NHS Costing Manual

DH INFORMATION READER BOX

Policy	Estates
HR / Workforce	Commissioning
Management	IM & T
Planning /	**Finance**
Clinical	Social Care / Partnership Working

Document Purpose	Action
Gateway Reference	17154
Title	NHS Costing Manual
Author	Payment by Results
Publication Date	26 January 2012
Target Audience	Directors of Finance
Circulation List	NHS costing accountants
Description	This NHS Costing Manual sets out mandatory and minimum principles for costing in the NHS. They can be applied to other costing models, but must be adhered to by NHS trusts and NHS foundation trusts when submitting reference costs.
Cross Ref	Reference costs guidance for 2011-12
Superseded Docs	NHS Costing Manual 2010-11
Action Required	
Timing	
Contact Details	SHA cluster reference cost leads Payment by Results team pbrdatacollection@dh.gsi.gov.uk
For Recipient's Use	

Contents

Section 1: Introduction

Purpose

1. This NHS Costing Manual sets out mandatory and minimum principles and practices that must be applied to costing in the NHS. They are designed to support the calculation of reference costs, and through these, the national tariff, but can also be applied to other costing models.

2. In summary, costing must be undertaken on a full absorption basis. Costs should be matched to the services that generate them and should reflect the full cost of the service delivered. This will be best achieved by maximising the proportion of costs charged directly to services and adopting a standardised approach to the apportionment of overheads and indirect costs. The approach to costing is based on a continuum with total costs being broken down into high level cost totals which in turn become disaggregated to reflect the more detailed costs of the care delivered as it moves down the continuum.

3. To provide cost information that is accurate and relevant to clinicians and managers at all levels, a balance must be struck between prescription to allow robust comparisons to be made between providers, and flexibility to respond to local variations. The key to this is the development of costing below specialty or treatment function level and the identification of major blocks of costs for services. These blocks can then be assembled in a variety of ways to meet the various needs for cost information, and form the building blocks for the development of care pathways.

4. The need for accurate information on the full cost of NHS funded services is more important than ever. Not only because reference costs feed into the production of the national tariff, but also because organisations need to have a detailed understanding of their cost base. The data, when consolidated, provides a source of detailed financial information for commissioners and providers of NHS services. It can be, and is, used to support development of the national tariff, monitoring of performance and service delivery, efficiency targets, benchmarking of services across all sectors, consideration of investment decisions, commissioning to meet health need and negotiation of revised levels of funding.

Costing standards and PLICS

5. Patient level information and costing systems (PLICS) help organisations understand exactly how costs are built at the most basic and accurate level, that of the patient, and therefore inform decision making to improve both the quality and effectiveness of services. The Department has not mandated the implementation of PLICS for NHS organisations. But we support its implementation and recognise its benefits, including the greater understanding of financial drivers, the provision of evidence based analysis in discussions with clinicians and commissioners, and provision of information to enable improved HRG classification. As part of the reference costs collection, we run a voluntary survey of NHS providers about their implementation and use of PLICS.

6. The HFMA has taken over development of the *Clinical Costing Standards*[1] for acute

[1] http://www.hfma.org.uk/costing/

and mental health previously published by the Department. These standards build on and enhance the principles outlined here, provide recommended best practice for the production of patient level costs, and support a more consistent implementation of PLICS within the NHS. The standards are not mandatory but we hope that PLICS organisations will adopt them to improve their costing.

7. NHS organisations which adopt PLICS and the *Clinical Costing Standards* must continue to submit reference costs in line with this guidance.

Section 2: Principles

Introduction

8. The costing of all services delivered by NHS providers is governed by the principles that costs (and income) should be:

   (a) calculated on a full absorption basis to identify the full cost of services delivered
   (b) allocated and apportioned accurately by maximising direct charging and where this is not possible using standard methods of apportionment
   (c) matched to the services that generate them to avoid cross subsidisation.

