Mental health clinical costing standards

2015/16

shaping healthcare finance …

Clinical costing standards

Contents

Foreword 3

Introduction 4

Standard 1: Classification of direct, indirect and overhead costs 5

Standard 2: Creation of cost pools and cost pool groups 8

Standard 3: Allocation of costs 15

Standard 3a: Allocating ward costs 18

Standard 3b: Allocating community team costs 19

Standard 3c: Allocating medical staffing costs 20

Standard 4: Classification of costs into fixed, semi-fixed and variable categories 21

Standard 5: Work in progress 22

Standard 6: Treatment of income 23

Standard 7: Treatment of non-service user care activities 27

Standard 8: Information 29

Standard 8a: Data matching 32

Standard 9: Quality assessment and measurement 36

Standard 10: Review and audit of cost information 38

Appendix A: Points of delivery and service lines 40

Appendix B: Glossary 41

Appendix C: HFMA Mental Health Costing Practitioner Group 42

Appendix D: Classification of fixed, semi-fixed and variable costs 43

Appendix E: Summary of the clinical costing process 45

Appendix F: Summary of key changes between mental health clinical costing standards 2014/15 and 2015/16 editions 48

“The HFMA has looked to raise the profile of costing across the service and within organisations. It has worked closely with costing practitioners to understand what support they need to improve costing locally.”

Foreword

The HFMA has been actively involved in driving better standards across NHS costing for a number of years.

These costing standards, developed by the association since 2010, are the most visible aspect of this work. But in fact the association’s contribution is much wider. It has looked to raise the profile of costing across the service and within organisations. It has worked closely with costing practitioners to understand what support they need to improve costing locally and – where possible – it has tried to deliver that support.

Its annual costing conference and the networks provided by its various costing groups have provided the foundations for the new HFMA Healthcare Costing for Value Institute. We believe this body can provide the focus for costing improvement and a practical professional network to continue the improvement of costing – and the use of cost data – across the NHS.

The HFMA firmly believes that robust cost data has a major part to play in meeting the service’s challenges over the next few years and over the longer term. It should underpin decision-making, ensuring local decisions are informed by a clear understanding of existing costs and the likely costs of any new ways of working. It will also provide the bedrock for new tariffs, however those tariffs and currencies are designed.

But there is still a way to go. Monitor’s proposals to transform costing over the next seven years set out an ambitious timetable for reform. The association believes this clear direction of travel towards the development of comprehensive service user-level costs across the NHS is a landmark moment in the development of costing.

Those proposals over time will have implications for these clinical costing standards. But the standards continue to represent best practice in NHS costing – a fact recognised by their inclusion in Monitor’s *Approved costing guidance*. Those closest to meeting the standards as they are currently set out will be in the best position to implement Monitor’s proposed new approach once guidance has been finalised.

The standards have a very specific role over the next year, in continuing to underpin Monitor’s voluntary patient-level cost collection. And the substance of the standards – for example, in describing allocation processes that ensure costs are assigned to service users in a way that reflects actual use of resources – will continue to be valid as the service looks to raise standards of costing and improve consistency.

These costing standards, including versions for acute and mental health services, have fully involved costing practitioners and have benefited from doing so. We will continue to work with these practitioners as we develop the standards in future.

John Graham, chair, HFMA Costing Practitioner Groups

Introduction

These clinical costing standards set out best practice guidance for deriving cost data in the NHS. They reflect the methodologies and processes used to derive individual patient-level – or for mental health organisations, service user-level – costs. We acknowledge that some organisations may not be doing full service user-level costing, but will have developed robust and detailed cost information. These standards therefore refer to clinical costing rather than just service user-level costing. They aim to provide organisations with best practice guidance to support improvement in the quality of cost information going forward.

Previous approaches to costing in the NHS have followed a top-down process – allocating total costs down to lower levels, such as the total costs incurred by particular services within a care group using occupied bed days, attendance and contacts, or more recently, by clusters. These approaches have provided useful information, but can only produce information about high-level costs or average costs based on the costs of the inputs of service user care.

In contrast, robust service user-level cost data enables organisations to drill beneath aggregate costs to understand how costs are built up. This data can help them understand variations in cost and inform the efficient redesign of pathways, elimination of waste and the reduction of costs. Service user-level costs should also provide better information to inform tariffs.

Analysing service user-level costs could help organisations understand if cost variations result from differences between service users (greater complexity, say) or between how their care was delivered. A consistent approach to identifying how individual service user costs are built up can also help organisations understand where variations arise within a service user pathway.

Focusing on costs at the service user level can facilitate meaningful discussions between clinicians, managers and support staff, which can underpin improvements both in services and value for money.

Clinical costing builds costs from the bottom up, identifying where possible the specific resources consumed in the treatment of individual service users – for example the costs of a drug. This is not always possible. For instance, it is difficult to assign medical and nursing staff time exactly to each service user. However, costs can be allocated with reasonable accuracy using, say, the number of ward round visits to a service user or the time spent on a ward, with adjustments made for the intensity of the nursing support needed by an individual service user. Indirect or overhead costs – such as the costs of payroll, human resources department or finance team – can also be divided among all service users based on appropriate allocation and apportionment methods.

Once accurate service user cost data is derived, it can be aggregated to provide higher level costs – clusters or service lines – for analysis. But users can always drill beneath these high-level figures to understand how the costs were made up by individual service user interactions.

Organisations are still required to submit cost information as part of the reference cost collection, and will need to follow the Department of Health's reference cost guidance to do this. Adhering to these clinical costing standards should lead to an overall improvement in the quality of cost data.

In addition, Monitor has set out a plan to move to a mandatory patient-level cost data collection for all trusts in its publication *Improving the costing of NHS services: proposals for 2015-2021.* As part of this vision, the HFMA standards continue to be integrated into Monitor's *Approved costing guidance,* updated February 2015.

A first draft of the clinical costing standards was published in 2009 by the Department, with a separate set subsequently produced for mental health organisations. The HFMA then took over responsibility for developing the standards, with continued support from the Department and Monitor. The standards reflect best practice and are intended to drive improvement. They may be stretching or aspirational for some organisations. Where this is the case, they should help organisations to understand their current data, systems and costing processes and how they need to develop to support adoption of the standards and an improvement in costing data quality.

Comment

This update of the clinical costing standards identifies best practice for costing in the NHS during the financial year 2015/16.

Appendix E provides a diagram and summary of the costing process.

Standard 1

Classification of direct, indirect and overhead costs

A: STANDARD

All general ledger costs need to be classified as direct, indirect or overhead[1].

B: PURPOSE

Assigning general ledger costs into direct, indirect and overhead groups improves the ability to analyse information at the organisational and service user level[2]. It provides an understanding of costs that arise directly as a result of service user care and those that are more loosely tied to service user care.

There may be occasions when costs need to be classified in different ways for specific reporting purposes. Monitor's service line reporting guidance suggests a different approach to cost classification. For example, the standards classify pathology as a direct cost, but Monitor's service line reporting guidance suggests it is an indirect cost. However, this standard sets out how costs should be classified to ensure a consistent assignment between direct, indirect and overheads across the NHS for costing purposes, which will also facilitate the understanding of benchmarking data between organisations.

C: GUIDELINES

Definition of cost categories

Direct costs relate directly to the delivery of service user care. These costs can be directly linked to the delivery of service user care and costs are caused/arise as a result of individual service user episodes of care. Some costs, such as radiology costs, can usually be linked directly to individual service users because of the information available. For other costs, such as medical staffing costs, there is a known causal relationship between costs and individual service users. However, the data may not be available to link an individual's time and cost to a specific service user, so the best available data may need to be used.

Indirect costs are indirectly related to the delivery of service user care, but cannot always be specifically identified to individual service users. Indirect costs can usually be allocated on an activity basis to service costs. Using weighted activity gives a better allocation method.

Overhead costs are the costs of support services that contribute to the effective running of an NHS provider. They are costs, such as the costs of the payroll service, that cannot be traced or easily attributed to service users. An appropriate driver of cost should be used where possible (see Standard 3). Any remaining costs – such as board expenses – can be allocated according to size of service value after all other driver calculations have been completed.

Costs should be classified as accurately as possible, as set out in these guidelines. Wherever possible, new methods and information to support a more accurate allocation of costs should be sought. However, for the purposes of national reporting of costs and benchmarking, it is important to achieve a level of consistency in the way costs are classified. Therefore this revised Standard 1 sets out best practice classifications for the NHS, based on the current information sources available to allocate costs. It is acknowledged that for local internal reporting, different classifications may be chosen, and clinical costing systems should be able to support this.

Comment

[1] *Monitor has made the following clarification to its service line reporting guidance: "This information is guidance only and we acknowledge implementation methods will vary at a local level – for example, classification of costs. The benefits, however, should be the same".*

[2] *For the purposes of detailed costing, costs should be reviewed at an individual cost centre and account code level, to ensure the correct interpretation of costs is achieved. It may be necessary for cost centres and account codes to be split further to support costing and this should be discussed with management accounting teams to ensure costs are clearly identifiable and captured accurately to support the costing process.*

Examples of cost centre classifications are shown below. This list is not intended to be comprehensive. However, it reflects a common approach across the NHS.

Direct costs

- Administrative staff directly linked to service user care/contacts
- Diagnostic costs – including MRI scan and CT scans
- Drugs
- Medical, and non-medical, consumable items used in service user contacts
- Medical staff
- Nursing staff
- Other clinical staff – such as scientific and professional staff
- Psychologists
- Psychotherapists
- Social workers
- Therapists, including:
  - Cognitive behaviour therapists
  - Family therapists
  - Occupational therapists
- Travel costs (related directly to visits to service users)

Indirect costs

- Capital charges (depreciation and cost of capital) – medical and surgical equipment that can be allocated to clinical departments
- Clinical safety, quality and audit
- CNST premium
- Consultancy costs if for a specific department or service (new inclusion for the 2015/16 update)
- Divisional managers and operational managers – for example, service managers and nurse leaders
- Linen
- Medical records
- Pharmacy services – managing and running costs
- Service user catering
- Service user transport (new for the 2015/16 update)
- Training – departmental (new for the 2015/16 update)

Overhead costs[3]

Estates overhead costs include:

- Building insurance
- Building maintenance
- Capital charges (depreciation and cost of capital) – buildings
- Capital charges (depreciation and cost of capital) – equipment (please note this was previously categorised in indirect)[4]
- Cleaning
- Consultancy costs for organisation-wide projects (new inclusion for the 2015/16 update)
- Energy
- Equipment maintenance
- Rates
- Utilities

Other overheads include:

- Administration
- Board costs – trust executives
- Computer licences
- Finance
- Health and safety (new for the 2015/16 update)
- Human resources
- Information management/information technology
- Non-operational units/teams – for example, clinical governance (new for the 2015/16 update)
- Interest payments (new for the 2015/16 update)
- Marketing and public relations (new for the 2015/16 update)
- Organisational development
- Payroll
- PFI payments (new for the 2015/16 update)
- Procurement (new for the 2015/16 update)
- Security (new for the 2015/16 update)
- Service user liaison and complaints (new for the 2015/16 update)
- Strategic planning
- Training – organisation-wide (new for the 2015/16 update)

Comments

[3] *The approach to classification of costs is based on best practice in identifying the costs incurred by service users. It is not based on how a particular costing system is set up or how significant the spend is considered to be by finance professionals.*

[4] *The Mental Health Costing Practitioner Group is aware NHS bodies take different approaches to the classification of estates costs, treating them as overheads, indirect costs or both. A significant amount of work has been undertaken by the group to review these classifications, and changes have been made to reflect this. The classification should not dictate the allocation method used. Whatever classification is used, the allocation/apportionment method chosen should always use the best available data to approximate actual usage as closely as possible. However, the group believes there is value in having a common approach to the classification of costs, facilitating like-for-like comparisons across organisations. For example, the group has agreed that capital charges relating to medical and surgical equipment should be classified as indirect costs, while capital charges relating to other equipment should be classified as overheads. If you are not able to split out the capital charges in this way, we suggest you report all capital charges as overheads until the necessary information can be provided by the organisation.*

Standard 2

Creation of cost pools and cost pool groups

A: STANDARD[5]

All service costs need to be grouped into associated cost pool groups.

