Mental Health Cluster Reference Cost Collection Guidance 2010-11

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Contents

Introduction

1. This guidance sets out the requirements for the parallel mental health cluster reference cost collection, to collect cost and activity data from all NHS mental health provider organisations on a cluster basis. All NHS mental health providers are expected to comply with this guidance and its timescales.

2. This collection is to be conducted in addition to and alongside the existing annual reference cost collection for 2010-11. The full reference cost guidance for 2010-11 can be found at www.dh.gov.uk/nhscosting.

3. The collection of mental health activity and cost data is extraordinary for 2010-11, in which providers should submit reference cost data using the existing currencies and also provide a return based upon clustered data. Organisations should submit reference cost data via the existing route as in prior years and to the timescales published. This is in-line with feedback from the NHS, which indicated that the vast majority of organisations wanted to retain the existing currencies for this year for a variety of purposes. Mental health providers are also expected to submit cost and activity data using the new mental health currency of care clusters in order to begin data collection of the new currency.

4. From 2011-12 the main reference cost collection is expected to be on a cluster basis and it is important that all organisations have made some move towards clustered data in time for the 2010-11 collection, both from a costing perspective and as the currency is mandatory from a commissioning perspective from 2011-12.

Background

5. *High Quality Care for All* committed the Department to make national mental health currencies available for use in 2010-11. The White Paper *Equity and Excellence: Liberating the NHS*, published in July 2010, committed the Department to implement a set of currencies of adult mental health services for use from 2012-13. The currency unit developed for mental health is not an HRG, but a care cluster based on need. The Care Pathways and Packages Project (CPPP), a consortium of NHS commissioners and providers from NHS Yorkshire and NHS North East, developed the care cluster currency.

6. The care clusters focus on the characteristics and needs of a service user, rather than the individual interventions they receive or their diagnosis. By starting from the perspective of individual service users, rather than organisations, the clusters fit with and can be used to support the personalisation agenda set out in *Putting People First*. The care clusters are numbered from 0-21 although 9 is not currently used. As with HRGs, these clusters will be reviewed and refined over time.

7. In addition to the care clusters, a clustering tool has been developed that will help mental health professionals determine which cluster best describes the characteristics of a particular service user. Mental health Payment by Results does not use ICD-10 or OPCS-4 codes. Instead mental health professionals will rate service users using the mental health clustering tool (MHCT). The tool has 18 scales (e.g. depressed mood, problems with activities of daily living). The first 12 scales are the Health of the Nation Outcome Scales (HoNOS), which is already part of the Mental Health Minimum Data Set. Each scale is rated from 0 (no problem) to 4

(severe to very severe problem). Clinicians are then able to identify a cluster, the profile of which matches that of the service user. Work is ongoing to develop algorithm software to support the clustering decision.

8. The clusters cover extended time periods which may contain multiple different care interventions. For instance, whilst in cluster 3 – non-psychotic (moderate severity) – a service user might have several sessions of psychological therapies, contacts with a care coordinator and a prescription for exercise. Each cluster has an associated review period. These are set out on in table 4 on page 8, and should be taken as a maximum rather than a minimum period duration.

9. The timetable for implementation and use for commissioning and reference cost collection of the care clusters is outlined in the table below for information

Table 1: Care cluster timetable

	2010-11	2011-12	2012-13	2013-14
Expansion of PbR to mental health	Introduction of 21 non-mandatory mental health clusters	National currencies used to inform local prices and basis for contracting	Clusters mandated for use in contracting and for payment	Earliest possible year for introduction of national mental health tariff
Cost collection	Cluster level costs to be collected alongside 2010-11 reference costs	2011-12 reference costs to be collected at a cluster level	2012-13 reference costs to be collected at a cluster level	2013-14 reference costs to be collected at a cluster level

Supporting guidance

10. A suite of documents to help organisations clinically cluster their service users can be found at www.dh.gov.uk/pbr:

    (a) The Mental Health Clustering Booklet for 2011-12, which outlines the care clusters and the supporting MHCT. In addition, the booklet now contains Care Transition Protocols for each cluster. Their use is encouraged as they are intended to improve the accuracy of cluster allocation, which will improve the overall functioning of the clinical and currency model
    (b) The Payments by Results guidance 2011-12 (section 9 relates to mental health) looking at operational issues in using the currencies.