9. The costing process should also be transparent with a clear audit trail. Decisions taken should be documented for audit, especially if they involve a departure from guidance.

10. We acknowledge that configurations of cost centres differ across NHS providers. NHS providers should identify cost centres which best reflect their service delivery for internal management purposes. These cost centres should however be able to map clearly to the treatment function, programme or service definitions required in this guidance.

Concepts

Direct, indirect and overhead costs

11. Direct costs are those which relate directly to the delivery of patient care, are driven by patient type and throughput of patients and can be directly attributed to the patient. For example, medical and nursing staff costs.

12. Indirect costs are those costs which are indirectly related to patient care. They are not directly determined by the number of patients but costs can be allocated on an activity basis. For example, there may be no method of directly allocating laundry costs to a particular cost centre and therefore laundry costs are an indirect cost to a number of cost centres. An activity based allocation methodology can be used to allocate costs to a direct cost centre.

13. Overhead costs are the costs of support services that contribute to the effective running of an NHS provider. They are costs not driven by the level of patient activity and have to be apportioned to service costs because there are no clear patient activity based allocation methods. Examples include the chief executive's salary, business planning and human resources. They need to be apportioned on a consistent and logical basis. Where such services are shared with other parts of the NHS, care should be taken to ensure the relevant proportions are identified to the relevant services. These proportions must be reviewed annually as utilisation of these services will vary.

Minimum standard categorisation of costs

14. To ensure consistency, the minimum standard categorisation of costs at Annex A analyses costs between direct, indirect and overheads. These are minimum standards and, where information systems allow costs that are categorised as

indirect to be allocated instead directly to treatment function, this should be done. In no circumstances should costs categorised as direct be allocated indirectly or apportioned as overheads, although reducing levels of overheads and a move to indirect or even direct cost classification is actively encouraged.

15. It is also expected that an annual review of overhead apportionments is undertaken. It is important to review apportionments across the individual points of delivery within a service or specialty, and not just the apportionments to individual services or specialties.

Fixed, semi-fixed and variable costs

16. Costs should be classed as either:

    (a) fixed where they are not affected by in-year changes in activity, eg rent, rates and depreciation
    (b) semi-fixed where costs are fixed for a given level of activity but change in steps when activity levels exceed or fall below these given levels, eg nursing staff
    (c) variable where costs vary proportionately with changes in activity, eg drugs and consumables.

17. NHS providers should make available the classification used in compiling their quantum of costs. These should reflect local circumstances and be justifiable to both commissioners and auditors.

The costing continuum

18. There are three key elements in the costing methodology which are required as NHS providers move along the costing continuum:

    (a) a high level control total based on actual costs by services identifying direct, indirect and overhead costs in line with the national minimum standards. The national high level control totals should be able to be mapped to the national classifications found in this guidance
    (b) a continuous reconciliation process at all stages of the costing process to ensure all costs are recovered, and can be matched to relevant services and final accounts
    (c) a resource profile analysis of all conditions which represent 100% of the high level control total in both activity and cost terms.

19. These profiles or pathways allow clinical audit and financial monitoring to be undertaken as part of ongoing internal performance management. Effort should be focused on the smallest number of procedures and activities within each service which together represent a high proportion of the total cost.

20. This guidance should be used to produce retrospective baseline cost information. Where assumptions are made about changes in activity and cost, they should be clearly identified and shared with all parties. This transparency will assist all parties in understanding the nature and behaviour of costs when linked to activity.

21. The involvement of clinicians, nurses and other professionals, including operational managers, is essential for the full understanding of the patient activities that are

being costed. Use of their knowledge and experience will improve the accuracy of the results and produce a better understanding of cost behaviour and costing and monitoring processes amongst non-finance staff. Their knowledge can also be used to supplement formal information systems and fill in any gaps that may exist.