B: PURPOSE

- To show the components of service user costs and provide useful and informative groupings by which to analyse and report costs
- To enable cost comparison at the individual and accumulated service user level for benchmarking
- To facilitate the audit of cost allocation and information systems.

C: GUIDELINES

Cost pool groups are 'types' of costs, forming a set of component costs. Cost pool groups are distinct from service lines or points of delivery (for definitions, see Appendix A). Instead, cost pool groups represent the component costs within a particular service line and can provide a logical and useful high-level breakdown of costs for analysis and benchmarking purposes.

Cost pool groups are at the top of a hierarchy and only this top level is covered by the standard. One or more subsidiary levels in the hierarchy may be set locally to enable organisation-specific reporting and to conform with data availability.

Organisations have freedom to choose cost pools (within cost pool groups) to suit local circumstances. However, best practice dictates that these pools should map to the cost pool groups in the standards to enable like-for-like comparison.

The recommended cost pool groups have been reviewed[6]. From 2015/16 they include:

- Clinical support functions, to include radiology and pathology, and other diagnostics (either subcontracted or provided by trust)
- Drugs and pharmacy
- Medical staff
- Non inpatient services/teams
- Non-service user care activities, including education and training (see Standard 7)
- Other clinical services
- Psychology and psychotherapy (new for 2015/16)
- Secondary commissioning costs
- Special procedure suites
- Therapies
- Wards.

Comment

[5] The role of cost pool groups is to provide useful component costs that help organisations to analyse the make-up of costs at whatever level – service lines, clusters or individual service users. The benefit of using consistent cost pool groups across the country opens the way for meaningful benchmarking and comparison. You could look at a service user's costs and see at a glance the contribution of medical staff, nursing, therapists and drugs to the overall costs of treatment. A service user might have an element of cost from every cost pool group or just from a selection of the groups.

[6] Cost pool groups should apply to all service user types – for example, inpatients and non-inpatients. They may have lower levels – perhaps the medical staff cost pool group is made up of cost pools of senior or junior medical staff.

Discussions have continued around the classification of social workers and psychologists. For 2015/16, a new cost pool group has been created for psychologists and psychotherapists. This reflects the increasing use of this staff group to deliver services and also the increasing materiality of their costs to organisations. Social workers should continue to be reported in the other clinical services cost pool group.

The aim of establishing cost pool groups is to provide sensible component costs for service user care to enable possible benchmarking and comparison. The suggested cost pool groups listed on the previous page draw largely on the traditional subjective analysis of expenditure as a starting point. The classification of cost pool groups will continue to be developed.

Cost pool groups should be created so they can be reported with and without overheads, particularly in order to meet the requirements of future national cost returns. The ability to report cost pool groups as fully absorbed groups of costs or just including the direct and indirect cost element will support benchmarking and the ability to better understand and drill down into variations in cost. This approach is being followed by Monitor in its voluntary service user-level cost data collection for acute organisations. To support this approach, we strongly recommend that organisations review their costing systems to ensure that they are fully compliant with Standard 1.

CLINICAL SUPPORT FUNCTIONS

This cost pool group includes costs of diagnostic clinical laboratory testing for the diagnosis and treatment of service users. A full list of pathology types can be found in Standard 1. To recognise the different cost implications of the many separate tests within the costing process, more than one cost pool should be created within the pathology cost pool group. Examples include clinical biochemistry, clinical microbiology, clinical pharmacology, haematology (laboratory), histopathology and immunology (laboratory). However, if pathology is provided as a sub-contracted service, it may only be appropriate to maintain one cost pool.

This cost pool group also covers the area of diagnostic radiology. Examples of imaging services, which could be separate cost pools within the cost pool group, include CT, plain film X-ray, mammography, fluoroscopy, MRI, nuclear medicine, PET and ultrasound. Again, where this is provided as a sub-contracted service, only one cost pool may be appropriate. It also covers other diagnostic services, such as ECG an EEG tests.

Include	Exclude
• Goods and services • Goods and services (eg chemicals) • Medical and surgical supplies • Medical staff salaries/wages related to pathology, radiology and other diagnostic cost centres • Medical technician and scientist salaries and wages • Nursing salaries and wages • Other staff salaries and wages • PACS / RIS contracts • Radiologist/radiographer salaries and wages	

DRUGS AND PHARMACY

The drugs cost pool group covers the cost of drugs and the pharmacy department. This includes all drugs, stock drugs, drugs dispensed directly to service users and home delivery of drugs.

Include	Exclude
• All medical and surgical supplies in pharmacy cost centres • All staff salaries and wages in pharmacy cost centres • Cost of drugs that can be allocated to service users • Cost of purchased drugs • Goods and services in pharmacy cost centres • Home delivery of drugs	

In order to support national cost reporting requirements, we recommend the creation of two cost pools underneath the drug cost pool group:

- Drugs dispensed to a service user – usually high-cost drugs
- Drugs not dispensed directly to a service user

MEDICAL STAFFING

This cost pool group consists of medical staffing salaries associated with the treatment of service users. This is treated as a separate cost pool group because it is a significant cost that could have an impact on comparability of costs between organisations. It covers the costs of consultants, registrars and junior doctors.

Include	Exclude
• Associated non-pay costs of medical staffing and medical secretaries • Medical salaries and wages including costs of consultants, other medical staff, registrars, and junior doctors	• Medical salaries and wages for pathology, radiology and other diagnostics

We suggest as a minimum that separate cost pools are created for consultants, other medical staff and juniors working across the services outlined below. In addition, separate cost pools should be created for the education and training element of their work. Where education and training is fully costed alongside service costs within a costing system, the element of costs of medical staffing relating to education and training should be included within the education and training cost pool, which groups to the non-service user care cost pool group.

However, where the education and training cost pool is not fully used, the element of education and training costs for medical staffing may be kept in the medical staffing cost pool group. This will be monitored for the 2016/17 update.

NON-INPATIENT TEAMS

The non-inpatient team cost pool group covers the costs associated with running outpatient clinics and community services. It should include services such as:

- Community mental health teams
- Assertive outreach teams
- Crisis resolution teams
- Early intervention teams
- Dementia teams
- Personality disorder teams

Include	Exclude
• Medical and surgical supplies centres • Nursing salaries and wages • Other staff salaries and wages	• Costs reported in other clinical services • Drugs • Medical staffing • Pathology/radiology/other diagnostics

NON-SERVICE USER CARE ACTIVITIES

This would include the costs of running non-service user care activities, including education and training and research and development (see Standard 7).

We suggest that cost pools are created for:

- Education and training costs
- Research and Development
- Commercial activities

These will support national cost work as well as internal costing /performance needs.

OTHER CLINICAL SERVICES

This clinical supplies and services cost pool group would include the costs of clinical services not included in other groups. This cost pool group has been included to accommodate trusts with services that cannot be included elsewhere. It should include the costs of daycare, and service user safety teams. It should also include the costs of social workers.

PSYCHOLOGY AND PSYCHOTHERAPY

This cost pool group consists of the salaries associated with psychologists and psychotherapists. It should also cover all associated non-pay costs.

Include	Exclude
• Associated non-pay costs of psychologists and psychotherapists • Medical secretary salaries and wages • Salaries and wages of psychologists and psychotherapists	• Salary costs of all other staff groups

SECONDARY COMMISSIONING COSTS

This cost pool group contains costs related to secondary commissioning of activity undertaken if, for example, an inpatient ward is provided by an independent provider and the costs for those service users is invoiced to the NHS provider.

SPECIAL PROCEDURE SUITES/SPECIAL TREATMENT ROOMS

The special procedure suites/special treatment rooms cost pool group covers costs for suites specifically equipped to enable diagnostic and therapeutic procedures to be performed under the direction of qualified medical practitioners. It includes ECT and minor procedure suites – for example, where drug therapy may be provided.

Include	Exclude
• Anaesthetics costs • Medical and surgical supplies • Nursing salaries and wages, including recovery and anaesthetics • Other goods and services reported in special procedure suite cost centres • Other staff salaries and wages	• Imaging • Medical staffing • Pathology • Pharmacy/drugs

THERAPIES

The therapies cost pool group includes clinical services delivered by qualified therapy professionals who have direct service user contact in the areas listed in Standard 1 (this excludes medical and nursing personnel). A number of individual cost pools should be created within the therapies cost pool group to achieve more granularity within the costing process. Examples would include cost pools for physiotherapy, dietetics, occupational therapy and speech and language. The therapy cost pool group should exclude the costs of psychology.

This cost pool group should include all staff groups classed as allied health professionals. This will include play therapists, exercise therapists, drama therapists and art therapists.

Include	Exclude
• All staff salaries and wages reported in therapies cost centres • All therapist salaries and wages reported in other cost centres • Medical and surgical supplies reported in therapies cost centres • Other costs reported in therapies cost centres	• Psychology • Social workers

WARDS

This group includes nursing salaries, as well as costs of medical and surgical supplies and other goods and services used and delivered on wards. Each ward should be costed separately before being allocated to service users, so each ward may be treated as a cost pool within the wards cost pool group. Other settings not covered by their own separate cost pool groups should be included here.

Include	Exclude

• All grades of nursing salaries and wages reported in ward areas
• Goods and services
• Medical and surgical supplies and services
• Salaries and wages of ward management and clerical staff
	• Costs of domestic staff, if coded to ward cost centres
	• Non-inpatient teams
	• Nursing salaries and wages reported in other cost pool group areas, including :
	  • Other clinical services
	  • Pathology/radiology/other diagnostics
	  • Special procedure suites
	  • Stock drugs
	  • Therapies

Classification of indirect costs across cost pool groups

Indirect costs should not be classified into the 'other clinical services cost pool group'. In most costing systems, indirect costs are allocated using activity information, whereas overhead costs are allocated to other cost centres. The table below offers guidance on the cost pool groups into which the indirect costs listed in Standard 1 should be classified. In many systems this may require some initial work to split the costs so that they can be classified across different cost pool groups. But this work should be a one-off exercise and will allow costs to be allocated more accurately, as the costs classified within each cost pool group should be allocated differently.

Indirect cost	Cost pool classification	Comment
CNST	All cost pool groups with the exception of non-service user care activities and drugs	Costs will need to be classified into relevant cost pool groups based on information regarding the CNST premium
Capital charges medical and surgical equipment	All relevant cost pool groups	Costs should be classified across all relevant cost pool groups
Catering (for service users)	Wards	
Clinical safety, quality and audit	All cost pool groups with the exception of non-service user care activities and drugs	Costs will need to be classified into relevant cost pool groups for the individual trust based on the work of this department
Divisional managers and operational managers	All cost pool groups, with the exception of medical staffing, non-service user care activities, drugs, secondary commissioning costs, non-service user care activities	Costs should be classified across appropriate cost pool groups for an individual trust, based on the work of the divisional and operational management teams
Linen	Wards, special procedure suites	Costs should principally be classified into the wards cost pool group. However, if linen is supplied to other service user groups then it may also be classified across special procedure suites
Medical records	Wards, non-service user services	The split across cost pool groups will depend on the advice of the medical records team
Service user transport (new for the 2015/16 update)	Wards, special procedure suites, non-service user services	Costs should be classified across relevant cost pool groups in proportion to the activity of the service
Pharmacy services (managing and running costs)	Drugs and pharmacy cost pool group	
Training – departmental (new for the 2015/16 update)	All relevant cost pool groups	Costs should be classified across all relevant cost pool groups. This will depend on the staff groups to whom the training is being delivered

Standard 3

Allocation of costs

A: STANDARD

This standard is based on the principle of full absorption costing[7]. For full absorption costing, all costs will be allocated at some point in the costing process. Whenever practical, costs should be allocated on an informed activity basis, using an appropriate driver of the resource use, rather than shared over a number of activity units based on total expenditure.

Cost pool groups will contain different types of service user resource - broadly staff/pay, consumables and other non-pay expenditure. These different service user resource costs should be allocated to service users who use a method that as closely as possible reflects actual use of the resource.

Organisations should consider the materiality of a resource when considering the amount of effort and/or data collection required to provide information on what drives costs.

The **MAQS template** contains a full list of allocation methodologies. For each cost type, there are a minimum of four allocation options to select, therefore showing which options are available to improve the quality of costing if data is available.

