

Board of Directors (Public)
Item 5.6

**Board
report**

Subject: Reference Costs 2014/15 Board of Directors “sign off”
Date of meeting: 28th July 2015
Prepared by: Jim Davies, Deputy Chief Financial officer
Presented by: David Jago Chief Finance Officer

Data Quality Rating	BAF Ref	Impact on BAF Risk Rating
Silver	N/A	N/A

1. Executive Summary

The purpose of this paper is to:

- i. Provide an overview of the costing processes in place at the Trust for the completion of reference costs which supports the reference cost submission for 2014/15; and
- ii. To request that the board considers and approves the processes and high level outputs included in the paper.

With effect from the 2012/13 submission, Monitor highlighted the need for enhanced Board Level engagement in the completion of reference costs. This paper is once again drafted to support this process.

As part of the approval process, there is a requirement that the Board of Directors has sight of, and confirms approval that the Trust is compliant with the self-assessment quality checklist (further details of which are included within this paper).

2. Background

2.1 Costing Process

The reference cost submission is mandatory for all NHS Foundation Trusts and NHS Trusts. The purpose is to provide average unit costs of the services provided by the Trust. These average unit costs are submitted to the Department of Health for the calculation of national average unit costs. These national averages are then used to influence setting the National Tariff. Therefore it is extremely important that the costs submitted are robust and accurate.

The average unit costs are based on HRGs i.e. similar groups of treatment which consume similar levels of resource. While the costs are on average basis, they are built up from extremely detailed patient level information, and so the level of accuracy is high. For the 2014/15, submission the

reference costs will be calculated using the same software that is used for Service Line Reporting (SLR) which is called Prodacapo. This means that the cost allocation model is readily available to feed into the reference cost model.

It should be noted that the process is consistent with that of recent years, with the exception of specific changes in either guidance or tariff arrangements. There have been no other material changes to the process.

The process can be broken down into the following steps:

1. There are some fundamental differences between reference cost requirements and Service Line Reporting (SLR) and annual accounts requirements. The most important among them is that costs of non-English patients e.g. Welsh and Private patients are excluded for reference cost purposes. As part of the reference cost process such costs which are reported internally within the Trust throughout the year are excluded from the return;
2. Whilst reference costs are largely developed through the SLR process, the differences in submission requirements necessitate the exclusion of certain items (examples given above). In order to manage this - the SLR model has been replicated to create a model purely for reference costs 2014/15. This is in common with practice in previous years;
3. The national reference cost collection process involves the development of detailed costing at Healthcare Resource group (HRG) level, the aggregate of all submissions from providers is used in the development of future tariffs;
4. The cardiac surgery and cardiology have been completely redesigned for HRG4+ grouper mainly with the intention of identifying aortic surgery from other cardiac and vascular surgery;
5. With input from clinical leads, the activity with the Reference cost HRG will be sense checked for the expected grouping;
6. The costs to be included for reference costs were gathered in line with the reference cost guidance. This can be evidenced by the reconciliation statement which reconciles the reference cost quantum to the Trust's Annual Accounts for 2014/15;
7. The unit costs will be calculated and exported into the reference cost submission workbooks;
8. Draft unit costs will be circulated to General Managers, Service Line Managers and clinical leads for sense checking;
9. Detailed review / sense check with the Deputy Chief Finance Officer, prior to final review by Chief Finance Officer;
10. Evidence based amendments to unit costs will be made where required, and following feedback from the sense check exercise;
11. Unit costs will be recalculated and exported onto the final submission workbook;
12. Submission workbooks will be uploaded onto UNIFY2 (a web based submission portal of DOH);
13. As part of the July Board meeting, Board sign off will be requested to support the process outlined and the high level outputs reported;
14. The Chief Finance Officer will sign off the final submission in UNIFY2 on or before 31st July 2015.