22. No meaningful cost and activity information will be produced if this is undertaken as a purely financial exercise. Professional involvement will be more concentrated when costing activities for the first time and should not be underestimated. This input should be planned and completed prior to the year-end costing exercise for reference costs, to allow sufficient time for the process. In some cases this input may be found in clinical audit studies, training aids for junior doctors etc, and these can provide a starting point for the process.

Section 3: Applying the principles

Introduction

23. This section explains how the general principles and key concepts should be applied in order to move through the four levels of NHS costing. A flow chart showing the process is at Annex B. PLICS organisations are likely to produce costs from the bottom up, with more focus on direct costs. When using PLICS, the levels identified in this section may not be visible given the sophistication of the system, but the general principles still apply.

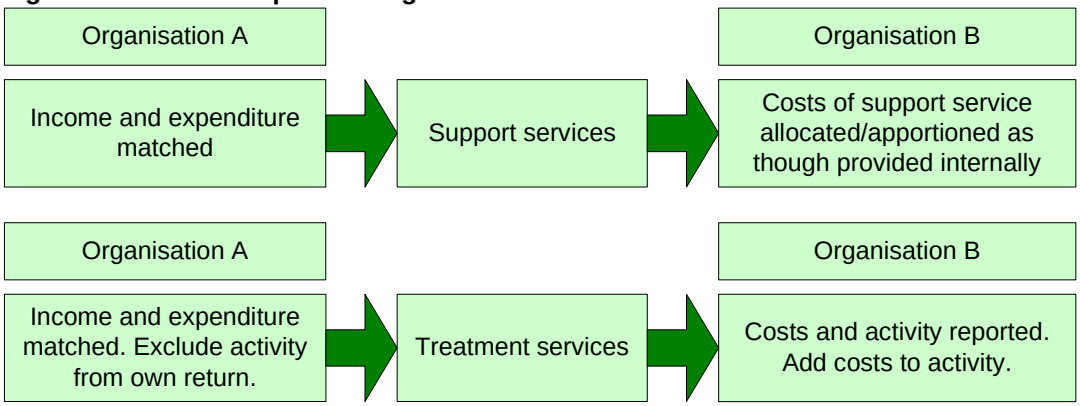
Level 1: Establish control totals for costing

General ledger reconciliation

24. The costing process begins with the general ledger. At the first level, the purpose is that a control total for costing should be established. This should be the full cost of providing services for NHS patients.

25. Where there are provider-to-provider agreements for support or treatment services, the costs and associated income should be treated as in Figure 1.

Figure 1: Provider-to-provider agreements



26. For support services, in line with the principles outlined in section 2:

    (a) the providing organisation (A) should record both expenditure and income and these should be matched in line with the costing principles
    (b) the receiving organisation (B) should include the service costs in their total quantum of costs, and these should be treated as though the service had been provided internally and therefore allocated and apportioned on a consistent basis.

27. For treatment services:

    (a) the receiving organisation (B) should record both the costs and activity. Such costs should be added to the cost of the activity if necessary
    (b) the providing organisation (A) should match the income and expenditure as with support services, but any resulting activity should be excluded and reconciled through the appropriate statement in the reconciliation statement workbook. Thus, the matching principle of activity and cost is maintained as the costs are

offset by the income and the activity is not double counted across the NHS as a whole.

28. For costing purposes only the net cost or income of teaching, research and development, and private patients should be included in the control total. All the associated income (grants, levies, donations, including all central levies eg MPET) should be attributed to the corresponding services, to match the expenditure in line with the matching principle. This should be done even where inaccuracies or anomalies in the costing of these activities have occurred. Thus, baseline costs used for reference costs will include only the net effect of the costs or income associated with these activities and their relevant income streams.

Level 2: Produce high level control totals

Attribute costs

29. Costs should first be analysed between direct, indirect and overhead using the minimum standard categorisation of costs in Annex A. Normally costs will need assigning to a general ledger account code comprising a mixture of direct, indirect and overhead costs.

30. Equally a similar assignment of fixed, semi-fixed and variable cost types should be applied to cost code structures to develop a full understanding of cost behaviour.