Given the importance of allocating indirect and overhead costs accurately, and the materiality of these costs, the MAQS has three distinct sections: direct, indirect and overhead costs. Therefore for the calculation of the MAQS, the quantum of costs in the first stage of the costing process will be required.

Allocation methods are given a rating to reflect the quality of the allocation achieved. These ratings (gold, silver, bronze, baseline) have an associated weighting that is used within the MAQS calculation to assess the quality of the costing process (see Standard 9).

Research commissioned by the HFMA and Monitor has found that costing systems across Europe use a mixture of top-down and bottom-up costing methodologies. This is primarily because the data is not usually available to allocate many overhead and indirect costs using a bottom-up costing methodology or directly to a service user. Therefore all costing systems do contain a mix of methodologies. It is for this reason that the MAQS is so important. It highlights the mix of methodologies used by individual organisations and demonstrates how cost allocations could be changed to improve the overall quality of costing.

International approaches to costing can be found on the HFMA's website at www.hfma.org.uk/costing/standards/supporting-material/mentalhealth

B: PURPOSE

To identify the most appropriate mechanisms to allocate costs. This includes direct, indirect and overhead costs.

C: GUIDELINES

This section sets out a number of methodologies to allocate costs from cost pool groups to service users using service user resource information obtained from feeder systems or local databases. The methodology an organisation chooses will largely depend on the availability of suitable service user level data. The aim is to allocate costs in line with the most appropriate cost driver for that particular set of costs. The method chosen should either allocate costs to service

Comment

[7] *This standard reflects best practice methodology in allocating costs to service users. This may be aspirational for some organisations given the information available. However, this should not deter organisations from implementing clinical costing and using the best methodologies available in individual circumstances, while putting plans in place to improve costing methodologies over time. While many mental health organisations may currently be focused on a top-down process to produce cluster-based costs, the accurate identification of service user costs will enable cluster costs to be built from the bottom up.*

users on the basis of actual consumption of resources by that service user or provide the best approximation of actual consumption. The methods are broadly set out in a hierarchy, with actual usage providing the preferred option where feasible. If this information is not available, then a method that best approximates actual usage should be used.

1. Actual usage

Where possible, an actual usage methodology should be employed or one that closely relates to actual usage by individual service users. This may mean allocating resources based on time spent with an individual service user and/or the actual consumption of a resource. Examples of time/volume allocation are:

- **Nursing staff on a ward** The methodology for allocating nursing costs on a ward is set out in Standard 3a.
- **Community mental health teams** The methodology to allocate community team costs is set out in Standard 3b.

2. Outsourced service

If goods or services are provided by an external agency and billed to the service, these costs should be allocated to a service based on the price charged by the external agency. This is similar to the ‘actual usage method’, and forms another version of the gold standard.

3. Average usage

It may be necessary to average the actual time spent with each service user or the utilisation of consumables across a particular group of users. This may be necessary where actual service user-level data is not available, and may be established by using sample information for the service that is being considered. Examples using the average usage method are as follows:

- **Psychotherapy** Average time of, say, 15 minutes is used for every service user with a particular condition alongside an average preparation time of one hour for each session
- **Ward drugs** Average cost of, say, £50 for a particular payment system cluster, where service user level information is not available
- **Medical staffing** A combination of actual usage and average usage can be used to allocate medical staffing costs. Some staff can be assigned to particular community services or wards and therefore their costs can be allocated based on actual usage, as in the examples above. Where a consultant has a split inpatient/community service role, then job plans should be used to determine this split based on dedicated programmed activities (PAs) for each service.

The costs of junior doctors should be assigned across the relevant wards or community teams and then be allocated on the basis of actual usage. In the event of junior doctors working across more than one service, rotas should be used to determine the split.

4. Duration of activity

Where there is a service user resource that has no associated feeder system to provide service user level data – for example, ward stock drugs – it may be appropriate to use a ‘surrogate’ or ‘proxy’ service user resource information (such as bed days) as a costing methodology.

5. Activity level (number of activities)

Where possible, the costs should be broken down at an individual service user level and/or built up by using the costs of interventions/activities – for example, cognitive behaviour therapy sessions – within an individual care pathway. Where this is not possible, it may be necessary to use the number of inpatient days, attendances or contacts as a proxy to allocate costs. This should only be used as an interim measure, as there may not be significant homogeneity in the amount of resource used per unit of activity at this higher level.

6. Service weights[8]

This involves allocating costs across a wide group of service users or products. For example, the cost of inpatient nursing care can be allocated across service users in different clusters, with each cluster being given a service weight based on the intensity of nursing time given. This may not reflect the different utilisation of this resource by individual service users.

7. Cost weights

Cost weights provide an alternative way to allocate some costs between different cost pools. They should be derived in conjunction with the individuals involved in the provision of the service. For example, cost weights for alcohol and substance abuse services should be developed in conjunction with relevant team and operational management.

Cost weights can be used to allocate costs within cost pools down to service user level in a number of different areas. For example, within an electro-convulsive therapy (ECT) cost pool, cost weights can be used to recognise all the different costs associated with different types of ECT (such as unilateral and bilateral ECTs). For pay costs, the number of minutes on an actual or average basis input by each type of clinician involved (anaesthetist, psychiatrist and nurse) will contribute to determining the cost weight.

The cost weight will be applied to the relative costs of each type of clinician involved to establish the overall cost of the procedure. Cost weights that describe pay components should ideally be verified by examining the total number of procedures performed. For example, the total number of ECTs performed by an anaesthetist per session should be consistent with the overall time they have taken (reflected in the cost weights) for the ECTs.

8. Standard costs/internal trading accounts[9]

Some trusts may wish to use a standard cost in some areas – for example, cognitive behavioural therapy – to allocate direct costs. The standard cost (pre-determined cost of providing a service) should be calculated using the methodologies already described. Any surplus or deficit resulting from using standard costs will then need to be treated as an indirect cost or, if possible, spread across the related activities, using the cost or number of units involved as a cost weight. In all cases the best available allocation method should be used. For example, for financial services, payroll and purchasing departments, an allocation based on the number of transactions is likely to be more accurate than using total spend.

9. Overhead – based on total expenditure

This methodology allocates costs based on the size of the expenditure pot after all other allocations have been made. It is not acceptable for direct costs but may be appropriate or necessary (due to lack of better information) for indirect costs. It will usually be acceptable for overhead costs, but more sensitive resource drivers should be used to allocate costs if available.

Comment

[8] *The use of service weights is discouraged because long term it results in averaging and will therefore not highlight differences in cost profiles. This will impede the analysis of variation, which is important to identify and eliminate unnecessary resource usage.*

Definition

[9] *A standard cost is the estimated/predetermined cost of providing a service under normal conditions. They are likely to differ from actual costs and may differ from average costs, calculated by dividing total recorded costs by activity.*

Standard 3a

Allocating ward costs

The HFMA has been working with the Mental Health Costing Practitioner Group to understand how organisations currently allocate ward costs, in particular nursing costs. The results of this work show that there is a wide variation in how organisations allocate nursing costs across the sector.

Most organisations use actual length of stay in days to allocate nursing costs to service users. However, this approach does not reflect the actual nursing input required to treat and care for individual service users, and this view is reflected in the MAQS.

The most accurate method would be to allocate nursing costs using the actual time each nurse spends with a service users. However, this would place considerable burden on nurses to collect this information, and potentially require significant IT investment to support.

Understanding acuity and the resulting nurse dependency is clearly key to ensuring wards have the right nursing staff in place to meet the needs of service users. Different service users need different levels of nursing care and support. The HFMA will continue to work closely with NICE as part of its work on safe staffing guidelines for mental health organisations during 2015.

As a result of our work, the gold standard for allocating nursing costs will now only be awarded where the additional costs of high dependent users are captured. This will attract a score of 1 in the MAQS. Silver standard will be awarded for the allocation of nursing costs using length of stay in days. This will attract a weighting of 0.75 in the MAQS. The bronze standard will be awarded for the allocation of nursing costs using length of stay at cluster level. This may be required for those organisations who have yet to implement systems on wards that capture service user-level information. To summarise:

- **Gold** The costs of each ward are allocated across the service users treated on that ward on the basis of length of stay (midnight bedcount as a minimum), incorporating a weighting for the additional costs of specialling and service users with higher dependency on nursing staff.
- **Silver** The costs of each ward are allocated across the service users treated on that ward on the basis of length of stay (midnight bedcount as a minimum).
- **Bronze** The costs of each individual ward are allocated using the specific activity for that ward at cluster level (midnight bedcount as a minimum).
- **Baseline** Total ward costs are divided by total ward activity (occupied bed days using midnight count) at the cluster level. In all cases, actual usage rather than planned or budgeted usage should be used to allocate nursing costs, as often the plan or budget is very different from the actual costs incurred.

The HFMA will continue to work with the Mental Health Costing Practitioner Group to review how leave days should be incorporated into costing models. This is a challenging area and we recommend that organisations continue to follow reference cost guidance during 2015/16.

Standard 3b

Allocating community team costs

The results of our work with the HFMA Mental Health Costing Practitioner Group show that organisations are capturing activity data for these teams and data is captured at an individual service user level.

For 2015/16 the gold standard approach to allocating these costs is being achieved by a few trusts. The approach is to allocate costs based on the actual time each team spends with a service user, and weight this time based on type of contact and duration. This will attract a score of 1 in the MAQS. Silver standard will be awarded for the allocation of costs across all contacts with a weighting for the type of contact. This will attract a score of 0.75 in the MAQS. The bronze standard will be awarded for the allocation of costs across attendances at cluster level. This will attract a score of 0.5 in the MAQS. This option will be relevant to those organisations that have yet to implement service user-level information.

To summarise:

- **Gold** Individual community team costs are allocated to the individual service user contacts undertaken by that team. This includes face-to-face and non-face-to-face contact activity and contacts should be weighted by the duration of the contact.
- **Silver** Individual community team costs are allocated to the individual service user contacts undertaken by that team. This includes face-to-face and non-face-to-face contact activity with face-to-face and non-face-to-face weighted differently based on a sample calculation by the organisation.
- **Bronze** Individual community team costs are allocated across the clustered service user activity for that team. This should include face-to-face and non-face-to-face activity.
- **Baseline** The total costs of community teams are allocated across the clustered service user activity for that team, for face-to-face activity only.

Comment

[10] *Job plans are a legal contract for individual consultant activities and pay, and as such should reflect accurately the services provided by the consultant to the trust.*

Standard 3c

Allocating medical staffing costs

The most recent HFMA costing survey highlighted wide variation in approaches to allocating medical staffing costs and in the information used to allocate these costs.

In many organisations, medical staff are directly charged to a specific ward or community team. However, this will not apply to all medical staff, so job plans and rotas should be used to allocate medical costs to services based on the PAs allocated to them.

Job plan information should be available from the medical staffing team. Job plans break down consultant activities by session or PA and should be updated annually.

Job plan breakdowns should be discussed with the clinical leads and managers for each specialty to ensure the information provided is accurate and sufficient for costing purposes[10].

Junior doctors should not be allocated using the same methodology and data as consultants. This is because junior doctors often spend different proportions of their time undertaking different activities. Junior doctor rotas should be used as the basis to break down junior doctor time, but discussions should be held with the medical staffing team and clinical leads to validate these breakdowns. The approaches taken are likely to vary considerably between services.

All junior doctors should not be allocated in the same way. The costs of the different grades of junior doctors should be allocated differently. This reflects the changing role of junior doctors and their impact on the delivery of services as they progress through their training programmes.

Again, the HFMA has worked with the Mental Health Costing Practitioner Group to investigate how medical staffing costs are currently being allocated. As a result of this work, the MAQS has been updated. The allocation methodologies for allocating medical staffing costs are as follows.

The Gold standard approach is to allocate consultant costs using job plans that have been reviewed by the service in the past 12 months and to use rotas for junior doctor costs. This will attract a score of 1 in the MAQS. Silver standard will be awarded for the allocation of costs based on job plans with junior doctors treated as an overhead to the consultants. This will attract a weighting of 0.75 in the MAQS. The bronze standard will be awarded for the allocation of costs using length of stay weighted by cluster casemix.