2.2 Quality Assurance

The Department of Health have provided a Quality Checklist which will provide the Board of Directors with assurance that the Trust reference costs are of high quality. This is made up of ten points:

Checklist	Check	Action	Evidence
Total Costs	The 2014/15 reference costs quantum has been fully reconciled to the signed annual accounts through completion of the reconciliation statement workbook in line with the guidance.	The reference cost quantum will be fully reconciled to within +/- 1% of the signed annual accounts.	The reconciliation statement is attached as evidence. [Figure 1]
Total Activity	The activity information used in the reference cost submission to report admitted patient care, outpatient attendances and A&E attendances has been fully reconciled to provisional Hospital Episode Statistics (HES) and documented.	The activity will be fully reconciled to the Trust's SUS submission. The activity uploaded to SUS feeds into the HES data.	The reconciliation statement is attached as evidence. [Figure 2]
Sense Check Low Unit Costs	All unit Costs under £5 to be reviewed and justified.	The review will be carried out and any such unit cost will be justified seeking input from clinicians and reported to the board.	Review completed.
Sense Check High Unit Costs	All unit costs over £50,000 will be reviewed and justified.	The review will be carried out and any such unit cost will be justified seeking input from clinicians and reported to the board.	Review completed.
Sense Check all Unit Cost Outliers	All unit cost outliers (defined as less than one-tenth or more than ten times the previous year's national mean average unit cost) will be reviewed and justified.	The review will be carried out and any such unit cost will be justified seeking input from clinicians and reported to the board.	Sense check completed.
Benchmarking	Data will be benchmarked where possible against national data for individual unit costs and for activity volume (the previous year's information is available in the Audit Commission's National Bench marker)	The review will be carried out and any such unit cost will be justified seeking input from clinicians and reported to the board. Also the high volume top ten HRGs for each directorate will be shared with internal	Benchmarking undertaken against available comparators.

		Heads Of Operations for sense checking.	
Data Quality - Data	Assurance is obtained over the quality of data for 2014/15.	Assurance has been obtained over data quality through IGT submission for 2014/15. The MIAA audit report verdict is significant assurance.	The Clinical Coding Manager undertakes a monthly check on coding of high cost devices such as pacemakers and high cost drugs. This gives internal assurance that these are coded correctly.
Data Quality – Systems	Assurance is obtained over the reliability of costing and information systems.	The Trust is short listed for PBR assurance audit for the year 2013/14. The coding arm of the audit was completed in April 2015. The costing arm is scheduled for first week of June 2015. The outcome of the audit will be reported to a future Board of Directors meeting.	The MAQ score (Materiality and Quality) for the Trust costing system for 2013/14 is 79% which is gold standard – Only four Trusts in the country achieved gold standard. The Trust was the only Trust to achieve gold standard for 2012/13.
Data Quality – issues identified and resolved	Data quality: Where issues have been identified in the work performed on the 2014-15 data and systems, these issues have been resolved to mitigate the risk of inaccuracy in the 2014-15 reference costs submission.	An issues log has been opened and shall be maintained and monitored by Deputy Chief Finance Officer.	Summary of key issues included.
Data Quality – Non Mandatory Validations	All other non -mandatory validations as specified in the guidance and workbooks have been investigated and necessary corrections made.	All non-mandatory validations will be investigated and necessary corrections made. For it is felt that errors identified are justifiable as a reflection of service provided, justification will be provided.	Summary of key issues included.

The following figure shows the reconciliation between total operating costs as included in the annual accounts, and the final reference cost submission (the detailed reconciliation is included at appendix 1):

Figure 1: Reconciliation of Final Accounts to Reference Cost Submission for the Year 2014/15

Reconciliation of Final accounts to reference cost submission for the year 2014/15		
Final accounts	Inner	£
Total Operating costs as per final accounts		116,877,234
Less cost of activities not included for reference cost being non English (Welsh and Scottish)	(15,959,036)	
Less cost of activities not included for reference cost being non NHS (Private)	(2,672,059)	(18,631,095)
Net operating cost for English NHS activity		98,246,139
Less Expenses to be deducted for non patient care activity (adjusted through income received)		
Education and Training	(2,622,216)	
Research and development	(1,377,242)	
Other non patient care income like grants and Provider to Provider (from Final accounts)	(4,542,953)	(8,542,411)
Operating cost net of income		89,703,728
Adjustments for non patient care expenses like PDC, impairments and excluded drugs		4,894,561
Net quantum of costs submitted to DOH as reference cost quantum (A)		94,598,289
Ref cost submission by Point of Delivery		
Day case and short stay episodes	14,103,294	
Elective and Non elective episodes	49,256,308	
Out patient appointments and Knowsley community services	10,074,448	
Critical Care	13,949,673	
Cystic Fibrosis - annual care	6,234,831	
Unbundled high cost drugs and radiology	979,735	
Total quantum by point of delivery per submission (B)	94,598,289	94,598,289
Difference due to rounding off		0

