



2009-10 Reference Costs data

Frequently Asked Questions



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Q1. Are the 2009-10 Reference Costs data directly comparable with the 2008-09 Reference Costs data?

Changes to (i) currencies (e.g. HRG), (ii) Treatment Function Codes (TFCs), (iii) trimpoints and (iv) Reference Costs guidance may mean that the data are not directly comparable.

Appendix 6 of the Reference Costs 2009-10: Collection Guidance document summarises the changes between the two years. It's available on the Department's website -

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_112590.

The Information Centre for Health and Social Care (IC) also publishes documents on the comparability of the HRG based data. Please refer to the - 'HRG4 2009/10 Reference Costs Grouper Roots Document' and 'HRG4 2009/10 Reference Cost Grouper Summary of Changes'. Both of which are available on the IC's website – <http://www.ic.nhs.uk/services/the-casemix-service/using-this-service/reference/archived--past-groupers-and-documentation/costing/hrg4-2009-10-reference-costs-grouper-documentation>

Q2. How are the Reference Costs trimpoints calculated?

The trimpoints used for the 2009-10 Reference Costs are calculated by using 2008-09 Hospital Episode Statistics (HES) data. The trimpoints are calculated as follows:

Trimpoint = Upper Quartile + (1.5 * Inter Quartile Range)

The trimpoints are calculated on a FCE basis and there is one trimpoint for both elective and non-elective long stay.

The trimpoints used for the PbR tariff are different to those used for Reference Costs. Tariff trimpoint are calculated on a spell level and reflect the structure of the tariff.

Q3. What does the "National average unit cost" refer to?

Reference costs collects activity and unit costs from organisations for various services. The unit cost are weighted by the activity and then a national weighted average is calculated. They are not adjusted by the Market Forces Factor (MFF) and outliers are not excluded – the data are shown as reported.

Q4. How can the mean be lower/higher than both quartiles?

The schedules published on the Department's website show "lower quartiles", "upper quartiles" and "National average" costs. The "National average" cost is calculated by using the mean (total cost divided by the total activity). If the "National average" cost was based on the median (the middle value – with the

unit costs arranged in ascending order) rather than the mean, then this apparent issue would not exist.

As shown in the example below, if one organisation has a high proportion of the activity, their figures will make up the lower quartile, the median and also the upper quartile. However, the mean takes account of all organisations' data and therefore can give a figure, which is not within the lower and upper quartiles. Therefore, the mean (£529) can lie outside the lower and upper quartiles (£600).

	Unit Cost	Activity	Total Cost
Trust A	£100	1	£100
Trust B	£600	6	£3,600
Mean	£529	7	£3,700

Unit Cost	
£100	
£600	Lower quartile
£600	
£600	
£600	
£600	Upper quartile
£600	
£600	

Q5. How is the Reference Costs Index (RCI) calculated and what's included in it?

The RCI is an index of relative efficiency. Organisations with lower RCIs are estimated to be more efficient than organisations with higher RCIs, based on submitted Reference Costs data.

The RCI is calculated by dividing the actual cost by the expected cost. The expected cost is calculated by multiplying the national average unit cost for the organisation type by the organisation's activity. Organisations are compared against other similar organisations (i.e. Trusts are compared against Trusts and PCTs against PCTs). The National average unit cost figures are available on the Department's website:
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_123459
 (see spreadsheet - NSRC1 for Trusts and NSRC2 for PCTs. Please note that the national average unit cost figures used for Elective Inpatient and Daycase are based on combined Elective Inpatient and Daycase data. These national average unit costs can be calculated from the data in the spreadsheets mentioned above. Alternatively, they are also shown in the csv data file – also available on the Department's website:
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_123448.)

The RCI is based on all data, with the exception of (i) commissioned and contracted out services, and (ii) UZ01Z and WD HRG codes.

Q6. Which MFF figures have been used for the 2009-10 RCIs?

The MFF figures as published on the Department's Exposition book 2011-12 have been used. These are available on the Department's website: (http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_124952.zip). See column I in the 'MFF' sheet.

These MFF values are then scaled to maintain the quantum of Reference Costs. For a detailed explanation of this calculation please see Annex D of the PbR and the Market Forces Factor Technical Paper – available on the Department's website:

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_095351.pdf. The scaled MFF figures are published on the Department's website alongside the RCIs: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_123454.xls

Q7. How does this Reference Cost data link to the Payment by Results tariff?

Reference Costs data is a collection of costs data. It is used for a variety of purposes - including to calculate the PbR tariff. It is anticipated that the 2009-10 Reference Costs will underpin the 2012-13 tariff.

A series of adjustments are made to the Reference Costs data to reflect the scope and structure of the tariff. These adjustments are explained in greater detail in the Step by Step Guide: Calculating the 2011-12 National Tariff – available on the Department's website -

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_125315

Q8. Have the actual cost and expected cost figures in the csv files been MFF adjusted?

No, the figures shown in the csv files are as collected in Reference Costs. The figures have not been MFF adjusted.

Q9. How have the expected costs for Elective Inpatient and Daycase been calculated in the csv data file?

The expected costs shown for Elective Inpatients and for Daycase are combined. This is how the RCIs are calculated and is also in line with the Payment by Results tariff. Please note that the schedules published on the Department's website show separate expected costs for Elective Inpatient and Daycase.