To summarise:

- **Gold** Consultant costs allocated to services based on the consultant job plans that have been validated by the service leads. Junior doctors costs are allocated based on rotas.
- **Silver** Consultant costs allocated to services based on consultant job plans that have been validated by the service leads. Junior doctors are treated in the same way as consultants.
- **Bronze** Medical staffing costs allocated across all service users at the cluster level, with each cluster weighted on the basis of length of stay.
- **Baseline** Medical staffing costs allocated across all service users at the cluster level.

Standard 4

Classification of costs into fixed, semi-fixed and variable categories

A: STANDARD

All costs are to be classified as fixed, semi-fixed or variable.

B: PURPOSE

Understanding the variability of costs will facilitate better analysis of costs around incremental changes in activity (upwards and downwards) but also inform decision-making when considering growing or divesting of services. When an organisation has knowledge of its fixed cost base and the thresholds where blocks of cost are added or removed, the financial impacts of service development can be more accurately anticipated.

C: GUIDELINES

As a general rule, fixed costs are those that would not be affected by in-year changes in activity. It is accepted that, in the long term, all costs are variable because all resources can be removed. However, using a 12-month period to judge how costs vary with activity enables the consistent classification of costs from organisation to organisation.

- **Fixed costs** Fixed costs will not change as activity changes over a 12-month period. Fixed costs are absorbed across the service users treated in a period and therefore the amount absorbed per service user will change as volumes of service users flex through the year. Fixed costs may also change if a contracted service is removed or added – therefore fixed costs are not just time-defined.
- **Semi-fixed costs** Semi-fixed costs do not move with activity changes on a small scale, but jump or step up when a certain threshold is reached. Defining the threshold, and the materiality of the step change, is at the discretion of individual organisations.
- **Variable costs** Variable costs will be directly affected by the number of service users treated or seen. They are an incremental or marginal cost. One more unit of activity will generate an extra cost. It is important to note that the very nature of service user-level costing means that this cost may differ from service user to service user, but the nature of the cost is that it is triggered by the quantity of service users.

A mapping of account codes to fixed, semi-fixed and variable classifications is provided in Appendix D. This mapping has been reviewed by the HFMA Mental Health Costing Practitioner Group. While the list intends to be as comprehensive as possible, if an organisation uses an account code that is not listed, similar account codes can be found to classify the costs according to the principles developed by this standard.

Standard 5

Work in progress

This standard on work in progress has been included for information only, for the reasons stated below.

Mental health services are continuing to move towards using a ‘cluster’ currency for costing and payment purposes. The national tariff payment system guidance 2015/16 for mental health outlines the approach to commission via a cluster basis, but using a price per day as the starting point for this approach.

The development of service user-level costing across mental health organisations will support the development of costing work in progress. This is because it will allow the costs of individual service users to be calculated on a daily basis.

Due to the long-term nature of service user’s needs, it is inevitable that some service users’ time in a cluster will span across specific accounting/reporting periods, but payment is likely to be periodic throughout this time. On this basis, costs can be assigned to service users within clusters and broadly matched with the relevant income. (The exception to this is where, in some cases, higher costs may be incurred at the beginning of treatment, in which case income and expenditure would not match.)

At the end of a financial period, service users who remain part of the trust’s caseload will be at different stages in their treatment cycles. The calculation of these service user costs on a daily basis will support the future development of pricing systems that will adequately reimburse work in progress.

The Mental Health Costing Practitioner Group will continue to review the applicability of this standard to mental health organisations and will monitor feedback received to support its future development.

Standard 6

Treatment of Income

A: STANDARD

Income should be clearly identifiable for internal reporting without being 'netted off' from cost[11]. Two classifications apply:

- All income should be classified as core or other.

  Core income Commissioning income for core NHS service users (including overseas visitors covered by reciprocal arrangements)

  Other income Including income from private service users or overseas visitors (not covered by reciprocal arrangements), service provision to other providers (for example, payroll or pathology) or provision of goods and services to non-NHS entities. Research and development income and education and training levy income (see Standard 7) are also 'other' income.

- All income should be classified as direct, indirect or corporate.

B: PURPOSE[12]

To ensure consistent treatment of different sources of income so that service user-level costs reflect the real cost of treating service users and do not include costs associated with non-core income. Additionally the standard supports a consistent approach to the treatment of income to support the understanding of profitability at service user and service line level.

This standard is aspirational as categorisation of income in this way is relatively new compared with the corresponding categorisation of cost. This standard forms best practice and is closely linked to the improvement of service line reporting (Appendix A) and benchmarking with other organisations.

C: GUIDELINES[13]

The treatment of income relates to costing in two ways. First, the costs of activities generating income that is unconnected to service user care – for example, delivery of a payroll service to a local trust or social care to a local authority – should not be assigned to service user costs. Instead the specific costs should be identified, matched with the relevant income and stripped out of service costs before any profit/surplus element is allocated down to service users and shown as income.

Second, it is acknowledged that income is also vital for comparing with cost data to understand profitability at service user or service line level. Income therefore needs to be handled consistently to ensure accuracy and comparability. With the development of pricing systems for mental health, the transparency of income sources will increase and this standard will become easier to implement in practice.

Comment

[11] *These standards cover approaches to costing, not income. However, it is recognised that inconsistent approaches to income can significantly influence the costs shown in costing service user care.*

[12] *Core income is broadly income from service user-related activities not including private service user income. This would be equivalent to income from mandatory services for foundation trusts.*

[13] *The category of 'other' income should align to the Department of Health reference costs guidance for 'allowable income'.*

CORE/OTHER INCOME[14]

Core income is defined as clinical commissioning group (CCG)/NHS England (NHSE) income for main clinical services:

- Service activity and block contracts with CCGs/NHSE for core care
- Non-contract activity with CCGs/NHSE
- Contracts with the NHSE or the NHSE's local area teams for specialised services
- Local authority contracts.

Other income is all other income streams that do not relate to the core NHS activity commissioned by commissioning groups, or NHS England, including:

- Provider-to-provider service contracts
- Social care provided to a local authority
- Contracts with non-NHS parties
- Private service users and overseas visitors.

DIRECT, INDIRECT AND CORPORATE INCOME

All appropriate income must be classified as direct, indirect or corporate. However, it is acknowledged that information may not be available to place all income streams into these categories with confidence. The guiding principle is whether the income relates to direct service user care (direct) or service user care for other organisations (indirect) or non-service user services/goods (corporate). As a general principle, income should not be netted off from gross costs but shown separately as an income stream. The reasons for this are as follows:

- After netting off, the residual value may not truly represent the cost of service user treatment as there may be an element of profit or loss that would be absorbed incorrectly into the cost of service user care. For example, a small surplus achieved on the provision of catering services should be shown as exactly that. If instead the full income were netted off from the quantum of costs, this would result in service user costs that were artificially low.
- Expenditure or resources that attract non-service user care-related income should not be included in the costs of service user treatment to start with – for example, rented-out floor space.
- Where a trust receives income other than that received for service user care, it is usually associated with a defined business unit that could make up or be part of a separate service line – for example, clinical training or social care income.

While the general rule is that income should not be netted off from gross costs, there will be exceptions. For example, if the relevant information is not available to split costs accurately between service user and non-service user-related services, netting off income received and applying the remaining cost to service user services may be the most reliable alternative approach. The approach will depend on materiality, quality of information and the accuracy obtained in matching income and costs.

Comment

[14] Organisations may wish to identify additional categories of income to enhance transparency or achieve a more usable output, such as estimated/accrued income.

Standards for the treatment of income types are described below:

Direct income

Direct income is income that can be directly attributed to service user care and should not be deducted from gross cost. It should be reported as service user-related income.

Examples include:

- NHS clinical income with activity-related payment (price and volume). This is a common currency for specialist services such as low and medium secure mental health contracts.
- NHS block contract income where this relates to a particular group of service users. In order to action the requirements of Standard 6, provider organisations must be able to identify their income streams to service lines (disaggregate block arrangements) so that an accurate service user service cost can be calculated. The most successful way to achieve this is to identify the full cost of the services provided from within the block contract, break these down at the lowest level possible and divide the income in line with these costs. Examples of this division are adult, older people and community services.
- Non-NHS clinical income – private service user and overseas visitor income – should be reported in the same way as NHS clinical income, at the service user level, and not deducted from NHS service user costs. If the timing of this income does not allow it to be linked directly to a service user episode, this income can be reported at a higher level. Private service user income is relatively rare in mental health settings.

Indirect income

Indirect income relates to service user care services but not directly to the care of the organisation's own service users. It should not be deducted from the gross cost of providing a service if it is material and the costs relating to how the income is generated can be isolated.

Consider a mental health trust providing psychiatric liaison services to an acute provider. If this service is provided through a service level agreement with the acute trust, the full costs of the services (including overheads) should be identified separately and reported against the relevant service line, with activity (or measure of time) being used to support the performance management of the agreement.

Where this is as a separately commissioned service, it should be managed as a service to the commissioner and identified separately at full cost against commissioner income. Where there is insufficient information to isolate the costs, or the income stream is not material to the service line, income should be netted off against the associated relevant costs.

For example:

- Income from low-value or non-regular staff recharges – deducting this from the gross cost of the member of staff gives the cost of providing the service. The level of detail to pursue should be reflected in the materiality of the impact on the costs of the results.
- Clinical excellence award income – the actual cost to the service is the subsidised cost of the member of staff receiving the award. This cost should be held against the service the post is supporting.

Corporate income

Corporate income should be reported separately from the costs associated with the business unit that is receiving this income. This income should not be deducted from gross cost, but can be allocated in service line reporting processes to provide information about the fully absorbed income for a service line. Using an appropriate activity-based driver may be possible.

Examples include:

- Commercial income from rental of the organisation's facilities – for example, retail outlets or consulting rooms rented to psychologists working privately
- Provider-to-provider arrangements – where a service is provided for another organisation, such as payroll, the income and associated costs should not be included when calculating the cost of providing a service to the organisation's own service users
- Interest receivable from investment of cash
- Technical adjustments from NHS England
- Service level agreement income for services provided to other organisations.

A significant amount of work may be required in order to ascertain the costs associated with corporate income – for example, the element of facilities costs associated with retail space. However, this standard sets out a higher standard than is currently in operation and it is recommended that organisations aim for these classifications over time, and within acceptable resource allocation of finance professionals.

Surplus (an excess of income over expenditure) should be treated as income, and kept separate from the costs of running the service. For service line reporting, the organisation may wish to show surplus separately from the income covering costs, but this is not a part of this standard. In general for service line reporting, it is recommended that the surplus, like the income, is matched to the service that generated it, or that it is shared across a range of (or all) services.

Training income and research and development funding should be treated as corporate income and reported separately, together with their associated costs. This income should not be deducted from gross cost. In service line reporting processes, it should be matched against the relevant service line.

Training income is mainly received in three categories, as set out in Standard 7.

Income relating to research and development should not be deducted from gross cost either, as it does not relate to providing a service to NHS service users (Standard 7). This applies to clinical trial income and Department of Health-funded research and development. This income should be matched with the costs associated with research activities.

As with other income, identification of this income for reference costs purposes should be achieved by establishing the costing system to comply with the clinical costing standards, while also being able to calculate the reference costs according to the reference cost guidance.

Standard 7

Treatment of non-service user care activities

A: STANDARD

The costs of clinical training and education, and research and development should be separately identified from the costs of providing service user care[15].

The costs incurred in other clinical and non-clinical activities, where the organisation's service users are not the primary reason for the activity, should not be allocated to service users but separately identified.

B: PURPOSE

To provide a consistent methodology to determine the cost of non-service user care activities to ensure that these costs are not included in service user care costs. This treatment will also show the surplus or deficit of providing services, to enable information for reimbursement discussions.

C: GUIDELINES

Training and education and research and development have historically been funded separately from healthcare. In costing terms, these activities have generally been treated as cost-neutral in terms of the costs of service user care activities. In practice, the income received for these activities has been deducted from an organisation's overall quantum of cost before these costs are allocated down to service user care activities.

However, using income received as a proxy for the costs of delivering training/research may not reflect the actual costs incurred. This may result in costs for service user care that are higher or lower than the real costs of care delivered.

