA HOSPITAL NHS TRUST	5	£1.1m	£2.6m	£0.0m	£3.7m	£0.3m	£1.1m	£1.3m	£-2.4m	-64%
Sub-total, Peer Group 5			£47.8m	£19.2m	£3.3m	£70.3m	£41.7m	£18.4m	£60.1m	£-10.2m	-14%
RBZ	NORTHERN DEVON HEALTHCARE NHS TRUST	6	£3.1m	£0.7m	£0.4m	£4.3m	£2.8m	£0.7m	£3.5m	£-0.8m	-19%
RW6	PENNINE ACUTE HOSPITALS NHS TRUST	6	£1.6m	£0.6m	£0.2m	£2.3m	£2.3m	£0.7m	£3.0m	£0.7m	29%
RD1	ROYAL UNITED HOSPITAL BATH NHS TRUST	6	£2.9m	£1.0m	£0.1m	£4.0m	£2.6m	£0.8m	£3.4m	£-0.6m	-15%
RPA	MEDWAY NHS FOUNDATION TRUST	6	£1.5m	£0.9m	£1.4m	£3.8m	£2.1m	£0.8m	£2.9m	£-1.0m	-25%
RLQ	WYE VALLEY NHS TRUST	6	£1.1m	£0.6m	£0.1m	£1.8m	£1.0m	£0.6m	£1.6m	£-0.2m	-9%