31. The objective is to attribute all costs to the services which generate them. To meet this objective, as many costs as possible should be allocated directly to the service to which they relate.

32. Costs that cannot be attributed directly will need to be allocated and apportioned using appropriate work or other measures. Indirect and overhead costs may be pooled to aid their allocation or apportionment to services. Cost pools brings together costs into identifiable groups, eg wards, and allow them to be allocated or apportioned to relevant services. For a number of indirect and overhead costs, the measures which must be used are detailed in Annex C. To ensure consistency, no other measures should be used in place of those specified.

Identify cost pools

33. Where costs have not been directly attributed to the patient, cost pools should be constructed so that the costs included can be allocated or apportioned using the same method. Cost pools can be constructed in different ways dependent on the nature of the costs included in them.

Fixed and semi-fixed cost pools

34. Cost pools can be identified as fixed, semi-fixed and variable. The main fixed and semi-fixed costing pools are likely to be as per Table 1.

Table 1: Fixed and semi-fixed costing pools

Cost pool	Apportionment methodology
Wards	Bed days
Theatres	Theatre hours or sessions
Diagnostics	Weighted tests

35. Costs by this point include not only direct nursing and medical staff but also the appropriate share of overheads and support services.

36. The absorption rate is calculated by dividing the combined fixed and semi-fixed costing pools for wards, theatres and outpatients by the appropriate activity units ie bed days, theatre hours or attendances. The units are obtained from the high level activity control totals.

Variable cost pools

37. The main variable cost pools are likely to be:

    (a) direct or condition based (Table 2). These are costs where the type, quantity and quality used depend on the condition, for example, drugs and dressings. These costs are assigned directly to a condition and are pooled only to provide a control total.

Table 2: Variable direct or condition based costing pools

Cost pool	Apportionment methodology
Wards	Direct to condition
Theatres	Direct to condition
Pharmacy	Direct to condition
Diagnostics	Direct to condition
Specialist nursing	Direct to condition

    (b) indirect or time based (Table 3). These costs relate to the time spent on ward, in theatre, in outpatients or with a client. These costs include catering provisions and linen where the quantity used depends on the time spent, for example, on a ward and is not dependent on the condition. The pooling of costs allows the calculation of a unit cost of time for allocating the pool. The unit cost is calculated by dividing the total of the pool by the expected usage of time ie the appropriate control total activity level. For example, if ward time based costs total £200,000 and the expected occupied time is 1,000 bed days then the unit cost is £200 per bed day.

Table 3: Variable indirect or time based costing pools

Cost pool	Apportionment methodology
Wards	Bed days
Theatres	Theatre hours or sessions
Outpatients	Attendances

38. Variable costs which may be condition based but are not material should normally be allocated to condition on a time basis (eg length of stay on bed day basis for ward drug stocks, or number of clients for minor dressings) through variable costing pools.

39. The sum of the pools created should provide a control total which can be reconciled to the totals at the previous stage.

40. Annex C mandates a standardised approach to allocating or apportioning cost centres to treatment function, service or programme. Where a suitable apportionment methodology is available, these should be allocated directly. Where this is not possible, for support services, costing pools and cost centres, a two stage allocation process will be needed. These standards may be improved upon locally depending on local circumstances. PLICS organisations are likely to have more sophisticated

methods and software, but the key principle is relevance to the costs being apportioned.

41. The results of the pooling and attribution process will be used to produce fully absorbed costs which may be used in the establishment of cost drivers. At this stage, some cost centres may be treatment function dependent. Others such as medical records will be directed to treatment function, service or programme through the cost drivers. Direct access services will retain costs that will not be allocated to other areas, eg pathology, and these are reported separately.

42. A full audit trail is important to understand the effects of pooling, the allocation process, and the basis of activity control totals. Wherever possible, the details which support the absorbed cost centres should be summarised. The basis of the costing pools and the basis of allocation should be reviewed regularly. As much of the allocation methodologies will be hidden in costing software packages, it is important to identify and review the methods.