Health Education England and the Department of Health are working closely with trusts to improve the NHS's understanding of the true cost of delivering clinical placements and training posts. As part of this work, the second annual mandatory cost collection will take place in summer 2015. Trusts will be required to identify their education and training costs and to report these costs by training programme and cohort year.

However it is recognised that for some other activities, identifying costs may be difficult and may require a great deal of effort for a perceived small amount of benefit. For non-service user care activities other than education and training, if the costs involved are judged to be not material, then the costs may be left with the service user (rather than separated out and matched with the relevant income).

Equally, where new commercial ventures are material in cost terms, they should only be undertaken if the cost of providing the service can be validated against the income. Therefore, the costs should be identified. For non-material commercial ventures, costs may be left with those of running the healthcare services.

An assessment tool to consider appropriate levels of materiality is being considered for future versions of the standards. The costing lead of the organisation should agree the treatment of these areas with the director of finance.

Definition

[15] *Non-service user care activities are any clinical and non-clinical activities where the organisation's service users are not the primary reason for the activity. This includes clinical training, education and research and other non-service user-related or commercial activities – such as rental of space or catering.*

Comment

[16] To ensure the services are appropriately reimbursed, these costs should be matched against the income received for carrying out the activities. This is part of service line reporting and outside the scope of these standards.

Training and education

The Department of Health introduced transitional tariffs for non-medical placements and undergraduate medical placements in secondary care from 1 April 2013. A similar tariff for postgraduate/medical trainees came into effect on 1 April 2014.

The cost collection does not cover all types of training programmes that take place within NHS trusts. In broad terms, the training programmes that are included are those that lead to a professional registration. For the purposes of costing, these training programmes have been categorised as non-salaried and salaried training.

The guidance and collection templates to support the 2014/15 collection exercise are currently being developed and will be added to the Department of Health and Health Education England website early in 2015. As with services, an in-depth costing exercise for education and training should be undertaken, and organisations are recommended to use the costing methodology set out on this website.

Research and development[16]

Research costs can be generated in one of three ways:

- Research that is funded by an external third party, such as Cancer UK
- As part of a funded trial, such as by a drug company
- Through internal NHS research.

Organisations should identify the full cost of research activities, regardless of the funding stream, in order to separate them from the costs associated with service user care.

Robust methods will be required to ensure that appropriate time, space and activity drivers are agreed and identified. While it is likely that consultant job plans will identify research and development time, this is only a starting point. The involvement of junior medical staff, nursing time and support service staff time must also be identified.

For example, there may be instances when the research is funded by the supply of specific drugs without charge. These will still need to be registered, recorded, checked, measured, assessed, stored and dispensed by pharmacists.

Organisations will also need to identify the space used by research activities and, therefore, ensure appropriate allocation of capital charges and estate-related overheads.

In developing robust methodologies for research, there must be a clear involvement with each specialty to ensure the best drivers can be identified relating to activity and that these in turn link accurately to costs.

Other non-service user care activities (including commercial activities)

These activities should be costed using the same principles as service user care costs (as in Standards 1, 2 and 3) but without the service user care context. The key objectives are to provide transparent costs, using appropriate methodology. This will ensure that costs are available for pricing and contract discussions.

Standard 8

Information

A: STANDARD

This standard provides guidance on how organisations can assess and ensure the integrity of all of the information used in the costing process.

B: PURPOSE

To ensure that the data used to underpin or inform clinical costing is a complete and accurate reflection of the treatment delivered within an organisation, therefore ensuring that costing outputs reflect as closely as possible the actual cost of the treatment and care provided for each service user.

In order to do this:

- Data should be managed and maintained centrally by an informatics team, which provides direct and ongoing support to the costing process.
- There should be adequate processes to ensure that data is accurate, and these processes should cover all services delivered by the trust, and all data used within costing.

C: GUIDELINES

Data management

No matter how detailed and accurate costing methodologies are, if the activity data used to inform them is inaccurate, then so will be the unit costs produced. Costing leads should work with informatics and IT to ensure that the data used for costing is in line with national guidance and has already undergone routine checks.

The data used for costing should be the same data that is used elsewhere in the organisation, and the same data that is submitted in national returns. Costing leads should not have to amend data to fit national requirements when loading into the system.

Activity data for costing should be provided by the informatics team. Costing leads should not have to go directly to the service for activity data. The role of the informatics team should be clearly outlined in the costing plan, and signed up to by senior managers responsible for data management and data quality.

At a minimum level, all data within an organisation should be managed and overseen by a central team. If this is not currently in place, this issue should be escalated through the costing development plan and plans put in place to move to a more adequate structure and management arrangement. Where services have their own data staff managing standalone systems, at the very least the central informatics team should maintain professional responsibility for the data in those systems, ensuring the quality of that data and managing the use of that data within the trust and for national returns.

Ideally, a trust will have a data warehouse that contains all data from all systems within the trust, covering all services provided. There will be routine automatic checks run on the data to ensure it is consistent and that all fields are completed, such as the NHS number.

Comment

[17] Good quality source documentation is fundamental to recording accurate information for service users and ensuring the costs allocated reflect the resources consumed. The mental health payment by results data assurance framework has noted that reviews on the quality of care clustering activity data found cases where service users care cluster activity data was not supported by information recorded in the service user record. The condition and contents of notes will have a direct impact on data quality. In addition, poor documentation also poses a risk to service user safety. Medical records are a legal document that trusts must ensure are fit for their many purposes.

It is vital to involve IT and information staff as early as possible. Costing leads should ensure that the informatics team understand the ultimate use of the data provided and feed back any issues identified when using the data. The informatics team should ensure that the data is in line with national guidelines and that it accurately reflects the care delivered within the trust.

Where a data warehouse is not in place, Informatics should lead on supplying the data for costing to ensure that it is consistent with data that is used elsewhere in the organisation and information standards are maintained. This will provide assurance over who will provide the data and to what timeline, the format of the data and what data quality checks will be undertaken prior to the data being sent to the costing team.

When setting up service user-level activity records with informatics, care should be taken to consider all of the fields available in the patient administration system (PAS) extract. For example, it may be helpful to bring demographic and commissioning information for service users into the costing system to support analysis at the end of the process.

Data quality

Trusts should have processes in place to review the care recorded, or treatment delivered, in activity data against source documentation to ensure that it is an accurate reflection of the treatment delivered.

- For mental health admitted patient care (APC) this would be via data quality programmes designed to validate local submission of national datasets – the mental health and learning disabilities data set (MHLDDS) and hospital episode statistics (HES), including internal data quality audits, external audits such as the Capita mental health payment by results assurance framework audits (currently piloted), alongside any local clinical coding audit programme or data quality reports, combined with clinical validation of the coded data. The audits should be focused using local intelligence and national comparisons as available via the Health and Social Care Information Centre, and should be proportionate to the volumes of activity within the inpatient services audited.

These same principles of audit and clinical validation should be applied to all other activity data. Trusts should have audit and review programmes in place to assure the quality of data in the following services:

- **Community activity** is a high-volume service with low individual costs and highly variable accuracy of data. The data validation programmes need to be varied and wide ranging to include data quality audits on completeness of data, timeliness of input, periods of cluster reviews and cluster allocation. In many places, these are services that trusts have inherited. Nevertheless, the data used to inform costing and national returns should be accurate and in line with guidance.[17] The HFMA has produced an introductory guide to PLICS for community services, which discusses these issues in more detail. This report can be downloaded from www.hfma.org.uk/costing/standards/supporting-material/community.
- **Other data items** such as the day of treatment/respite or contact with the acute mental health teams will have an impact on grouping and the allocation of costs. In particular they will affect the allocation to point of delivery – mental health site, community homes, acute hospital site and mode of delivery, such as respite provision, individual therapists or group therapies.
- **Costing inputs** such as medical staffing, therapy data, drugs and similar. Where activity or service user-level data is used to drive cost allocation, that information should also be subject to review and assurance processes. In many trusts, job plans are used to allocate significant volumes of cost. We understand from feedback in our annual survey that the quality, and access to, job plan information can vary significantly on a trust by trust basis. Therefore the costing team may need to spend considerable time reviewing job plans with the medical director's team and clinical leads, in order to ensure that the information is kept up to date, complete and as accurate as possible.

- **Information used in the allocation of indirect and overhead costs** The information used to allocate indirect and overhead cost is set out in the MAQS template (see Standard 9). This information includes floor plans, headcount and other financial and non-financial information. It is important that all of these allocation statistics are included within the costing team's information policy and should be subject to the same data quality checks and rigour. Floor area in particular is often owned by the estates department and is used to allocate significant volumes of cost.

  There are several principles that should be used to ensure completeness and accuracy of this information:

  • Ensure it is updated/reviewed on an annual basis.

  • Ensure it is checked/tested by a member of the costing team or relevant member of the finance team. In the case of floor area, this may involve walking the floors to check the usage of rooms and allocate them to the correct team/specialty or department.

The clinical engagement within PLICS will then supplement all of these processes, as data will be one of the areas verified and then used by clinical teams. Once fully rolled out and embedded, PLICS could then be used to direct further data quality audits.

All trusts should have a data quality policy that covers data from all services within the trust, not just data from the PAS. This data quality policy should been signed off by a senior manager and it should be monitored by a senior committee. Staff within the trust should be aware of the data quality policy and their responsibilities. Ideally, data quality will be a standard objective for all staff involved in the capture and management of information, including clinicians.

Standard 8a

Data matching

A: STANDARD

This standard provides guidance on the importance of matching resources to individual service user episodes and the factors to consider ensuring that this process is undertaken as accurately as possible.

B: PURPOSE

The successful matching of feeder systems to service user interventions is absolutely integral to the costing process for the following reasons:

- It provides the basis of attributing costs to specific service users based on the actual resources they consume.
- Low levels of matching or incorrect matching will significantly distort individual service user costs and therefore undermine the validity of service user-level cost data.
- Unmatched activity will distort service user-level costs through:
  - Unmatched service users not having the full cost of care attributed to them
  - Service users that did not necessarily receive the care attributed to them may receive the cost of this unmatched activity. This will result in significantly inflated costs if the unmatched activity is treated as an overhead to matched activity.

In an ideal world, every resource allocated using a feeder system would be matched perfectly to a service user episode of care or contact. However, in the absence of fully integrated information systems, we know that in reality discrepancies will arise for the following reasons:

- Poor data quality of feeder systems
- Work in progress
- Service users not recorded on patient administration systems
- Tests ordered or delivered outside of the dates of an contact or episode.

The quality of the underlying data is a significant issue and we encourage costing professionals to liaise with clinical and information colleagues to understand the issues and resolve as an organisation-wide issue. If significant, they should also be placed on the costing risk register.

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C: GUIDELINES

In allocating costs to service users, resources will need to be costed and allocated to specific service users and specific episodes of care. The key resources considered in this standard are:

- Drugs
- Radiology examinations/tests

Matching also applies to the service user-level data feeds that are used to allocate costs to service users, such as:

- Ward minutes
- Therapy time
- Pathology tests.

We recommend the following information is completed for each feeder system to document, understand and monitor the quality of feeder systems and how they are used in costing systems:

- Type of feeder system – name, owner and version being used
- Currency and fields of data – for example, time or test and the details of the cost weights to be applied
- Total transaction count
- Cost allocated by feeder system
- Percentage linked
- Percentage allocated to inpatients, outpatients and community contacts.

One of the key risks identified relates to the quality of matching. Organisations could report excellent matching scores but actually the resources may not be allocated against the correct service user episode or attendance. This not only impacts the quality of the cost data produced, it will also be detrimental to obtaining the buy-in of clinical staff – if they see that the costs include tests or resources that the service user has not actually consumed, or not consumed as part of that particular episode of care. Several fundamental rules should be applied:

- Resources must be linked to the correct service user type. As a minimum, resources should match to the service user type using date and a service user identifier. Further accuracy can be obtained using additional variables, including speciality code, consultant and a location code – for example, ward or department code.
- Where there are multiple possibilities for a service user as to which episode or attendance to link to, then a consistent set of rules should apply.
- When matching to the service user type, hierarchy of matching should be inpatients, and then outpatients and community contacts.
- Where the attendance is out of the date scope, some flexibility may be required such as extending the parameters of the date that is matched to. Further guidance is provided for some specific datasets at the end of this standard.
- Care should be taken to ensure that where relevant direct access activity is removed and any activity that relates to service users not reported on a PAS is accounted for – for example, service users attending HIV and sexual health clinics.
- Unmatched activity needs to be costed up to prevent the matched activity from attracting higher costs.