**2010/11 Chemotherapy Reference Costs
Potential Tariff Impact by Peer Group**

Org code	Organisation name	Peer Group	Costs declared in Ref Costs 2010/11				Potential Tariff Income (option 4 incl MFF)				
			Procurement	Delivery	Attendance	TOTAL	Procurement	Delivery	TOTAL	Gain/(Loss)	
RCU	SHEFFIELD CHILDREN'S NHS FOUNDATION TRUST	6	£0.8m	£1.0m	£0.0m	£1.9m	£2.1m	£0.6m	£2.7m	£0.9m	48%
RBD	DORSET COUNTY HOSPITAL NHS FOUNDATION TRUST	6	£0.5m	£0.5m	£0.0m	£1.0m	£1.7m	£0.7m	£2.4m	£1.4m	143%
RTK	ASHFORD AND ST PETER'S HOSPITALS NHS FOUNDATION TRUST	6	£0.3m	£0.3m	£0.0m	£0.7m	£2.1m	£0.3m	£2.4m	£1.8m	268%
RC9	LUTON AND DUNSTABLE HOSPITAL NHS FOUNDATION TRUST	6	£2.7m	£0.0m	£0.0m	£2.8m	£1.8m	£0.0m	£1.8m	£-0.9m	-34%
RA4	YEOVIL DISTRICT HOSPITAL NHS FOUNDATION TRUST	6	£1.8m	£0.8m	£0.0m	£2.6m	£1.5m	£0.7m	£2.1m	£-0.5m	-19%
RCC	SCARBOROUGH AND NORTH EAST YORKSHIRE HEALTH CARE NHS TRUST	6	£1.0m	£0.2m	£0.2m	£1.3m	£1.4m	£0.6m	£1.9m	£0.6m	45%
RVL	BARNET AND CHASE FARM HOSPITALS NHS TRUST	6	£3.0m	£0.6m	£0.0m	£3.6m	£2.1m	£0.6m	£2.7m	£-0.9m	-25%
RRF	WRIGHTINGTON, WIGAN AND LEIGH NHS FOUNDATION TRUST	6	£1.4m	£0.7m	£0.2m	£2.3m	£1.0m	£0.5m	£1.4m	£-0.9m	-38%
RD8	MILTON KEYNES HOSPITAL NHS FOUNDATION TRUST	6	£1.4m	£0.8m	£0.9m	£3.1m	£1.1m	£0.5m	£1.6m	£-1.4m	-46%
RN7	DARTFORD AND GRAVESHAM NHS TRUST	6	£0.5m	£0.4m	£0.5m	£1.5m	£1.5m	£0.5m	£2.0m	£0.5m	34%
RE9	SOUTH TYNESIDE NHS FOUNDATION TRUST	6	£2.1m	£0.3m	£0.0m	£2.3m	£1.4m	£0.4m	£1.8m	£-0.5m	-22%
RJZ	KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	6	£1.1m	£1.0m	£0.0m	£2.1m	£0.9m	£0.8m	£1.7m	£-0.4m	-19%
RWG	WEST HERTFORDSHIRE HOSPITALS NHS TRUST	6	£1.1m	£0.4m	£0.0m	£1.5m	£0.8m	£0.5m	£1.3m	£-0.2m	-12%
RA3	WESTON AREA HEALTH NHS TRUST	6	£0.7m	£0.7m	£0.0m	£1.4m	£0.0m	£0.5m	£0.5m	£-0.9m	-66%
RN5	BASINGSTOKE AND NORTH HAMPSHIRE NHS FOUNDATION TRUST	6	£0.0m	£0.0m	£2.8m	£2.8m	£0.0m	£0.0m	£0.0m	£-2.8m	-100%
Sub-total, Peer Group 6			£28.8m	£11.4m	£6.8m	£47.1m	£30.2m	£10.7m	£40.9m	£-6.1m	-13%
RVY	SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST	7	£1.7m	£0.2m	£0.0m	£1.8m	£1.2m	£0.3m	£1.4m	£-0.4m	-22%
RFF	BARNSLEY HOSPITAL NHS FOUNDATION TRUST	7	£1.3m	£0.1m	£0.0m	£1.4m	£0.9m	£0.1m	£1.0m	£-0.4m	-28%
RQ6	ROYAL LIVERPOOL AND BROADGREEN UNIVERSITY HOSPITALS NHS TRUST	7	£0.7m	£0.4m	£0.1m	£1.2m	£1.6m	£0.4m	£2.0m	£0.7m	60%
REM	AINTREE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	7	£1.7m	£0.2m	£0.0m	£1.9m	£2.3m	£0.2m	£2.4m	£0.5m	27%
RBT	MID CHESHIRE HOSPITALS NHS FOUNDATION TRUST	7	£0.9m	£0.5m	£0.3m	£1.8m	£0.7m	£0.4m	£1.1m	£-0.6m	-37%
RQQ	HINCHINGBROOKE HEALTH CARE NHS TRUST	7	£1.6m	£0.4m	£0.8m	£2.8m	£1.3m	£0.4m	£1.7m	£-1.1m	-39%
RDU	FRIMLEY PARK HOSPITAL NHS FOUNDATION TRUST	7	£1.6m	£0.5m	£0.0m	£2.1m	£1.3m	£0.4m	£1.7m	£-0.3m	-16%
RP5	DONCASTER AND BASSETLAW HOSPITALS NHS FOUNDATION TRUST	7	£1.5m	£0.2m	£0.0m	£1.7m	£0.9m	£0.3m	£1.2m	£-0.5m	-27%
RBL	WIRRAL UNIVERSITY TEACHING HOSPITAL NHS FOUNDATION TRUST	7	£1.7m	£0.5m	£0.0m	£2.2m	£1.2m	£0.4m	£1.7m	£-0.6m	-26%
RKE	THE WHITTINGTON HOSPITAL NHS TRUST	7	£1.1m	£0.9m	£0.0m	£2.1m	£1.1m	£0.4m	£1.5m	£-0.6m	-28%
RNH	NEWHAM UNIVERSITY HOSPITAL NHS TRUST	7	£0.8m	£0.3m	£0.0m	£1.1m	£0.9m	£0.3m	£1.2m	£0.1m	10%
RBS	ALDER HEY CHILDREN'S NHS FOUNDATION TRUST	7	£0.3m	£0.5m	£0.0m	£0.8m	£0.4m	£0.4m	£0.8m	£-0.0m	-5%
RQ3	BIRMINGHAM CHILDREN'S HOSPITAL NHS FOUNDATION TRUST	7	£1.8m	£1.0m	£0.0m	£2.8m	£0.3m	£0.3m	£0.6m	£-2.2m	-79%
RDD	BASILDON AND THURROCK UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	7	£0.0m	£0.4m	£0.1m	£0.5m	£0.0m	£0.4m	£0.4m	£-0.0m	-7%
RP4	GREAT ORMOND STREET HOSPITAL FOR CHILDREN NHS TRUST	7	£0.0m	£0.9m	£0.0m	£1.0m	£0.0m	£0.5m	£0.5m	£-0.5m	-51%
RM2	UNIVERSITY HOSPITAL OF SOUTH MANCHESTER NHS FOUNDATION TRUST	7	£0.0m	£0.0m	£0.5m	£0.5m	£0.0m	£0.0m	£0.0m	£-0.5m	-100%
RVR	EPSOM AND ST HELIER UNIVERSITY HOSPITALS NHS TRUST	7	£0.0m	£0.0m	£0.1m	£0.1m	£0.0m	£0.0m	£0.0m	£-0.1m	-100%
RFW	WEST MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST	7	£0.0m	£0.0m	£0.5m	£0.5m	£0.0m	£0.0m	£0.0m	£-0.5m	-100%
Sub-total, Peer Group 7			£16.8m	£6.9m	£2.6m	£26.4m	£14.0m	£5.3m	£19.3m	£-7.1m	-27%