43. This analysis can be particularly useful in explaining the true and comprehensive cost structure of the services being provided for discussions with clinicians and business managers.

Identify key cost drivers

44. Each costing pool needs a set of statistics that form the basis of apportionment. For each identified costing pool, a cost driver will need to be established. Table 4 gives some examples for admitted patient care.

Table 4: Cost drivers

Cost pool	Driver
Condition based ward costs (eg medical records)	Admission records
Drugs (excluding high cost drugs)	Number of items dispensed
Physiotherapy	Number of sessions
Radiology or pathology	Number of tests
Time based theatre costs	Theatre time
Time based ward costs (eg catering, laundry)	Length of stay

45. Using the identified cost drivers, the costs within a costing pool can be allocated to the relevant services. This allows all costs to be allocated as appropriately as possible to the services that generate them.

46. At this point level 2 is complete and high level control totals will have been established to reflect the local configuration of service, treatment function or programmes.

Level 3: Establish control totals at point of delivery

Disaggregate high level control totals

47. For all services not attributed directly to patients, the high level control totals established at level 2 should now be analysed between the points of delivery, eg day cases, outpatients, direct access. This may involve some further disaggregation of costs, eg the fully absorbed costs of a support department will be distributed as an element in the cost of a range of surgical and medical interventions, and outpatient

attendances, but also as a direct access service. The amount of work involved at this stage will be determined by the approach taken to the allocation and apportionment of costs through cost pools at level 2. This stage is mandatory for all services.

48. The point of delivery control totals must reconcile to the high level control totals and provide the basis of resource profiles which will be established in level 4 for a range of services. The control totals may include:

    (a) costs which will be allocated to condition on the basis of:
        (i) bed days for ward based costs
        (ii) theatre hours or sessions for theatre based costs
        (iii) attendances for outpatient costs
        (iv) number of visits for direct access
        (v) number of clients for community nursing services
    (b) costs which are specific to a condition, such as drugs, dressings, surgical implants.

49. They should also include activity data both as a check that all relevant activity is included in the process and to provide the basis of an absorption cost per unit.

Identify relevant activity data

50. The reference costs guidance sets out the requirements for capturing activity. As a starting point, we recommend working through it to determine which services the organisation provides and how activity needs to be counted for reference costs. Then find out whether that activity information is already collected.

51. If data are not available, a sample or clinical estimate is acceptable for some services, although actions should be put in place to collect the data for the following year. Information should be kept for audit purposes if a clinical estimate is made.

52. As a general rule, include all activity data that the organisation undertakes unless the reference cost guidance explicitly states that it should be excluded. We recommend liaising closely with the information department to ensure that all activity is captured and is an accurate reflection of data reported by the organisation in other activity returns such as hospital episode statistics (HES). The data in these returns may not exactly match reference costs and it may be necessary to provide a reconciliation between the various sets of data for audit.

53. Care should be taken that the data are accurate. Inaccurate coding can seriously distort cost and activity data. Relevant activity data may come from a variety of sources including:

    (a) estate management systems
    (b) general ledger
    (c) human resource systems
    (d) medical records
    (e) nursing hand held records
    (f) oncology records
    (g) pathology systems
    (h) patient administration systems (PAS)
    (i) patient records

(j) pharmacy records
(k) radiology systems
(l) radiotherapy systems
(m) self service systems
(n) theatre records
(o) travel systems.

54. Activity data should be analysed across points of delivery, using the standard definitions in this guidance and the Data Dictionary. At the end of the process all those involved should have a clear understanding of the various sources of data and its quality.

55. After following these steps, level 3 is complete and provides the basis for the development of resource profiles or proxies at level 4. All NHS providers are required to cost their service provision using the approach outlined in this manual up to and including at least level 3. We expect that most organisations will reach level 4 and beyond, and with the increased use of PLICS many will cost at a patient level and build costs back up to level 1.