There is some key information organisations must understand and document:

- How the matching rules set up in their costing system work
- The percentage matching for each resource dataset used – the percentage is based on activity count and not the cost value. This should be broken down by service user type
- Ideally, this should be broken down by cost driver to fully understand data quality
- The data quality issues relating to the underlying feeder system – data quality should be monitored with each costing update
- Where the attendance is out of the date scope, some flexibility may be required – such as extending the parameters of the date that is matched to.

It should be noted, that when calculating a matching score, including for use within the MAQS, the count of activity/resources should be used, not the value. However, internally within organisations, it is suggested that both calculations are undertaken in order to ensure that high-value items are being accurately matched.

Treatment of unmatched activity

Unmatched activity will distort service user level costs through:

- Unmatched service users not having the full cost of care attributed to them
- Service users that did not necessarily receive the care attributed to them may receive the cost of this unmatched activity. This will result in significantly inflated costs if the unmatched activity is treated as an overhead to matched activity.

Organisations should investigate the reasons why resources have not been matched. This may be the result of:

- Data quality issues in the underlying information source
- Work in progress
- Service users who may receive treatment but whose episode is not recorded on a PAS, such as those attending HIV clinics
- Poor matching rules.

Unmatched activity should not be treated as an overhead to matched activity. This will result in significant distortions in cost to those service users, whose activity and resources utilised can be matched. Unmatched activity should be costed and reported separately.

Guidance on the matching of specific resources

The HFMA Mental Health Costing Practitioner Group has provided some additional guidance for two specific resources. We are publishing this guidance within the standard to provide support to organisations that wish to undertake more detailed work in this area. Examples for other resource types will be published in future updates of the clinical costing standards.

Radiology

Some mental health organisations may not provide radiology services, and therefore this guidance will not be relevant. However, many do, and therefore guidance on matching radiology tests to service users has been included within these mental health clinical costing standards.

For outpatient and community activity, the date parameters or rules within an organisation will need to be established, as tests are often not undertaken on the date of an attendance or episode. These rules must be documented and discussed with the radiology department and individual clinical teams to ensure that the rules are consistent with clinical protocols.

Care needs to be taken to use the correct date in line with other national guidance documents. It is suggested that event date is used for inpatients and outpatient interventional radiology. For all other outpatient diagnostic imaging, it is recommended that the request date is used. Where possible, matching rules should be specific to the trust's service user pathway.

Again, care should be taken to ensure that direct access tests are removed, and any tests that relate to service users not reported on the PAS are accounted for. Radiology costs will be higher for certain groups of service users, and in some cases for inpatient care compared with outpatient attendances. The radiology department needs to be involved when identifying the difference in costs attributed to the tests being carried out in the various settings and, where possible, this should be reflected in the service user costings.

Where the attendance is out of the date scope, some flexibility may be required, such as extending the parameters of the date that is matched to. However, care should be taken where it is possible that more than one service user event may be matched within the set period. It may be necessary to expand the date parameters on an incremental basis and/or to add other parameters such as referrer or location of referral.

Initial research shows that the maximum day ranges should be 12 days for inpatients and 28 days for outpatients. If changes are made to the matching processes, the outcomes must be monitored and evaluated – for example, if narrowing the maximum date range by which a match can occur causes a high number of records to not match, the reasons for this need to be investigated and addressed accordingly.

Pharmacy

For outpatient attendances and community contacts, the date parameters or rules within an organisation will need to be established as drugs may not be dispensed on the date of prescribing. These rules must be documented and discussed with the pharmacy department and individual clinical teams, to ensure that the rules are consistent with clinical protocols.

There are some drug issues that will not match to a service user type – for example, ward stock and HIV/GUM drugs – and these should be removed from the pharmacy data prior to the matching process. Additionally, this activity should also be excluded from the matching percentage calculations as they will adversely skew the values.

Where there is good data quality, and activity data is captured, Healthcare at Home drugs can be matched to service users. However, in most cases this will not be possible because no service user activity will be recorded and therefore these drugs should be excluded prior to the matching process taking place, in the same way as ward stock drugs and HIV/GUM drugs.

There are some specific situations that should also be considered:

- Where there are multiple issues on one prescription, discussions must take place with the pharmacy department to resolve any adverse impacts on the matching processes. An example of good practice is where one trust asks the pharmacy department to match the returns prior to the data being loaded onto the costing system.
- Where the attendance is out of the date scope, some flexibility may be required, such as extending the parameters of the date that is matched to. However, care should be taken where it is possible that more than one service user event may be matched within the set period. It may be necessary to expand the date parameters on an incremental basis and/or to add other parameters such as referrer or location of referral. Initial research shows that the maximum day ranges should be 10 days for in inpatients and seven days for outpatients (based on median values of the data collected in the research project). If changes are made to the matching processes the outcomes must be monitored and evaluated – for example, if narrowing the maximum date range by which a match can occur causes a high number of records to not match – the reasons for this need to be investigated and addressed accordingly.

Comment

[18] The scores produced by the MAQS process are intended to provide a guide only – helping organisations to understand the current quality of their costing data in assessing its reliability to inform decision-making. The scores should also help organisations to target their improvement efforts for costing systems and processes. Further guidance will be issued once feedback has been received regarding the scores being obtained by mental health organisations.

Standard 9

Quality assessment and measurement

A: STANDARD

Organisations should document and measure the materiality and quality of their costing process. This should be evidenced by a MAQ score, which is calculated using the supporting template. The score structure is as follows[18]:

Gold	MAQS	75%-100%
Silver	MAQS	60%-74.9%
Bronze	MAQS	45%-59.9%
Baseline	MAQS	below 44.9%

B: PURPOSE

This standard provides a consistent methodology for organisations to assess and improve the quality of their costing process and data. In particular it looks to:

- Provide internal awareness of data quality issues that have an impact on the quality of costing data
- Provide a tangible method to assess improvements in the quality of costing over time – for example, to demonstrate improvements to an organisation's board or audit committee
- Inform development plans by focusing attention on areas that will create maximum improvement to cost information
- Provide transparency on the approaches taken to produce cost data
- Provide a consistent approach to comparing data quality across NHS organisations.

Clinical costing is intended to be a practical management tool that helps to drive best care/best value. Robust and transparent cost information is essential for the engagement of clinicians and managers, to improve the management of resources and clinical care. The materiality and quality score (MAQS) has been designed to assess an organisation's ability to provide robust, reliable data for internal and (potentially) external assurance.

The MAQS will help organisations that are implementing clinical costing to assess and monitor improvements in data quality. It will also help those organisations that may not yet be fully implementing service user-level costing, highlighting opportunities to improve quality in the costing process.

For most organisations, the main driver for undertaking clinical costing is to deliver high-quality internal business information. Understanding the robustness or the limitations of the information presented to senior management is very important if decisions are to be taken on the back of this information.

There is also an aspiration for accurate clinical costing information to have a greater role in informing the development and setting of both currencies and price regulation. In line with this aspiration, for acute organisations, the MAQS will be collected and used again by Monitor in its 2015 voluntary service user-level cost data collection as one mechanism to assess the robustness and quality of cost data submitted.

Organisations will also be asked if they have calculated their MAQS and, if so, to report their score as part of the 2015 reference cost survey (this will be on a voluntary reporting basis only).

The MAQS template for 2015/16 has been updated to reflect the following:

- Monitor's report on the findings of the 2012/13 PLICS collection for acute organisations
- Feedback received in the HFMA costing survey, and feedback directly sent to the HFMA
- Work with the Mental Health Costing Practitioner Group regarding the allocation of ward, community team and medical staffing costs to support the development of Standard 3.

C: GUIDELINES

The MAQS template can be downloaded from the HFMA website at www.hfma.org.uk/costing/standards. The template and all supporting documentation should be completed and saved for future reference.

Procedure for calculating the MAQS

- The MAQS template is designed to allow the calculation of a MAQ score for the allocation of direct costs, indirect costs and overhead costs separately. Standard 1 has been reviewed in detail to support this.
- For direct costs, the template is then further broken down by cost pool group to allow the calculation of a MAQ score for each cost pool group individually. This is intended to provide a focus on where the greatest impact can be made through improvements to costing.
- The MAQS template is now automated. This is intended to reduce the burden and time required to complete the process.
- The calculation process works as follows:

  • A report will be required from your costing system breaking costs down by:

  - Direct, indirect and overhead
  - Direct costs further broken down by cost pool group.

  The MAQS template then provides the cost types within each of these cost pool groups.

  • Starting with direct costs (within each cost pool group), input the actual financial resources used for each cost type (to provide a measure of materiality).

  • The MAQS template has been automated so that for each cost type, the template provides a dropdown box with a selection of allocation methodologies[19]. For each cost type, you will need to select the allocation methodology used (each methodology has an associated quality rating). The options available have been significantly reviewed in light of feedback received.

  • Organisations will also need to input the data quality matching percentage for each cost type[20]. This figure is essentially a measure of how well service user level data sources – such as ward time, pathology tests and drugs – are allocated to individual service user episodes.

  • The template then weights the financial resources used by each cost type to take account of the quality of the allocation method and the data quality matching percentage (for relevant direct costs).

  • The same process should be followed for indirect and overhead costs but with no matching adjustment.

  • The weighted financial amount for each cost type is then divided by the total unweighted financial amount for all cost types to give that cost type's contribution to the MAQ score.

  • An overall MAQ score is then calculated by adding up all the contributions from all the different direct cost types, the indirect costs and the overheads.

  • The template also calculates a MAQ score for each cost pool group (and for indirect costs and overheads at an aggregate level). At a glance, this enables organisations to compare the costing process in different parts of the organisation.

Comment

[19] *The allocation methodologies in the MAQs will be reviewed each year to ensure they are reflective of the range of costing practice in the NHS and that gold standard reflects best practice. The overall scoring bands may also change as we wish the MAQS template to continue to reflect best practice in the NHS and therefore we would expect some allocation methodologies to change over time as information systems and costing systems develop.*

[20] *Standard 8/8a provides further information on matching service user records within clinical costing systems.*

Comment

[21] *In 2014/15, the payment by results data assurance framework will be known as the payment and tariff assurance framework. It is being managed by Capita CHKS on behalf of Monitor. Under the Health and Social Care Act 2012, Monitor took over the responsibility for the assurance framework on 1 April 2014. Monitor will use this year's audit programme to discharge its responsibilities of tariff enforcement and compliance focusing on acute hospitals.*

Standard 10

Review and audit of cost information

A: STANDARD

Costing information and processes should be reviewed regularly to ensure that:

- The apportionment methods used in costing are appropriate
- The data that informs costing is correct
- Costing outputs are materially accurate
- The clinical costing standards have been followed
- Processes exist to ensure that cost data is robust.

B: PURPOSE

Evidence suggests that conducting audits of costing systems, processes and outputs results in improved data quality and procedures. It provides vital information on areas for improvement, supports board and senior sign-off and ensures confidence in the data presented.

Costing leads and other staff involved in the costing process should build regular checks on cost data into the ongoing costing process, and ensure there are adequate checks undertaken on any national cost submissions.

C: GUIDELINES

Checks

The payment by results data assurance framework[21] covers reference costs, as well as coding and wider data used to underpin payment in the NHS. In 2013/14 and 2014/15, reviews of costing processes and the reference costs submissions will have been undertaken at the majority of acute trusts. These audits were undertaken in conjunction with costing experts from the NHS.

Findings from the audit programme showed that high-performing organisations treated costing as an ongoing process and carried out checks as far as possible throughout the year. These included:

- Inputs such as job plans and floor areas
- Activity levels, reconciled in-year to identify issues early
- Non-PAS data, to provide assurance where provided directly from the service
- Cost allocations, shared and discussed with service representatives
- The previous year's costs, benchmarked to identify outliers
- This year's costs, compared with previous years.