Timetable for Reference Cost Collection

11. The timetable for the existing 2010-11 reference cost collection is shown in Table 2. Further details can be found in the reference costs submission window document on the Unify2[1] forum.

[1] Unify2 is the Department's corporate data collection system and is available to all NHS users at http://nww.unify2.dh.nhs.uk/unify/interface/homepage.aspx

Table 2: Reference cost collection timetable 2010-11

	Begins	Ends
Validation week	04/07/2011	08/07/2011
Open submission week	11/07/2011	15/07/2011
SHA managed submission week	18/07/2011	22/07/2011
Additional validations	25/07/2011	29/07/2011

12. The collection period for the cluster based data return will be from 1 September to 23 September. It is expected this will be done via Unify 2 and providers will be expected to reconcile their costs to the general ledger quantum as in the existing reference cost collection. All NHS mental health providers are expected to complete the cluster collection, although it is recognised that not all service users will be clustered for 2010-11.

13. Further details regarding collection will be communicated to provider organisations later on in the summer.

Reference cost collection principles

14. Whilst this cluster based reference cost collection for 2010-11 is not conducted as part of the main reference cost collection, the principles identified within the 2010-11 reference cost collection guidance remain applicable. These include

    (a) reference costs are retrospective, and the quantum of costs used in their production should be reconciled to the 2010-11 final accounts.
    (b) the mandatory submission is composed of activity and unit cost data, by cluster
    (c) reference costs and cluster costs are based on full absorption costing.
    (d) in preparing costs for collection, the emphasis is on the cost of delivering a service, and not the funding streams that are used to recover these costs. The services covered are those provided for NHS patients under a range of contractual arrangements.

15. The total expenditure used in the production of reference costs must be reconciled to the final accounts. This will allow full operating expenses, plus the following items as appropriate:

    (a) the revenue consequences of capital
    (b) the allowable costs of reorganisation
    (c) profit or loss on disposal of fixed assets
    (d) interest receivable or payable
    (e) PDC dividends
    (f) other finance costs as stipulated on the expenditure reconciliation statement (which will not need to be completed for the cluster collection). (This is as per normal costing processes).

16. It is also expected that an annual review of overhead apportionments is undertaken. It is important to review apportionments across the individual points of delivery within a service/care group and not just the apportionments to individual services/care groups.

17. All NHS organisations, that provide any mental health services, are required to make a submission of all relevant information to the Department of Health

18. In addition, NHS Trusts who sub-contract services from non-NHS health care providers and PCTs who directly commission services from non-NHS health care providers, including the voluntary sector, are required to make a separate return, but only on the existing reference cost basis not on the basis of clusters. This will ensure that the total cost of treating NHS patients is identified whether the provision is made by NHS or non-NHS providers.

Costing principles

19. To ensure that all NHS providers are compared on a consistent basis, details of the definitions to be used and refinements to the standard costing approach that must be adopted for reference costs purposes are detailed below.

20. Comprehensive information on the overall standards, concepts and approach to costing NHS services can be found in the NHS Costing Manual at www.dh.gov.uk/nhscosting.

21. NHS mental health providers are expected to adopt the NHS Costing Manual classifications of direct, indirect and overhead costs as a minimum when attributing, allocating and apportioning their costs to those services that they provide (where accounting records support this). It is desirable that organisations move from classifying costs as overheads, thereby apportioning them, to re-classifying them as indirect costs, which can be allocated to specific service areas. Costs identified as direct in the NHS Costing Manual must be directly attributed to services, and cannot be re-classified as either indirect or overheads. This treatment ensures a minimum degree of comparability.

22. Patient Level Information and Costing Systems (PLICS) is a method of costing that many organisations are moving towards, supported by the Department, as a means of understanding costs and drivers better. The use of PLICS will in turn help produce more accurate patient level costs which will help in producing cluster and pathway costs.

Defining the quantum

23. The clusters cover working age adults and older people only. Costs for children and young people's services (CYPS) and other areas will not be collected in 2010-11 on a cluster basis.

24. For 2010-11, the total for CYPS is included as a reconciling item on the collection spreadsheet, so that the cost quantum will reconcile to the general ledger costs and reconcile to the reference cost quantum after various adjustments have been made.

25. To help clarify the adjustments required to produce cluster reference costs, Table 3 highlights

    (a) activity included within the cluster based reference costs
    (b) activity included as a reconciling item within the cluster based collection
    (c) for reference, activity excluded under the existing reference cost collection.