Level 4: Identify and cost resource profiles or client groups

56. Many services are now defined and costed at level 4 and/or at a patient level. The currency used to produce information at this level is relevant to the services involved.

57. The purpose of this level is to identify the activity to be costed. To ensure that comparative data is available in a nationally agreed format, the end product of this analysis is a cost for the key HRGs, or other currencies, within each point of delivery.

58. Previous NHS Costing Manuals have included a minimum requirement to select and profile the HRGs that cover at least 80% of cost and activity at each point of delivery, with the discretion that standard costs may be submitted for up to 20% of the remainder of HRGs. Given that one of the principles of HRG4 is that HRGs are iso-resource and expected to have different costs, and that it is inappropriate to report the same cost against multiple HRGs, we now expect NHS providers to cost 100% of cost and activity and most are already doing this. Priority should still be given to the HRGs within each point of delivery which together represent a high proportion of the total cost.

Other costing issues

Capital charges

59. Capital charges for assets, including a building or part of a building must be charged directly to the relevant cost centres if they are used by only one treatment function or allocated indirectly by appropriate methods if they are shared between specialties or treatment function.

Clinical negligence scheme for trusts

60. Clinical negligence scheme for trust (CNST) payments should be treated as an overhead to the relevant specialty, and then weighted across all relevant patient types. When allocating CNST costs, it should be noted that maternity services often

incur a much higher payment than other services, to reflect the sizable claims that arise from delivery events. These should be accurately reflected in the relevant cost pools when determining the unit costs of maternity activity.

Down time

61. Concerns have been raised in the past about waiting or down time in theatres, A&E departments and ambulance trusts. The cost associated with these time periods should be included to comply with the full absorption cost principle. These contribute to the state of readiness which is a feature of the service delivery. To allow consistency in the costing process, downtime should not be costed as a separate element. In calculating a charge for different staff categories, therefore, the costs should be fully inclusive of all staff time, including oncosts, and this should be seen as a direct actual cost to the service activity. This will ensure that all costs from the various staff costing pools are fully recovered.

Provisions

62. All provisions (eg clinical negligence or bad debt) should be treated consistently. Changes in provisions, ie costs and income that are reflected in the income and expenditure account, need to be taken into account for reference costs.

63. Where NHS providers have made an increase or decrease in their provisions, this cost or income is part of the quantum of costs or expenditure for a given year and should be included in reference costs. The inclusion of such expenditure would have an overall increase in the total quantum of costs, whilst the inclusion of income from a reduction in provisions would result in a decrease in the quantum of costs submitted, on an annual basis.

Road traffic accidents

64. Road traffic accident (RTA) income is a reimbursement via a central government agency and should not be treated any differently to contractual income from PCTs. Therefore, activity and costs associated with the treatment of patients involved in RTAs should be included in reference costs.

Annex A: Minimum standard categorisation of costs

Table 5 analyses costs as direct, indirect or overhead, and is the minimum standard categorisation (paragraph 14). We give two categories for some costs. The first is the preferred analysis, but NHS providers may use the alternative where it is not supported by information systems, moving to the preferred analysis as opportunities present themselves.