**2010/11 Chemotherapy Reference Costs
Potential Tariff Impact by Peer Group**

Org code	Organisation name	Peer Group	Costs declared in Ref Costs 2010/11				Potential Tariff Income (option 4 incl MFF)				
			Procurement	Delivery	Attendance	TOTAL	Procurement	Delivery	TOTAL	Gain/(Loss)	
RJR	COUNTESS OF CHESTER HOSPITAL NHS FOUNDATION TRUST	8	£0.9m	£0.2m	£0.0m	£1.1m	£1.5m	£0.2m	£1.7m	£0.6m	60%
RAX	KINGSTON HOSPITAL NHS TRUST	8	£0.8m	£1.0m	£0.3m	£2.1m	£0.4m	£0.2m	£0.6m	£-1.5m	-71%
RFS	CHESTERFIELD ROYAL HOSPITAL NHS FOUNDATION TRUST	8	£0.8m	£0.2m	£0.0m	£1.0m	£0.6m	£0.2m	£0.7m	£-0.3m	-30%
RM3	SALFORD ROYAL NHS FOUNDATION TRUST	8	£0.8m	£0.1m	£0.0m	£0.9m	£0.7m	£0.2m	£1.0m	£0.0m	5%
RC3	EALING HOSPITAL NHS TRUST	8	£0.9m	£0.2m	£0.0m	£1.1m	£0.5m	£0.2m	£0.7m	£-0.4m	-40%
RVJ	NORTH BRISTOL NHS TRUST	8	£0.2m	£0.1m	£0.2m	£0.4m	£0.8m	£0.3m	£1.1m	£0.7m	175%
RJ6	CROYDON HEALTH SERVICES NHS TRUST	8	£0.6m	£0.4m	£0.1m	£1.1m	£0.3m	£0.2m	£0.5m	£-0.6m	-57%
RJ2	LEWISHAM HEALTHCARE NHS TRUST	8	£0.1m	£0.0m	£0.0m	£0.2m	£0.6m	£0.2m	£0.8m	£0.7m	370%
RGC	WHIPPS CROSS UNIVERSITY HOSPITAL NHS TRUST	8	£0.5m	£0.3m	£0.2m	£1.0m	£0.6m	£0.3m	£1.0m	£-0.0m	-2%
RMC	ROYAL BOLTON HOSPITAL NHS FOUNDATION TRUST	8	£0.3m	£0.4m	£0.0m	£0.7m	£0.3m	£0.1m	£0.4m	£-0.3m	-42%
RAS	THE HILLINGDON HOSPITAL NHS TRUST	8	£0.4m	£0.2m	£0.0m	£0.6m	£0.4m	£0.1m	£0.6m	£-0.1m	-11%
RM4	TRAFFORD HEALTHCARE NHS TRUST	8	£0.1m	£0.3m	£0.0m	£0.4m	£0.1m	£0.1m	£0.2m	£-0.2m	-57%
RFR	THE ROTHERHAM NHS FOUNDATION TRUST	8	£0.1m	£0.8m	£0.0m	£1.0m	£0.1m	£0.1m	£0.2m	£-0.7m	-76%
RMP	TAMESIDE HOSPITAL NHS FOUNDATION TRUST	8	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£0.1m	£0.1m	£0.0m	103%
RWJ	STOCKPORT NHS FOUNDATION TRUST	8	£0.0m	£0.1m	£0.0m	£0.1m	£0.0m	£0.1m	£0.1m	£-0.0m	-20%
RQM	CHELSEA AND WESTMINSTER HOSPITAL NHS FOUNDATION TRUST	8	£0.0m	£0.0m	£0.4m	£0.4m	£0.0m	£0.0m	£0.0m	£-0.4m	-100%
RJN	EAST CHESHIRE NHS TRUST	8	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£0.0m	£-0.0m	-100%
RWW	WARRINGTON AND HALTON HOSPITALS NHS FOUNDATION TRUST	8	£0.0m	£0.0m	£0.1m	£0.1m	£0.0m	£0.0m	£0.0m	£-0.1m	-100%
Sub-total, Peer Group 8			£6.5m	£4.3m	£1.3m	£12.2m	£7.0m	£2.6m	£9.6m	£-2.6m	-21%
Grand Total			£581.1m	£200.2m	£38.1m	£819.3m	£603.7m	£215.6m	£819.3m	£0.0m	