Table 3: Producing care cluster reference costs

	Included in new cluster reference costs	Included as a reconciling item in new cluster reference costs	Excluded from existing reference costs
CAMHS		Yes	
Secure		Yes	
Primary drug and alcohol		Yes	
Prisons		Yes	
Eating disorders	Yes		
Specialist/discrete psychology	Yes		Yes
Psychotherapy	Yes		Yes
Learning disabilities		Yes	Yes
Improving access to psychological therapies		Yes	
Social care		Yes	Yes

26. It is recognised that whilst mental health clusters and service delivery of clusters will cover and in some cases include social care, in this instance only the health element of costs within each cluster should be included, in line with previous reference cost collections.

27. If for any reason it is not possible to comply with guidance given in Table 3 for a particular service, you should note this in the free text box provided with the collection template along with your data submission.

Work in progress (WIP)

28. The existing reference costs collection excludes activity which continues into the next reporting year, (page 182 in the reference cost guidance for 2010-11). To take account of the potential length of some of the mental health care clusters it has been decided to **collect all activity and costs which have occurred within 2010-11**, regardless of whether the clusters have completed. This will ensure that the maximum level of activity is collected and costed within the clusters.

Did not attends (DNA's)

29. In a change from the existing reference cost methodology, did not attends (DNAs) will not be collected separately and the costs should be included as an overhead within the cluster pathway(s).

Home leave

30. Some admitted patient care within mental health services includes trial periods of time where patients are on home leave. They are not discharged but 'sent on leave' to return as an inpatient at a future date. This sometimes creates an anomaly where their beds may be used for other admitted patients, resulting in bed occupancy levels of over 100%. This multiple occupancy should not be recognised within the cluster costings as it would in effect dilute the bed day cost for admitted patient care.

31. Organisations should ensure that the reported total number of occupied bed days for a ward does not include any 'leave' day activity unless the bed is held open for that

patient to return to, i.e. that no other patient uses the bed in their absence. This rule also applies to patients transferred temporarily to an acute provider for treatment.

32. Where the patient administration system does not record home leave, the activity levels will need to be adjusted manually. The key rule is to ensure that occupancy above 100% is not reported, as this would have the artificial effect of diluting the costs.

Assessment costs

33. Assessment costs are identified separately within the cluster. This is to help develop cluster pathways. It is recognised however that organisations may not have this activity defined and costed at the moment. If this is not possible then this can be left blank or the cost of a first attendance could be used where appropriate as a potential proxy.

Costs and activity within cluster

34. This should only include costs and activity incurred once a service user is assigned a cluster. Costs and activity incurred before a cluster is assigned should be collected and recorded in 'patients not clustered or assessed category'.

Mental health care clusters

35. The care clusters cover only adults of working age and older people's services. Children and young people's services are not included within the clusters. This activity will be collected in the traditional format and a reconciliation box is included within the cluster collection template to account for the costs and activity used in these areas.

36. The change to collection of mental health activity and cost data on a cluster basis represents a significant change to the data collected currently in reference costs. The cluster definitions, alongside the maximum cluster review periods, are summarised in Table 4.

Table 4: Mental health care clusters

Cluster No.	Cluster label	Cluster review interval (maximum)
0	Assessed but not clustered	N/A
00	Not assessed or clustered	N/A
1	Common mental health problems (low severity)	12 weeks
2	Common mental health problems	15 weeks
3	Non-psychotic (moderate severity)	6 months
4	Non-psychotic (severe)	6 months
5	Non-psychotic (very severe)	6 months
6	Non-psychotic disorders of overvalued Ideas	6 months
7	Enduring non-psychotic disorders (high disability)	Annual
8	Non-psychotic chaotic and challenging disorders	Annual
9	Blank cluster	Not applicable
10	First episode in psychosis	Annual
11	Ongoing recurrent psychosis (low symptoms)	Annual

Cluster No.	Cluster label	Cluster review interval (maximum)
12	Ongoing or recurrent psychosis (high disability)	Annual
13	Ongoing or recurrent psychosis (high symptom and disability)	Annual
14	Psychotic crisis	4 weeks
15	Severe psychotic depression	4 weeks
16	Dual diagnosis (substance abuse and mental illness)	6 months
17	Psychosis and affective disorder difficult to engage	6 months
18	Cognitive impairment (low need)	6 months
19	Cognitive impairment or dementia (moderate need)	6 months
20	Cognitive impairment or dementia (high need)	6 months
21	Cognitive impairment or dementia (high physical or engagement)	6 months

Definitions

37. For each cluster, the range of clinical activity delivered to treat service users should be captured. The total cost of treating service users within each cluster is to be collected as well as the underpinning activity data and costs using the following definitions.