Organisations that had robust checks in place did not just rely on the costing team, but used all appropriate colleagues to undertake these checks. Divisional accountants engaged with service managers and clinicians to check individual unit costs. Information leads reconciled activity against other data sources. Finance managers reviewed the cost quantum and exclusions. Where there was joint ownership of cost information within an organisation, its quality improved.

Costing leads should benchmark their cost information to identify areas of cost variation that may be caused by poor data quality or costing methodologies. Tools contained within the payment by results national benchmarker[22] enable trusts to identify outlier costs when compared with the national to average to help target further investigations

Comment

[22] *The national benchmarker is freely available to the NHS as part of the payment by results data assurance framework. For more information and to request a log-in, go to www.chks.co.uk/national-benchmarker.*

Audit

The costing process covers many areas where assurance can be sought. Audit of costing processes and the activity data underpinning the cost information provides assurance that the trust's costing is effective. Trusts can use audit reports generated from the payment by results data assurance framework to provide evidence of assurance of the accuracy of costing information.

There are many individual areas where trusts can seek internal or external assurance, such as:

- Assessing the organisation's internal arrangements for reviewing and self-assessing the key component areas of costing data
- Focused and specific work on any risk areas identified – for example, the accuracy cluster recording
- Other data collections not covered by routine data quality audits
- Assessing compliance with clinical costing standards
- Reviewing the process for clinical engagement in the trust
- Obtaining executive and board-level sign-off of data.

In addition, working with internal audit will allow organisations to improve the robustness and quality of the information produced. Trusts that are implementing systems should obtain internal assurances over controls, processes and outputs. Assurance should cover all aspects of activity that underpin costs data, including all activity data sets. It should also cover other feeder information used in the costing process, such as pharmacy, staff costs, floor area and therapy contacts.

Once systems are implemented, ongoing and regular internal review and scrutiny of the key information components of financial, activity and service user-level information data should be completed on a quarterly basis and should be reviewed annually as a minimum by internal or external auditors.

The outcomes from other related audit and assurance processes – for example, internal and external audit and inspection reviews, the information governance toolkit and external audits such as those previously delivered by Capita CHKS under the payment by results data assurance framework – may provide assurance on wider activity data used for costing.

Appendix A

Points of delivery and service lines

‘Points of delivery’ is a term widely used in the NHS to describe the location or manner of care given to patients and service users. For example, the acute sector may have inpatient elective or non-elective points of delivery, outpatient points of delivery or community contacts.

These have been defined over a number of years, and to date the payment by results reimbursement system has been built around them, with different tariff rates for elective and non-elective admissions, accident and emergency attendances and outpatient attendances and procedures.

Service line reporting information (profitability analysis) is a major driver for the development of patient-level costing and for improvements in costing (and income) processes. Comments in the 2011 HFMA clinical costing standards survey noted that there was some confusion between service lines and cost pool groups.

Service lines are discrete business units that can be reported separately in terms of activity, expenditure and income, often – but not exclusively – in conjunction with the organisation’s performance management. Monitor defines service lines as specialist clinical areas that are managed as distinct operational units. In most cases, they should have a discrete patient group, discrete finances (profit and loss), discrete staffing group, compatible infrastructure requirements and the ability largely to operate independently.

Service lines may show a fully absorbed cost when reported at levels of total expenditure. Contribution to overheads may be used as a preferred reporting level, rather than fully absorbed profitability, where the organisation wishes to focus on costs that are controllable by the clinical service leaders.

But service lines may also be reported, using components of differing clinical costing standards, including:

- Cost pool groups
- Direct, indirect and overhead costs
- Variable, semi-fixed and fixed costs.

Service lines may be further broken down by point of delivery. For example, the service line of a specialty (treatment function code) will include:

- Cost pool groups of medical staff, ward costs, drugs and so on
- Direct costs (clinical staff, drugs), indirect costs (linen, catering) and overhead costs (HR, finance, trust board)
- Variable costs for drugs, semi-fixed costs of nursing, with the variable element relating to special observation nursing, and fixed costs of medical staff (and overhead support)
- Points of delivery relating to inpatients, with possible subsets of clusters.

Appendix B

Glossary

Care cluster	The new unit of currency for mental health organisations. Service users are assigned to a cluster on the basis of their characteristics rather than just diagnosis.
Corporate income	Also known as overhead income, this income does not relate to patient or service user activity.
Cost pool groups	All service costs (including direct, indirect and overhead costs) are grouped into cost pool groups to enable analysis.
Cost weight	This is a weighting to reflect resource usage. For example, each individual pathology test needs to be assigned a cost weight because different tests will use different levels of resources in terms of staff time and consumables.
Data quality	The degree of completeness, consistency, timeliness and accuracy that makes data appropriate for a specific use.
Direct costs	Costs that directly relate to the delivery of patient care. Examples are medical and nursing staff costs.
Direct income	Income relating directly to the organisation's own patients, including all national and local tariff clinical income as well as private patient income. It can be attributed to individual patients or a defined patient group (for example, block contract income received for a particular service).
Feeder system	A system that feeds into the costing system – for example, a pharmacy system may provide important data about the drugs used in the treatment of different service users.
Fixed costs	Fixed costs are not affected by in-year changes in activity, for example rent and rates.
Indirect costs	Costs that are indirectly related to the delivery of patient care. Costs can be allocated on an activity basis to service costs.
Indirect income	This relates to patient care services but not directly to the care of the organisation's own patients.
Matched patient	Matched patient records record the proportion of patients whose patient records administration system (PAS) records match to a recorded event such as theatres, pathology or pharmacy issue.
Materiality	Information is material if its omission or mis-statement could influence the economic decision taken on the basis of the financial information. Materiality depends on the size of the item, judged in the particular circumstances of its omission or mis-statement.
Overhead costs	Costs that are not driven by the level of patient activity and which have to be apportioned to service costs as there is no clear activity-based allocation method. An example would be the chief executive's salary.
Overhead cost centres	Overhead costs are grouped in overhead cost centres. These costs are then apportioned to direct cost centres, with an allocation of indirect costs, to produce fully absorbed service costs.
Semi-fixed costs	Semi-fixed costs are fixed for a given level of activity but change in steps, when activity levels exceed or fall below these given levels. Nursing costs are an example.
Standard cost	A standard cost is the estimated or predetermined cost of performing an operation or producing a good or service, under normal conditions. Standard costs can be used as target costs (or as a basis for comparison with the actual costs) or to calculate cost weights. They are developed from historical data analysis or from time and motion studies. They are likely to differ from actual costs and may be different from average costs, which are calculated by dividing the total recorded cost by activity.
Variable costs	Costs that vary with changes in activity – for example, drugs.

Appendix C

HFMA Mental Health Costing Practitioner Group

Work to update the 2015/16 version of the mental health clinical costing standards has been led by Helen Strain, HFMA costing lead, and Scott Hodgson, HFMA costing standards lead. It has been informed by a survey of practitioners in NHS organisations and has involved considerable debate and discussion with the mental health costing practitioner group. The HFMA would like to thank all of those individuals and their teams who have been involved in the mental health costing practitioner group, and relevant subgroups.

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Appendix D

Classification of fixed, semi-fixed and variable costs

FIXED

Ambulance car service
Audit fees: internal
Audit fees: statutory
B9 psychology
B9 senior mgrs
Bad debt expense
Building contracts
Building and engineering equipment maintenance
Chairman
Chief executive
CNST contributions
Comps ex gratia
Contract: other external
Contract: premises security
Contract: refuse and clinical waste
Debt recovery and credit control
Defence costs
Depreciation on owned/ leased assets
Director
Dividend payment
Doctors' fees (BD8s etc)
Early retirement payments
Electricity
Engineering contracts
Executive director
External consultancy fees
Finance lease interest
Gas
Grounds and gardens expenses
Healthcare from local authorities
Heating oil
Insurance costs
Interest receivable
Laundry equipment
Legal fees
Net bank charges
Non-exec members
Patent costs
Performing rights
Professional fees
Rates
Rent
Research and development
Security payments (cash delivery etc)
Sewerage
Staff consultancy and support
Staff location systems/ bleeps
Telephone installation and maintenance
Telephone rental and call charges
Training materials
Vehicle maintenance
Vehicle running costs: other
Water

SEMI-FIXED

A&C bank staff
Advertising and staff recruitment
Agency consultants
Als courses/training
Associate specialist
B1 A&C
B1 support staff
B2 A&C
B2 healthcare asst
B2 maintenance
B2 occ therapy
B2 other staff
B2 pharmacy
B2 qlfd nurse
B2 support staff
B2 unqlfd bank nurse
B2 unqlfd nurse
B3 A&C
B3 dietician
B3 healthcare asst
B3 maintenance
B3 occ therapy
B3 pams other
B3 physiotherapy
B3 qlfd nurse
B3 support staff
B3 unqlfd nurse
B4 A&C
B4 dietician
B4 maintenance
B4 occ therapy
B4 pams other
B4 pharmacy
B4 physiotherapy
B4 psychology
B4 qlfd nurse
B4 speech therapy
B4 support staff
B4 unqlfd nurse
B5 A&C
B5 dietician
B5 maintenance
B5 occ therapy
B5 pams other
B5 pharmacy
B5 physiotherapy
B5 prof & technical
B5 psychology
B5 qlfd bank nurse
B5 qlfd nurse
B5 speech therapy
B5 unqlfd nurse
B6 A&C
B6 dietician
B6 nurse mgr
B6 occ therapy
B6 other sci & prof
B6 PAMS other
B6 pharmacy
B6 physiotherapy
B6 prof & technical
B6 psychology
B6 qlfd nurse
B6 senior mgrs
B6 social worker
B6 speech therapy
B6 unqlfd nurse
B7 A&C
B7 dietician
B7 nurse mgr
B7 occ therapy
B7 other sci & prof
B7 PAMS other
B7 physiotherapy
B7 prof & technical
B7 psychology
B7 qlfd nurse
B7 senior mgrs
B7 speech therapy
B8 psychology
B8a dietician
B8a nurse mgr
B8a occ therapy
B8a other sci & prof
B8a pharmacy
B8a psychology
B8a qlfd nurse
B8b nurse mgr
B8b occ therapy
B8b pharmacy
B8b physiotherapy
B8b psychology
B8b qlfd nurse
B8b speech therapy
B8c nurse consultant
B8c occ therapy
B8c pharmacy
B8c psychology
B8d psychology
Bedding and linen: non-disposable
Books, journals and subscriptions
Catering equipment – leases
Catering equipment – maintenance
Catering equipment – purchase
Cleaning equipment
Clinical asst
Computer hardware purchases
Computer maintenance
Computer network costs
Computer software/ license fees
Conferences and seminars
Consultant
Contract: grounds and gardens
Contract: pest control
Contract: photocopying rental and charges
Contract: supply and fix
Data lines
Dental consultant

Appendix D

Classification of fixed, semi-fixed and variable costs (continued)

Design costs
Excess mileage
External contracts: catering
External contracts: domestics
External contracts: laundry
External contracts: other hotel services
External contracts: window cleaning
External data contracts
FM computer contracts
Furniture and fittings
General losses and special payments
GP sessions/staff fund
Gross redundancy payments
Hardware and crockery
Healthcare from foundation trusts
Hospitality
Information tech security costs
Interpreting services
Interview expenses
Junior medical training
Laboratory equipment
Laboratory equipment – maintenance
Lease rents
Leased cars: contract
Leased cars: private deductions
Lecture fees
Local authority staff
Locum clinical asst
Locum consultant
Med surg eqpt hire
Med surg eqpt mtce contracts
Med surg eqpt repairs
Microfilming and dit
Miscellaneous expenditure
Mobile phones
National QC and accreditation fees
Non-healthcare services from foundation trusts
Office equipment and materials: hire
Office equipment and materials: purchase
Office equipment and materials: repairs
Other general provisions
Other transport costs
Packing and storage
Patients appliances: lease
Photographic materials
Postage and carriage
Public relations expenses
Radio communications
Removal expenses
SHO
Services from local authorities
Social worker – qualified
Social worker – unqualified
Spec registrar
Staff grade pract
Staff uniforms and clothing
Support staff bank
Taxi and other vehicle hire
Training expenses
Training travel and subsistence
Travel and subsistence
Vehicle insurance
Vehicle leases
Vehicle running costs: fuel
Vending machine rental/ maintenance
X-ray equipment: purchases

VARIABLE

Agency admin and clerical
Agency consultants dental
Agency HCAs and support staff
Agency nursing
Agency other
Agency other career grades
Agency prof and tech
Agency scientific
Agency SHOs and HOs
Agency social worker
Alac: disabled living aids
Alac: limbs
Alac: special cushions
Alac: special seating
Alac: wheelchairs
Anaes: accessories and equipment
Anaes: temp control
B3 unqlfd bank nurse
Bedding and linen: disposable
Catering equipment – disposable
Cleaning materials
Contact lenses and spectacles
Continence products
Contractual clinical services
Dietetic products
Dressings
Drugs
Enteral feeding
FP10s
Funeral expenses
General materials (eg EBME OT etc)
Healthcare from commercial sector
Healthcare from independent sector
Healthcare from voluntary sector
Hearing aids: purchases
Home loans
Laboratory bottles and containers
Laboratory chemicals
Laboratory external tests
Laboratory reagents
Laboratory test kits
Laundry materials
Locum dental consultant
Materials – building
Materials – electrical
Materials – mechanical
Med surg eqpt disposable
Med surg eqpt general
Medical gases
Minor works
Other clinical costs
Other general supplies and services
Other patients expenses
Patients appliances: purchase
Patients appliances: repairs
Patients clothing
Patients travel exp/ allowances
Printing costs
Protective clothing
Provisions
Staff benefits expenses
Stationery
Sterile products
Surgical instruments: general
Therapy equipment and materials
Vending machine supplies
Welfare foods

Appendix E

Summary of the clinical costing process

See diagram overleaf.

