

## Reference costs

*Andrew Street*

In previous editions of this volume, unit costs of inpatient and outpatient care have been reported by specialty. These data were derived from the TFR2 specialty and programme costs returns made each year by Trusts to the Department of Health. Trusts are no longer obliged to make these returns as they have been superseded by the Reference Cost return which is mandatory for all providers of NHS services. The National Schedule of Reference Costs (NSRC) has been compiled annually since 1998 and has become steadily more comprehensive. The 2002 NSRC ([www.doh.gov.uk/nhsexec/refcosts.htm](http://www.doh.gov.uk/nhsexec/refcosts.htm)) itemises the unit costs of some 89% of hospital and community health service expenditure under the following broad categories:

- emergency and elective inpatients and day cases;
- outpatients;
- critical care;
- radiotherapy and chemotherapy;
- accident and emergency;
- specialist services including renal dialysis, bone marrow transplantation, spinal injuries services, and rehabilitation;
- pathology and radiology;
- community nursing services and other community services such as occupational therapy, speech therapy, physiotherapy;
- audiology services; and
- mental health services.

Within these categories, services are defined in a variety of ways. Inpatient and day case activity is defined using Healthcare Resource Groups (HRGs), which provide a more accurate description of patients than the specialty-level costs reported in the TFR2. Previously estimates of the cost of inpatient activity were available for only the forty or so specialties listed in the TFR2. In contrast, the 2002 NSRC provides details of the costs of emergency care subdivided into 553 different categories, with separate costs for 545 and 532 different types of elective and day case activity respectively. Inpatient costs are not included in the current edition as they can be downloaded directly from the Department's website ([www.doh.gov.uk/nhsexec/refcosts.htm](http://www.doh.gov.uk/nhsexec/refcosts.htm)). Outpatient costs continue to be reported at specialty level, the NSRC distinguishing between first and follow-up attendances; critical care services are reported according to the number of occupied bed days, as are mental health services; and community service activity is defined according to the number of clients seen.

In order to reduce inconsistencies in how finance departments calculate unit costs, the Department of Health provides instructions about how costs should be apportioned to activity ([www.doh.gov.uk/nhsexec/costing.htm](http://www.doh.gov.uk/nhsexec/costing.htm)) as well as specific guidance relating to the collection of Reference Costs ([www.doh.gov.uk/nhsexec/natsched.htm](http://www.doh.gov.uk/nhsexec/natsched.htm)). Despite this, inconsistencies are likely to remain, particularly over matters where local discretion has to be exercised (for example, in how to apportion the costs of consultants who work across specialties). Inconsistent cost apportionment was known to be a problem with the TFR2 returns, Trusts having had few incentives to invest in ensuring accuracy and rarely receiving feedback on how the data were used – if they were used at all. The greater prominence of the Reference Cost data, both in being made publicly available and in being used to inform the setting of efficiency targets, may have encouraged Trusts to put greater effort into compiling the returns. The use of Reference Costs to inform the creation of a set of national prices for paying Trusts on the basis of their activity may

act as a further spur to improved accuracy ([www.doh.gov.uk/nhsfinancialreforms/](http://www.doh.gov.uk/nhsfinancialreforms/)).

Summarising the returns made by each Trust, the NSRC reports mean costs together with the interquartile range and the full range, along with additional information for some services. There is variation in the unit costs reported by individual Trusts for these services, as indicated in the columns in schema 7.1 showing the interquartile range. This variation may be due to several causes:

- some Trusts may be more efficient in providing these services;
- there may be differences across Trusts in how activity is defined and in how accurately units of activity are counted;
- there may be systematic unmeasured differences between Trusts in the condition or treatment requirements of patients seen within each category;
- Trusts may not be applying the costing guidance in a standard fashion or they may be making different judgements about how to apportion costs when there is scope for discretion; and
- costs in some Trusts may be influenced unduly by atypical patients (although, as a safeguard against this, Trusts below a threshold level of activity are excluded).

Where these factors come into play, caution should be exercised in using the Reference Cost data as estimates of the 'true' cost of the service in question. Wide variation among Trusts in their reported costs may indicate that the factors listed above are influential. Another indicator of possible inaccuracy is to look at how reported costs change over time – if there is little change, greater confidence might be placed in the estimate. The table below shows the change in mean cost from 2001/02 to 2002/03 (uprated from 2000/01 and 2001/02 figures) for a selection of services. As can be seen, there is no consistency in the direction of change and the size of movement in the mean cost for some types of services is dramatic. Only reference costs that show a reasonable level of stability over time (i.e. less than 20% variation year on year) have been included in Schema 7.1. In practice this has meant excluding all Community Nursing Services which have been reported only since 2001.

Despite these cautions, the Reference Cost database represents an important resource for management and research purposes. With the move to paying NHS providers on the basis of their activity, the prominence and accuracy of the data are likely to increase further.

<b>Mental Health Services – inpatient date</b>	<b>201 Mean £</b>	<b>2002 Mean £</b>	<b>Change %</b>
Children	329	363	10
Adult			
Intensive care	286	385	35
Acute care	171	181	6
Rehabilitation	175	183	5
Elderly	154	170	10

<b>Community Services Type</b>	<b>201 Mean £</b>	<b>2002 Mean £</b>	<b>Change %</b>
Cancer related nursing care	254	299	18
Palliative/respite care/nursing care	282	411	46
Diabetic nursing/liaison	107	104	-3
Cardiac nursing/liaison	143	151	6
Asthma/respiratory nursing/liaison	201	139	-31
Parkinson/Alzheimer nursing/liaison	124	181	46
Intensive care nursing	2,196	3,778	72