38. It is recognised that not all providers will have activity within each of these categories and providers will have use different methodologies to produce costed activity data, including the utilisation of existing reference cost data.

Cost per day per cluster

39. The cost per day per cluster is produced using the length of clusters falling in 2010-11 (expressed in days, similar to an acute spell or episode) and the costs of interventions within them.

40. This can be calculated using a number of different methodologies, depending on the costing system in place. The simplest approach builds on the same predominantly "top-down" methodology used in existing reference costs, to produce a cost per day per cluster. (See example in Appendix 1)

41. Organisations using PLICS will be able to adopt more of a "bottom-up" approach which is likely to involve applying a weighted cost per day per cluster based on the length of cluster, using a series of relative value units/cluster weightings to reflect the different levels of treatment intensity.

42. The weighted cost per day per cluster is the methodology used by the CPPP to cost their clusters. The CPPP approach calculates a cost per day by cluster, based on a series of relative value units or cluster weightings, to reflect the differing treatment intensity. This cost can then be multiplied up to get a cost by patient in a specific cluster. (See example in Appendix 2). More details can be found at http://www.cppconsortium.nhs.uk/.

43. Please note it is not expected that the costs calculated for the following categories will tie back to the individual reference cost worksheets.

Inpatient

44. This covers admitted inpatient care on an occupied bed day basis covering planned elective and unplanned non-elective activity. For existing reference costs this is collected on the worksheet MH – Occupied Bed Days.

Non-inpatient cost per day per cluster

45. This is a single cost per day per cluster, covering all non-in-patient settings and is produced using an analysis of direct costs of interventions across a cluster period. The methodology for calculating this is described in Appendix 2.

46. Please note that it is not expected that all organisations will use this category. Only organisations using PLICS and/or the CPPP approach are likely to complete this field (although organisations can complete this if they are able). For this reason, these columns have been shaded grey on the template). Organisations using existing reference cost activity categories to calculate cluster costs will not need to complete these columns and will provide information using inpatient days and the following activity categories.

Outpatient attendances

47. This covers consultant services both specialist and non-specialist, and is collected on the existing reference cost worksheet MH – OP Attendances, using the currencies; attendances, face to face/non, first attendance, follow up attendance. Some providers no longer record these, but have amalgamated with contacts as detailed below.

Attendance

48. This covers day case and day care attendances, which are collected on the existing reference cost worksheet MH – Patient Days.

Contact

49. This covers consultant specialist and non-specialist services, community mental health and community mental health specialist teams. This is collected on the existing reference cost worksheet MH – Community.

Assessment

50. This covers the activity and costs associated with assessing service users which help clinicians to allocate service users into the clusters. It is recognised that some organisations will be unable to extract the costs for this activity from their activity data and will therefore not include data. Useful proxies may be first attendance cost and activity.

Patients not clustered

51. This line on the cost collection template is to record costs incurred for treatment for a service user who has been assessed but has not been allocated a cluster. Once a

service user has been assessed and placed into a cluster, the costs of the assessment and treatment should be recorded within the cluster,

Patients not clustered or assessed

52. This line on the cost collection template is to record costs incurred for treatment before a service user has been assessed and allocated to a cluster or for 2010-11 for service users who have not had cause to be assessed for clustering. Once a service user has been assessed and placed into a cluster, the costs of the assessment and treatment should be recorded within the cluster.

Costing clusters

53. As with existing reference costs, as described above, there are a number of methodologies for costing activity data. The key principle is that all costs should be produced using a full absorption methodology to reflect the full cost of providing the service. The more costs that be directly linked to a patient as opposed to being apportioned, the more accurate the costed activity data will be.

54. The NHS Costing Manual sets out the basic principles of costing, and the minimum standard which all NHS providers must achieve. More detailed patient level costing is used by some providers and can offer a more detailed patient level costs with increased use of direct costs issued to a patient. Further detail regarding PLICS can be found at www.dh.gov.uk/nhscosting, alongside the Clinical Costing Standards for Mental Health. The Clinical Costing Standards for Mental Health offer a guide for organisations including those using or implementing PLICS systems.