The following figure shows the reconciliation between the total number of FCEs to the Trust information system – Secondary user System (SUS):

Figure 2: Activity Reconciliation (Reference Costs to Secondary User service (SUS))

	Number of FCEs
Reference Costs (English & IOM Commissioners) excluding CF activity	11,834
Wales, Scotland and Northern Ireland activity excluding CF activity to be excluded from reference cost submission	1,525
Cystic Fibrosis activity English & IOM only (reported separately in reference costs)	293
Private patient activity (excluded from reference costs)	470
Total	14,122
SUS (Secondary User Service)	14,122
Difference	-

3. Issues

Following the detailed review of all data quality and non-mandatory validations, selected areas have been updated / corrected. There have also been a small number of non-mandatory validations which have been reviewed and subsequently retained within the return as unadjusted. The specific issues are summarised as follows, together with justification for leaving unchanged within the return:

Detail	Validation	Narrative
Cystic Fibrosis	Cost exceeds £50,000	<ul style="list-style-type: none"> The unit of activity for cystic fibrosis is based on a year of care cost, the cost which exceeds £50,000 therefore reflects the full year cost – including inpatient, outpatient and high cost drug costs. The validation specifically referred to two cases which were in the highest cost category for the service. On this basis inclusion of the cost as it currently stands has been justified.
Inpatient	Cost exceeds £50,000	<ul style="list-style-type: none"> Following review, it was noted that following treatment - the patient had a long length of stay, and was in hospital for 167 day. The validation specifically referred to one case. On this basis inclusion of the cost as it currently stands has been justified.
Outpatients	The cost of non-consultant led attendance was 2 * greater than consultant led attendance.	<ul style="list-style-type: none"> For 172 (thoracic surgery) and 340 (Respiratory medicine), the non-consultant led clinics include significant expenditure on pathology, spirometry and other higher outpatient cost per appointment. Following detailed review there is a clear rationale to justify the validation query. On this basis inclusion of the cost as it currently stands has been justified.

Outpatients	Cost of follow up attendance greater than first attendance (Medical Oncology)	<ul style="list-style-type: none"> The specific follow up attendances are therapeutic in nature; interventional patients are referred to the Clatterbridge Cancer Centre after first appointment. The follow up appointment includes high level of drugs and imaging costs, and hence the higher level of costs. On this basis inclusion of the cost as it currently stands has been justified.
-------------	---	--

4. Key Outputs

The following table provides a high level overview of the outputs of the reference cost exercise, with the total cost quantum split by activity type, and the 2013/14 figures are included also to enable comparison between the two years. While it is not anticipated that there will be significant changes, quality checks / reviews will continue up until the submission date. Any further changes are not expected to be material, and will be circulated to the Board of Directors in advance of submission – together with an explanation / rationale.

Worksheet Name	Costs			Activity		
	2013-14 £000	2014-15 £000	% change	2013-14	2014-15	% change
Day cases, ordinary non-elective short stay and regular day and night admissions	12,835	14,103	9.9%	4,928	4,918	(0.2%)
Ordinary electives and ordinary non-electives long stay	47,127	49,256	4.5%	6,867	6,916	0.7%
Subtotal – Inpatients	59,963	63,360	5.7%	11,795	11,834	0.3%
Outpatient attendances	8,909	10,074	13.1%	82,622	93,898	13.6%
Critical care	12,686	13,950	10.0%	12,053	13,281	10.2%
Diagnostic imaging	816	855	4.9%	7,477	6,204	(17.0%)
High cost drugs	119	125	4.7%	170	192	12.9%
Cystic fibrosis provided solely by a specialist centre	3,402	6,235	83.3%	250	235	(6.0%)
Total	85,895	94,598	10.1%	114,367	125,644	9.9%