The first step in the costing process is to determine the costs in the general ledger directly driven by service user care (doctors' time, administered drugs and prostheses) and those more loosely tied to service user activity. This means all cost centres in the ledger are assigned to a direct, indirect or overhead cost category (Standard 1).

However, some adjustments are needed. For example, many NHS organisations receive separate funding for clinical training and education. The costs incurred in delivering this training are not related to the treatment of service users. So to produce accurate costs for the treatment of individual service users, these costs – both the direct costs of time spent training and a proportion of indirect/ overhead costs – need to be stripped out (Standard 7).

Similarly, costs may have been incurred delivering a corporate service for an external organisation. For instance, the trust may be paid to deliver payroll or other financial services for a neighbouring trust. It would not be appropriate for the costs of delivering these 'additional' services to be allocated to service users. Or, if they are allocated down to service users, then they should be clearly identifiable so that the costs relating to the delivery of service user care can be viewed separately. Non-material amounts of cost and income from 'additional' services can remain with the service user care costs.

Once these adjustments have been made, overhead costs need to be allocated or apportioned to the direct and indirect cost centres (Standard 3).[30]

Organisations should classify costs into variable (those that flex with service user numbers), semi-fixed (costs that stay the same until a certain activity threshold is reached, at which point cost change) and fixed (those that remain fixed regardless of the number of service users treated) – Standard 4.

Once any adjustments have been made to establish the appropriate totality or quantum of costs, all the remaining costs can be assigned to a cost pool group (Standard 2). Cost pool groups provide an opportunity to analyse the key components of healthcare costs at service user or some higher level and provide a foundation for benchmarking with other providers.

Cost pool groups – such as for medical staff, wards or pathology – are not the same as cost centres as identified within general ledger accounting systems. For example, medical staff costs might be identified within various direct cost centres within the general ledger, but are collected in a dedicated cost pool group. Equally, drug costs might be identified in different direct cost centres within the ledger system, but are pulled together into their own cost pool group.

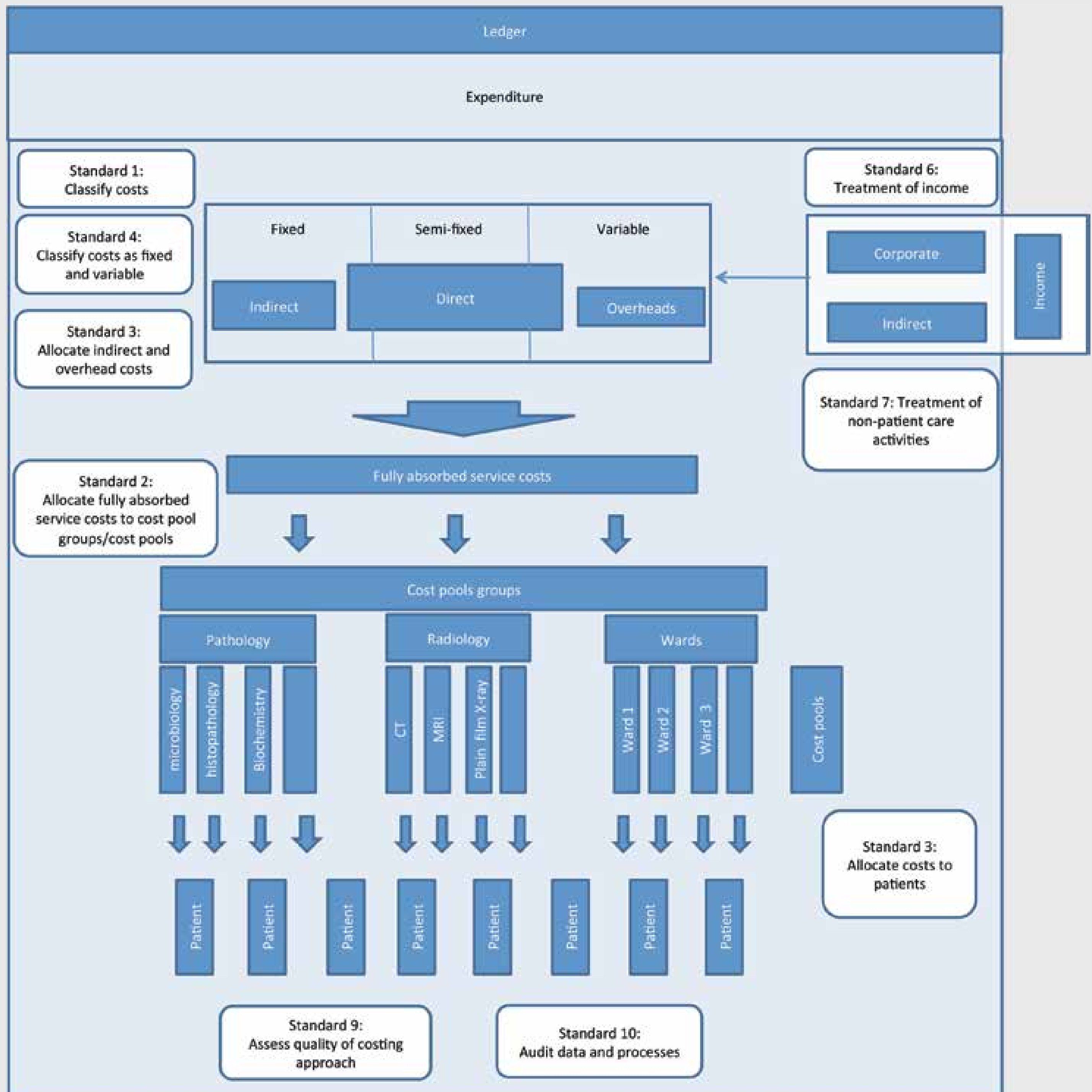
Within each cost pool group, costs may also be separately identified within individual cost pools. For example, 'wards' may be a cost pool group identifying costs across all wards but organisations may wish to identify the costs of each ward as a separate cost pool within that group. Once costs are gathered in cost pool groups, they can be allocated on to meet different requirements. For example, they could be allocated to service users – the process covered by these standards – or to service lines/points of delivery.

Comment

[23] Feedback suggests that clinical costing systems offer a range of flexible ways to allocate indirect costs, whether it is across direct cost centres or directly down to patients. Indirect costs must, however, be flagged for inclusion within the relevant cost pool group for reporting purposes.

Appendix E

Summary of the clinical costing process (continued)



Appendix E

Summary of the clinical costing process (continued)

Costs should be allocated on the basis of actual usage of resources or using an allocation method that most closely reflects actual usage (Standard 3). Different allocation methods will be appropriate for different types of cost. For instance, within a ward cost pool, nursing staff costs could be allocated on the basis of time spent on ward, with an adjustment for acuity.

However, consumables used on a ward could be allocated on the basis of the actual consumables used for each specific service user and other non-pay costs could be assigned on the basis of time on ward with no adjustment for acuity.

Recognising the different cost drivers – rather than assigning all the ward cots, say, on the same basis – will produce more accurate service user-specific costs. Gold, silver, bronze and baseline allocation methodologies are identified for different resource types and the overall 'accuracy' or quality of the costing information can be measured by calculating a material and quality score or MAQS (Standard 9). A MAQS template has been specifically designed for mental health services and is published as part of this 2015/16 update of the mental health clinical costing standards. See Standard 9 for more information

While the costing process is important in ensuring robust service user-level costs, the overall results will only be as good as the core data used in the process. This ranges from the simple accuracy of assigning the right clinical codes to service user episodes and the correct entry of the service user information through to the accurate linking of service user resources to service user records. Accurate costing is as much dependent on colleagues in IT and information as it is on costing teams (Standard 8). Audit also plays an important part in assuring and developing data accuracy and the robustness of the costing process (Standard 10).

Appendix F

Summary of key changes between mental health clinical costing standards 2014/15 and 2015/16 editions

Standard 1	Minor changes only. The following costs have been reclassified: • Capital charges (depreciation and cost of capital) – medical and surgical equipment that can be allocated to clinical departments should be classified as indirect • Capital charges (depreciation and cost of capital) – equipment should now be classified as an overhead. The following costs have been included in the list of indirect costs: • Consultancy costs if for a specific department or service (new for the 2015/16 update) • Patient transport (new for the 2015/16 update) • Training – departmental. The following costs have been included in the list of overhead costs: • Consultancy costs for organisation-wide projects • PFI payments • Interest payments • Patient liaison and complaints • Marketing and public relations • Training – organisation-wide.
Standard 2	A new cost pool group has been created for psychologists and psychotherapists. Guidance has been given on which cost pool groups the indirect costs, listed in Standard 1, should be classified into.
Standard 3	This standard has been significantly reviewed, in order to provide more detailed guidance on allocating costs. The following standards have been developed: • 3A – Allocating ward costs (focusing on nursing costs) • 3B – Allocating community team costs • 3C – Allocating medical staffing costs. The information included within these standards has been incorporated into the MAQS for 2015/16. Further work is planned for the 2016/17 update to further develop these standards and to also incorporate guidance for other cost pool groups.
Standard 4	Development of guidance on the classification of costs into fixed, semi-fixed and variable categories. A classification has been developed by the mental health costing practitioner group and is provided within Appendix D.
Standard 5	This standard is included for information only.

Appendix F

Summary of key changes between mental health clinical costing standards 2014/15 and 2015/16 editions (continued)

Standard 6	No substantive changes.
Standard 7	Minor changes to reflect the Department of Health and Health Education England work to develop currencies for education and training and costing guidance to support the national cost data collections planned for 2015.
Standard 8	Significant development of this standard on information. The standard has been expanded to incorporate all information used in the costing process and to provide more information regarding the integrity of data in costing. This standard has been informed by the work undertaken by Capita CHKS on the reference cost audits during 2014. Standard 8a has been further developed to incorporate more detailed guidance on matching, specifically how to treat unmatched resources.
Standard 9	Minor changes to reflect feedback received on the MAQS.
Standard 10	Development of this standard to cover the review and audit of cost information.

Additional publications

The HFMA has published a guide to patient-level costing for community services. This guide is seen as the first step in developing costing guidance for community services. It can be downloaded from www.hfma.org.uk/costing/standards/supporting-material/community

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Work to update the 2015/16 version of the mental health clinical costing standards has been led by Helen Strain, HFMA costing lead, and Scott Hodgson, HFMA costing standards lead.

While every care has been taken in the preparation of this publication, the publishers and authors cannot in any circumstances accept responsibility for error or omissions, and are not responsible for any loss occasioned to any person or organisation acting or refraining from action as a result of any material within it

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