Table 5: Minimum standard categorisation of costs

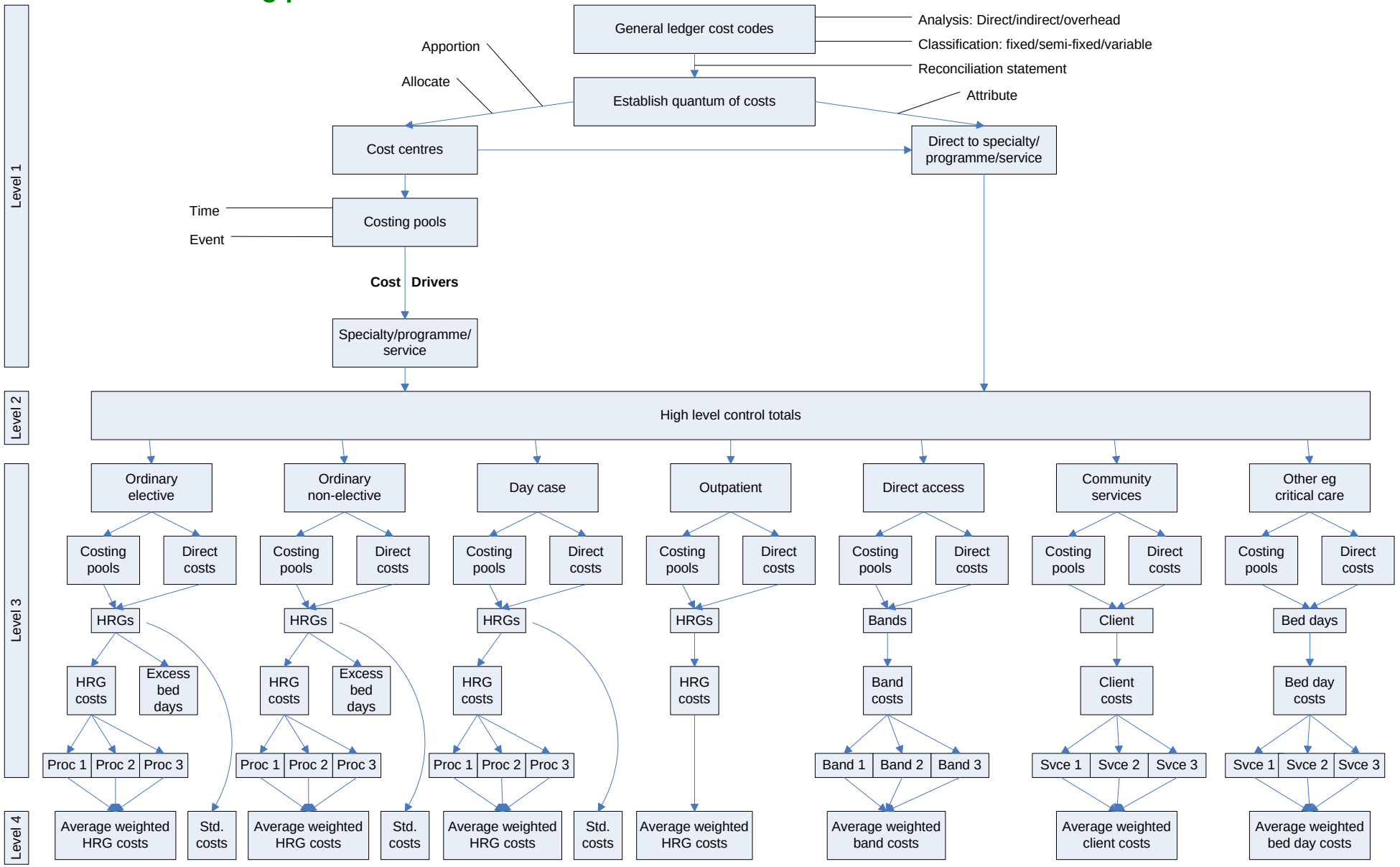
GENERAL/SENIOR MANAGERS	
Chief executive	Indirect/Overhead
Senior managers - board level	Overhead
Senior managers - other	Overhead
MEDICAL[1]	
Medical staff groups	Direct
Clinical representatives on management teams	Overhead
DENTAL	
Dental staff groups	Direct
NURSES AND MIDWIVES[1]	
Senior nursing staff (district nursing officers and directors of nursing services)	Indirect
Qualified nurses, midwives and health visitors	Direct
Unqualified nurses	Direct
Post registration nurse learners	Direct
PROFESSIONS ALLIED TO MEDICINE	
Professions allied to medicine (excluding speech therapists)	Direct/Indirect
PROFESSIONAL AND SCIENTIFIC STAFF	
Therapists	Direct/Indirect
Biochemists	Direct/Indirect
Physicists	Direct/Indirect
Clinical psychologists	Direct
Other scientists	Indirect
Chaplains	Overhead
PROFESSIONAL AND TECHNICAL STAFF	
Medical laboratory scientific officers	Indirect
Restorative maxillo-facial and orthodontic technicians	Direct
Pharmacy technicians	Direct
Dental hygienists, dental surgery assistants, dental therapists	Direct
All other technicians	Indirect
District/trust work staff	Indirect
OPTICIANS	
Opticians	Direct
PHARMACISTS	
Pharmacists	Indirect
ADMINISTRATIVE AND CLERICAL	
Other administrative and clerical staff	Indirect/Overhead
NHS staff on protected salary scale	Indirect/Overhead
ANCILLARY STAFF	
Ancillary staff including support workers	Direct/Indirect
MAINTENANCE STAFF	
Maintenance staff	Indirect
HEALTH CARE ASSISTANTS	
Health Care Assistants	Direct
NON-NHS STAFF	
Medical	Direct
Dental	Direct
Nursing	Direct
Professions allied to medicine	Indirect
Professional and scientific	Indirect
Professional and technical	Indirect