The key points to note from the high level analysis of reference costs (above) are summarised as follows;

- Inpatients: In overall terms activity has increased at a marginal level between 2013-14 and 2014-15 (note: activity included for reference costs exclude non English and non NHS activity). There has been a more significant increase in costs, and this relates largely to case mix and specifically in terms of devices;
- Outpatients: There has been an increase in activity and costs between 2013-14 and 2014-15, and these are broadly equivalent in percentage terms (Costs 13.1% increase, activity 13.6% increase);
- Critical Care: Similarly there has been an increase in both activity and costs within critical care which is broadly equivalent at around 10%;
- Diagnostic Imaging: Within diagnostic imaging there has been a slight increase in costs (4.9%) alongside a more significant reduction to activity. This reflects a shift in classification between Diagnostic Imaging and Outpatients rather than an actual reduction in activity;

- High Cost Drugs: Movements are relatively small, and overall numbers low, so there are no key conclusions to assert.
- Cystic Fibrosis: The analysis shows a significant increase in costs reported, whilst activity shows a slight reduction. This reflects a change in treatment rather than an actual increase in costs. In 2013/14 a range of high cost drugs were excluded to the value of £2.6m. Following discussions with Capita who conduct audits on behalf of Monitor, it was agreed that these costs would be included from 2014/15. Had the costs been included in 2013/14 also - the comparable cost would have been circa. £6m. and the variance between the years a lot closer.

The analysis of the high level outputs, together with the quality checks undertaken provide a strong basis for the submission of a good quality reference cost return. Further analysis and benchmarking will be undertaken prior to submission, and while there are not expected to be changes of a material nature – any changes will be circulated to members of the Board in advance of submission.

5. Conclusion

The Trust has completed the reference cost process using the costing software that is used for Service Line Reporting and Patient Level Costing, and has followed the reference cost guidance - operating in line with the quality checklist and providing a rationale for the continued inclusion of non-mandatory errors.

This paper is presented for the consideration and approval of the Trust Board.

6. Recommendations

The Board of Directors is asked to note the costing process that supports the reference cost submission for 2014/15 and approve the submission in line with prescribed timescales.

Appendix 1: Reconciliation of reference costs to the audited annual accounts

Line	Description	Notes: FTs	Notes: NHS Trusts	£
1	Operating expenses	1. SOCI Note 3	TRU01 sc100 + sc110	£116,877,234
2	Less: Actual cost of non-NHS private patients			-£2,672,059
4	Less: Actual cost of other non-NHS patients			-£15,959,036
5	Less: Total other operating income split into	6. Op Inc (type)	TRU01	
5a	Non-salaried education and training income			-£390,561
5b	Salaried education and training income			-£2,231,655
5c	Research and Development			-£1,377,242
5d	Other			-£4,542,953
6	Add: Not allow able non-contractual income			£395,940
7	Less: Actual cost of centrally funded awards under the Clinical Excellence Awards Scheme			-£289,661
10	Less: Impairments	7.Op Exp (type)		
10b	Other impairments			-£27,000
11	Add: Reversal of impairments	6. Op inc		
11b	Other reversals			£3,528,973
12	Less: Depreciation related to donated or government granted non-current assets			-£157,582
13	Add: Donations or government grants received to fund non-current assets		TRU05 sc287 + sc288 + sc300	£776,537
19	Less: Adjustment for provider-to-provider agreements			-£266,841
21	Less: Finance income (FTs) or investment revenue (NHS trusts)	1.SOCI Note 8	TRU01 sc150	-£37,638
22	Add: Finance expenses financial liabilities (FTs) or finance costs (NHS trusts)	1.SOCI Note 9	TRU01 sc170	£39,920
23	Add: PDC dividends payable	1.SOCI	TRU01 sc190	£2,095,000
24	Add: Finance expenses - unwinding of discount			£4,000
25	Less: Services excluded from reference costs			
25b	Cystic fibrosis drugs			-£1,167,086
28	Total reference costs submission quantum (sum lines 1 to 27)			£94,598,289