Excerpt from Bailey & Moore Report – June 2011 (Chapter 3)

3 Counting and recording activity**Introduction**

3.1 Tables 2 and 3 in the previous section show the variation in the activity data reported for reference costs, which implies that there is an inconsistency in the counting and recording of activity. Based on the observations from the data tables, combined with the conclusions drawn from the radiotherapy exercise, certain factors seem likely to be relevant to these variances.

Use of regimens in chemotherapy

3.2 Chemotherapy services are unique in that they are driven by a nationally agreed set of protocols for the delivery of services. This would imply that the opportunity for variance in means of treatment is significantly reduced, and thus a higher level of consistency in both counting and costing would be expected.

3.3 In reality, this does not seem to be the case and regimens appear to increase the likelihood of problems with data capture. This is supported by the anomalies in the RC data – suggesting that either provider systems do not readily support the collection of activity in this way or regimens are subject to a wider degree of variance in local application than would be expected (which seems unlikely).

3.4 Regimens can contain any number of cycles, and each cycle can contain one or more deliveries within that cycle. The HRG applicable will depend on:

- The regimen(s) for treatment
- Whether the treatment is the start of a new cycle within the regimen (first attendance), or a continuation of an existing cycle (subsequent attendance)

3.5 In the procurement of drugs, Trust pharmacy systems would be capable of capturing information on the ordering of supplies and the dispensing of drugs, but not necessarily the relevant chemotherapy regimen or the point within the cycle. Both of these pieces of information would need to be captured in order to code the procurement of the drug and generate the correct procurement HRG.

3.6 For the delivery HRGs, Trust PAS systems would need to record the chemotherapy delivery against the patient spell or attendance. This would ensure the activity was not coded as, for example, a medical oncology outpatient which would be reported as part of outpatients rather than as chemotherapy activity.

3.7 A likely example of this is shown in the activity reported under SB11Z (delivery of exclusively oral chemotherapy) for providers in peer group 1:

Table 4: Highest and lowest numbers of cycles procured under HRG SB11Z in peer group 1

Provider	Cycles
South Tees NHS FT	13
Royal Surrey County NHS FT	8,732

Excerpt from Bailey & Moore Report – June 2011 (Chapter 3)

- 3.8 Comparing the level of activity reported by South Tees, the lowest in peer group 1, to that of the highest activity in peer group 1 (Royal Surrey County), it seems unlikely that only 13 deliveries of oral chemotherapy were undertaken. The most likely explanation would be that these have been miscoded as outpatients or day attenders, and therefore excluded from chemotherapy activity and costs.