55. Each organisation will have their own data systems and costing systems, therefore it is impossible to provide a 100% consistent methodology for costing at a cluster level.

56. The key to costing accurately at cluster level is having the activity and interventions recorded by service user and the cluster assigned so costs can be built up by service user.

57. There have been a number of alternative approaches used to cost the clusters, by a number of different organisations. The cost collection template has been designed to reflect both existing reference cost costing methodology and the cluster based approach of ‘cost per cluster’.

58. It is important to understand that due to the nature and length of mental health clusters, that costs are not currently collected on a completed cluster basis. Reference costs are designed to capture a provider’s in-year costs. As many clusters will begin in one financial year and run to the next, and others will have a length of 12 months or more it will not be able to collect data on a completed cluster basis. As it is essential that the cost collection captures relevant and useful data the collection therefore should capture data at a cost-per-cluster per day level.

59. Where more sophisticated approaches such as PLICS are not yet available, the interventions within the clusters can be costed based on the approach used in existing reference costs. Here, each community visit, outpatient attendance, admitted bed day etc. can be costed and then totalled up by patient to give a cluster cost for each service user, from which an average cost can be produced.

60. Further details regarding two costing approaches from the West Midlands and the CPPP project can be found in Appendix 1 and 2.

Collection template

61. The collection template is different to that used in the existing reference cost collections where separate sheets for each setting and type of activity were used for collection including:

    (a) Ordinary admission
    (b) Non-specialist consultant (outpatient and community)
    (c) Community mental health teams
    (d) Some specialised mental health activity (e.g. crisis resolution, early intervention, assertive outreach, day care)

62. For each cluster, the range of clinical activity delivered to treat service users should be captured. As such, the total cost of treating service users within each cluster is to be collected as well as the underpinning activity data and costs using the following definitions. It is recognised that not all providers will have activity within each of these categories and providers will have use different methodologies to produce costed activity data.

63. It is not expected that the costs calculated for the following categories will tie back to the individual reference cost worksheets.

64. In support of recognising the cluster pathways, all costs and activity within the cluster are collected on one sheet, and for each cluster the information in Table 5 will be collected.

65. Given the differing services and settings where care is delivered by different providers, organisations will not be expected to submit data for all settings.

Table 5: Collection template

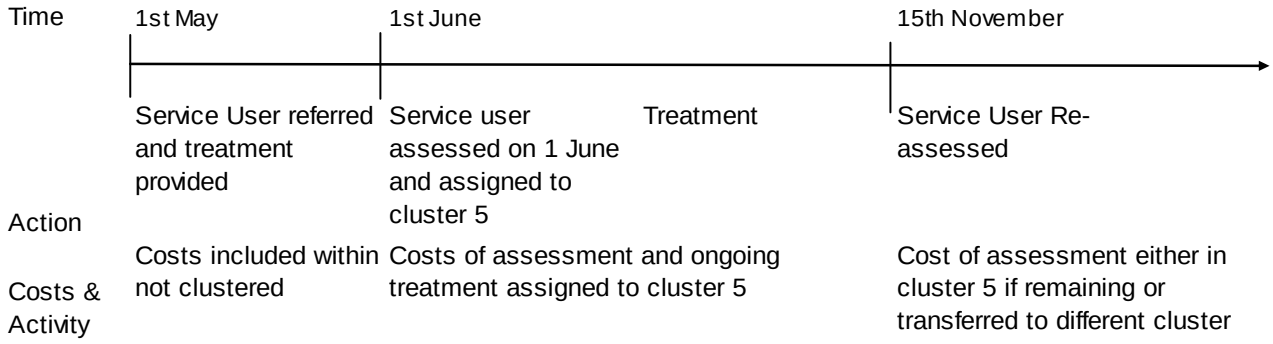
Activity field	Explanation
Total cost (column B)	The total cost of overall activity counted within the specific cluster
Total number of patient days within a cluster[2] (column C)	Total number of patient days within each cluster (similar to the concept of an episode or a spell for the acute sector) covering the whole period of time for all activity counted whether carried out as an in patient or in the community.
Number of service users (column D)	Total number of service users counted in cluster x over the time period recorded. If a service user has been allocated to a cluster more than once during the overall period, each separate time should be