Mapping of regimens to HRG bands

- 3.9 In order to facilitate a consistent approach to assigning chemotherapy regimens to the correct HRG, the Information Centre began publishing a national mapping of regimens to HRGs. Responsibility for the maintenance of this list has now passed to the Department of Health Payment by Results team, who also provide a portal whereby providers can submit regimens that cannot be matched to the list. They will then be considered for addition to the list in the next iteration.
- 3.10 The list has expanded considerably over the past 3 years and is one of the most important tools that will help providers consistently identify the correct HRG for the treatment undertaken. It is unclear, however, what proportion of each provider's activity can be readily matched to the list, i.e. what degree of local variation there is from national regimens.
- 3.11 If a provider cannot match its treatment regimen to the national list, the coder should use an "unspecified" code which will generate a HRG for regimens not on the national list. However, it would be undesirable to have large amounts of activity recorded as such.
- 3.12 From previous experience of costing chemotherapy regimens, there is some evidence of costing anomalies within the bands – i.e. where regimens with lower drug costs are assigned to higher cost bands by the national regimen list. However, the spread of national average unit costs by each HRG would suggest that this is not material nationally.
- 3.13 It will be important, however, to ensure that the list is maintained on a regular basis. This is so as to ensure that:
- The assignments of regimens to bands keeps pace with changing drug costs, particularly where relatively expensive therapies come off trial
 - Requests for new regimens to be considered can be handled promptly and added to the national list where appropriate.

Excerpt from Bailey & Moore Report – June 2011 (Chapter 4)**4 Variations in costs****Introduction**

- 4.1 During the review of radiotherapy costing, many providers reported well-developed costing processes in place, including service level reporting and patient level costing. However, this was not always evidenced by the results of the benchmarking of reference costs and this is equally applicable to chemotherapy.
- 4.2 There were also a number of providers that described fairly rudimentary methodologies for costing using the basic “top-down approach” output from their costing system.
- 4.3 More broadly, it was observed that the variation in the quality and robustness of costing appeared to be largely dependent on the level of resources that providers put into costing in general, and service level costing in particular. Furthermore, good quality costing depends on the close working between:
- The service managers and their staff
 - Business/management accountants for cancer services
 - The individual or department leading the production of reference costs

Each of the 3 departments need to work carefully and closely together to ensure that the input of data and knowledge is sufficient and that the outputs are consistent. Recent initiatives to promote patient level costing and service line reporting have improved these links in many providers, but there were other cases where working did not seem to be joined up.

- 4.4 Some specific issues that may affect chemotherapy costing are set out below.

Procurement of drugs

- 4.5 There may be significant differences in the prices paid for certain drugs by individual providers, for example, depending on the volume purchased (availability of bulk discounts). Where drugs are procured from a private sector supplier, there may be a facilities charge or difficulties identifying chemotherapy drugs from within a large invoice.
- 4.6 Providers will also need to add on costs to the drug costs, such as pharmacy staff time, storage and despatch costs which may be difficult to identify. Providers will also need to ensure that the cost of wastage and returns are correctly attributed to chemotherapy costs rather than pooled and allocated within overheads.

Non-chemotherapy drugs and supportive therapies

- 4.7 Several chemotherapy regimens include non-chemotherapy drugs, such as:
- Hormonal therapies
 - Biological therapies
 - Supportive therapies

Excerpt from Bailey & Moore Report – June 2011 (Chapter 4)

- 4.8 Such drugs may also be prescribed alongside a regimen of chemotherapy whilst not being formally part of the regimen, e.g. to deal with the side effects of chemotherapy. Many of the supportive drugs, such as antihistamines or anti-emetics, will not have a material cost implication. However, others such as granulocyte-colony stimulating factors (G-CSF) or bisphosphonates, may result in significant costs.
- 4.9 A review of the coding guidance and the reference costs guidance indicates some inconsistency in how supportive therapy drugs are to be coded and costed:
- Reference costs guidance states that the costs of **all** supportive drugs are attributed to chemotherapy procurement, even when delivered without chemotherapy, **whereas**
 - The OPCS coding guidance states that supportive therapies are coded separately as non-chemotherapy drug administration (e.g. infusion of therapeutic substance) if they are not delivered in the same attendance as chemotherapy treatment.
- 4.10 Following the OPCS coding guidance, the costs of supportive therapy drugs that were delivered separately from an attendance for chemotherapy would need to be manually added to the chemotherapy cost pool for the purposes of reference costs.
- 4.11 In addition, under reference cost guidance, the treatment of costs of hormonal therapies is not the same as for supportive therapies. These are only included in chemotherapy costs if they are an intrinsic part of the regimen. No specific guidance is provided for biological therapies.

Staff costs

- 4.12 Providers may have issues in the allocation of medical time when costing, because job plans may not be available, accurately documented and/or medical staff often combine a number of different activities in a single PA. In some cases, medical time may be treated as an overhead and thus allocated over all cancer services, such as surgery, radiotherapy and chemotherapy.
- 4.13 The skill mix of medical staff, between consultants and other grades, will vary between providers and may be a component of the variation of costs between providers.

Apportioning costs and offsetting income

- 4.14 There is evidently a risk that fundamental errors in costing methodology will occur if the principles of the NHS Costing Manual are not followed carefully.
- 4.15 Allocation of direct costs will need to be undertaken if the facility/unit used for the delivery of chemotherapy is also used for non-chemotherapy activity, e.g. blood transfusions, to ensure chemotherapy costs are not overstated.
- 4.16 Apportionment of overheads should be carried out as prescribed by the costing manual using reasonable bases of apportionment to ensure chemotherapy costs reflect their fair share of provider overheads.
- 4.17 Contributions from other income, such as private patients' and R&D, will reduce the total cost pool attributed to chemotherapy. The extent to which this is available will vary from provider to provider so will have an impact on the variation of costs.

Excerpt from Bailey & Moore Report – June 2011 (Chapter 5)

5 Recommendations for next steps

Introduction

5.1 In order to prepare for the transition to a national tariff, the key aims of the project could be defined as follows:

- Trusts should be able to code and count activity accurately
- Trusts should have a robust costing process
- Trusts should understand key cost drivers
- Existing guidance should be developed to provide full support to chemotherapy Trusts and highlight solutions to known difficulties
- Commissioning arrangements must be fit for purpose
- Feedback from the project should be shared with the PbR Team

Discussions with Trusts

5.2 In order to fully understand the reasons for variances and the underlying difficulties perceived by Trusts, it is recommended that a sample of Trusts should be identified and meetings arranged to:

- Discuss how to ensure a consistent and accurate approach to counting activity
- Promote a robust costing methodology, in line with national standards
- Gain an overview of the significant factors that make each Trust's costs vary compared to their peers
- Assess any particular difficulties encountered when costing chemotherapy and identify ways to address these
- Identify examples of best practice and practical solutions and communicate these widely
- Ask for views regarding what further support Trusts would find useful from NCAT in the future

5.3 Meetings could also include a discussion of the Trust's 2009/10 Reference Costs data compared to their peers to identify local understanding of variances.

5.4 Key attendees would be chemotherapy managers, finance leads and reference cost leads to explore and understand the issues mentioned above. Local Cancer Network Directors and SHA leads could also be invited to give a strategic overview.

Excerpt from Bailey & Moore Report – June 2011 (Chapter 5)

Identifying a sample group of Trusts

- 5.5 To maximise the benefit from the meetings recommended above, the sample of Trusts could be drawn as follows:
- From within peer groups 1-3 as these demonstrate the least variation, plus
 - 1-2 Trusts within peer groups 4-6 to gain an understanding of issues that may specifically affect smaller Trusts
 - Trusts whose reference costs are demonstrably in line with national and peer group averages
 - A sample from those Trusts using CPORT.

Providing feedback to Trusts

- 5.6 The outcome of the meetings would be to develop the existing guidance to provide solutions and advice on key costing and counting issues, so as to prepare Trusts for the introduction of a national currency and/or tariff.
- 5.7 This could also include the sharing of benchmarking data so Trusts can assess their position against peer group and national averages. This would aim to reduce variances in reported costs by encouraging Trust to explore the reasons why their data may appear to be an outlier.

Providing feedback to PbR team

- 5.8 Following discussions with Trusts, a summary of the key issues, along with recommendations, should be sent to the PbR team. This would detail how any tariff structure could be adapted so that the issues raised in meetings with Trusts do not adversely affect provision of the service.
- 5.9 To provide additional feedback, a small group of pilot sites, selected from across all peer groups, could be formed to “road test” an indicative tariff, based on average reference costs.