2 Figure 1 is an example of a typical service user and shows where costs and activity should be recorded.

Activity field	Explanation
	counted.
Cost per service user (column E)	Cost per service user per each episode or instance of cluster[3] including the costs of interventions within them
Length of cluster per service user (review period) (column F)	Average length of cluster per service user This is the overall average length of cluster for each service user expressed in days (similar to an acute spell or episode)
Cost per day per cluster (column G)	Average/weighted cost per day per service user per cluster
Inpatient/admitted patient care: Number of admissions Cost per inpatient day Number of occupied bed days (column H – J)	 Number of admissions Cost per inpatient bed day Number of occupied bed days
Non Inpatient Care: Number of Cluster Days Cost per cluster day (column K-L)	 Number of cluster days Cost per day per service user across all community/non-inpatient settings for each separate time allocated to that cluster during the overall period
Outpatient: Number of outpatient attendances Cost per outpatient attendance (column M-N)	 Number of outpatient attendances Cost per attendance
Attendances/day care: Number of attendances Cost per attendance (column O-P)	 Number of attendances Cost per attendance
Contacts (community): Number of contacts Cost per contact (column Q-R)	 Number of contacts (including face-to-face and non-face-to-face) Cost per contact
Assessments: Number of assessments Average length of time of assessment Cost per assessment (column S-U)	 Number of assessments Average length of time of assessment Cost per assessment

[3] This should be the average cost of each episode/instance of the cluster – for example, a service user may have two or more instances/episodes of a cluster. The cost reported here should be the average cost of one instance.

Figure 1: Typical service user



Reconciliation

66. Fields have been included within the cost collection template to reconcile the quantum of costs with that used in the general ledger and reference cost return. In order to do this, providers will need to separately identify the activity excluded from clusters such as children's and young people's services data.

67. Table 6 shows the reconciliation as detailed in the collection template, please see summary box on page 5 for the list of exclusions/inclusions within the clusters.

Table 6: Reconciliation

Total cost per cluster for all clusters recorded	£10,000
Patients not clustered or assessed	£3,000
Exclusions:	
Children and adolescent	£100
Secure	£50
Drugs and alcohol	
Other	
Total mental health service provision including cluster exclusions	£13,150
General ledger/reference cost quantum	£12,500
Check	-£650

Appendix 1: Costing approach used by West Midlands

This approach is likely to be achievable for most organisations, utilising existing reference cost categories and costs. The West Midlands project utilised existing reference cost activity categories and costs, in combination with care cluster activity, to calculate a cost by cluster. Initially care cluster activity is grouped using an aggregated template.

Cluster X Service User X					
Currency code	Activity type	Currency description	Activity volume	Average unit cost	Total cost
NHCT2	Contact (NF2F)	MHCT: Adult – other services comm team	1	£51	£51
MHOPFAA2	Outpatient (F2F)	Adult: other services	2	£253	£506
NHIPA2	OBD	Adult: acute care	21	£288	£6058
Total					£6,615

A template similar to the following one is also used to record service user's interventions and associated costs. For submission of reference costs, local costs should be used for this calculation.

Cluster allocation number	CP01		CP02		CP03	
Service type	Activity	Activity/ Client	Activity	Activity/ Client	Activity	Activity /Client
Outpatients:						
Adult outpatient new						
Adult outpatient other						
SMS alcohol outpatient new						

By utilising a combination of service user information, patient level costing and top down allocation methodologies, costs by service user by cluster can be calculated. A template similar to the reference costs cluster based collection can be used to record and summarise service user costs. Outpatient activity is shown here as an example, but this template would be expanded and the columns repeated for inpatient bed days, day care attendances, community contacts etc.

Outpatient						
	Service user ref no	Attendance no of	Unit Cost £	Value £	SLR ref	Total cost
Cluster 1 Cluster costs	1 2 3					
Cluster 21	29 30 31					
Total						

Appendix 2: Costing approach used by CPPP

The CPPP approach is based on a calculation of direct costs of interventions, which are used to determine the relative resource intensity of care provided across the clusters. It seeks to utilise patient/service user level costing methodologies.

It therefore recognises the resources employed in different cluster treatments. A cost per day is first calculated, and this is then applied to the duration of care between reviews to give a cost per cluster period. For 2010-11 cluster reference costs a cost per day per cluster only will be collected.

The CPPP approach gives a single calculated cost per day for community/non-inpatient activity. Using this methodology, this is what should be inserted in the reference cost template under the community (non in-patient) section.

For in-patient activity, it is assumed that there is no difference in relative resource intensity across in patient activity. Therefore existing reference costs are used to calculate a cost per day.

In-patient costs per day per cluster

Current reference cost collection will form basis of cluster submission.

Calculation of community/non-inpatient cost per day per cluster

The process for costing clusters for community/non-inpatient activity can be summarised as follows:

Stage 1: Collate the cost of clinical time at a cluster level.

From the data collected through the MHCT run a report at a patient level for the given reporting period providing:

- the length of time of the appointment
- cluster allocated
- band of staff – (individual staff details if available)

Using this information calculate a cost of the staffing resource utilised across these patients.

Patient (A)	Cluster (B)	Appointment time (C)	Band (D)	Staff rate per hour (E)	Cost per appointment (C*E) (F)
X	1	30 mins	Band 6	£18.55	£9.28
Y	2	60 mins	Band 8a	£27.72	£26.72
Z	3	60 mins	Cons	£65.40	£65.40

Consolidate this patient level costing for the patients identified at a cluster level to obtain a total cost per cluster for this period.

Cluster Number	Total of cluster (Sum of column F above) (G)	Patient Days (H)	Cost Per Patient Day (G/H) (I)	Weightings (Cluster No Cost (I)/Lowest Cluster No Cost (I)) (J)
1	115,895	25,134	4.61	1.00
2	177,565	32,368	5.49	1.19
3	94,228	18,017	5.23	1.13
4	226,998	34,864	6.51	1.41
5	158,458	21,085	7.52	1.63
6-21	1,322,744	150,062	8.81	1.91
Total	2,095,888	281,531		

The cost of clinical staff time is the cost driver being used to identify the relative resource intensity between the clusters. The weighting column above (column J) shows a relative value unit of each cluster.

The relative value provides an indication of the relative resource utilisation of the clusters. From the example in the table above, we can see Cluster 5 is shown to require 1.63 more resources than cluster 1.

Ideally, this stage is completed utilising 12 months of data from the MHCT. There is a clear understanding organisations are at different stages of collecting activity by cluster so where there is a limited level of data available, a sample will be more appropriate.

The above calculation can be applied at an organisation, directorate and or team level to develop benchmarking. It is recognised that as data volumes increase and data quality improves this will lead to team level costing to allow a more detailed understanding of costs.

Stage 2: Calculate a fully absorbed cost per day.

Each organisation has a fully absorbed cost at a patient service level from their existing costing model that has been previously calculated to support the reference costs submission. Using stage 1 for each patient service area the fully absorbed cost can be apportioned out across the clusters using the weighted patient days.

The data collected through the MHCT provides the number of patient days patients have spent within each cluster. Run a report to provide the total number of patient days by cluster for the period. The fully absorbed cost by cluster can be divided by the patient days for that cluster to obtain a cost per day per cluster. See below as an example.

Cluster Number	Costed patient level data (from stage 1) (G) £	Patient days (from stage 1) (H)	Weighting (from stage 1) (J)	Weighted patient days (H*J) (K)	Apportioned full cost Total of L *(K/Total of K) (L) £	Total days in the cluster (M)	Cost per day per cluster (L/M) (N) £
1	115,895	25,134	1.00	25,134	215,699	34,223	6.30
2	177,565	32,368	1.19	38,508	330,477	40,598	8.14
3	94,228	18,017	1.13	20,435	175,373	22,424	7.82
4	226,998	34,864	1.41	49,229	422,480	45,007	9.39
5	158,458	21,085	1.63	34,364	294,916	25,638	11.50
6-21	1,322,744	150,062	1.91	286,861	2,461,838	184,024	13.38
TOTAL	2,095,888	281,531		454,531	**3,900,783	351,914	

**Full Cost of the service from costing model

Through costing based on primary data collected at a patient level, organisations are better placed to develop full patient level costing across all services.

Column M and N should be inserted into the reference cost template under the section on community/non-in-patient.

While this reference costs collection is only concerned with collecting a cost per day per cluster, the CPPP methodology has two further stages as described briefly below.

Stage 3: Period of care durations

Use cost per day per cluster to determine the total cost of the cluster period duration of care.

CPPP are currently collecting durations within clusters as part of the data set to review against the care transition protocols.

Stage 4: Create a tariff

Development of a tariff will be informed by stage 1 to 3, outlined above. The focus on continually improving data quality and iterative benchmarking will inform the production of local tariffs.

Discussions with commissioners are scheduled in 2011-12 to locally develop and implement currencies to meet Department of Health timescales.