Opticians	Direct
Pharmacists	Indirect
Administrative and clerical	Indirect
Ancillary staff	Indirect
Maintenance staff	Indirect
Ambulance staff	Direct
CHAIRMAN'S AND NON-EXECUTIVE MEMBERS' REMUNERATION	
Remuneration	Overhead
SUPPLIES AND SERVICES - CLINICAL	
Occupational and industrial therapy equipment and materials	Indirect
Drugs	Direct/Indirect
Medical gases	Indirect
Dressings	Direct
Medical and surgical equipment	
- Purchases	Direct
- Maintenance contracts	Indirect
- X-ray film	Indirect
- X-ray equipment and chemicals	Indirect
- X-ray equipment - maintenance contracts	Indirect
- Patients' appliances	Direct
- Artificial limb and wheelchair hardware	Direct
Laboratory equipment	
- Instruments and materials	Indirect
- Maintenance contracts	Indirect
SUPPLIES AND SERVICES - GENERAL	
Provisions – purchases	Indirect
Contract catering	Indirect
Staff uniforms and clothing including contracts for making up, etc	Indirect
Patients' clothing	Indirect
Laundry - equipment and materials	Indirect
Laundry - external contracts	Indirect
Hardware and crockery	Indirect
Bedding and linen – disposable	Indirect
Bedding and linen – non disposable	Indirect
ESTABLISHMENT EXPENSES	
Printing and stationery	Indirect/Overhead
Postage	Indirect/Overhead
Telephone – rental	Indirect/Overhead
Telephone - other, including calls	Indirect
Advertising	Indirect
Travelling and subsistence expenses	Indirect
Removal expenses	Indirect
Leased and contract hire charges (staff cars)	Indirect
TRANSPORT AND MOVEABLE PLANT	
Fuel and oil	Indirect
Maintenance – equipment and materials	Indirect
Maintenance - external contracts	Indirect
Hire of transport	Indirect
Hospital car service	Indirect
Miscellaneous transport expenses	Indirect
PREMISES AND FIXED PLANT	
Coal	Overhead
Oil	Overhead
Electricity	Overhead
Gas	Overhead
Other fuel	Overhead
Water and sewerage	Overhead
Cleaning - equipment and materials	Indirect
External general service contracts not identified elsewhere	Indirect
Office equipment	Indirect

Purchase of computer hardware and software including licence fees	Indirect
External contracts for data processing services	Indirect
Maintenance of computer hardware and software including licence fees	Indirect
Services	Indirect
Rates	Overhead
Rents	Overhead
Engineering maintenance	
- equipment and materials	Overhead
- external contracts	Overhead
Building maintenance	
- equipment and materials	Overhead
- external contracts	Overhead
Gardening and farming	
- equipment and materials	Overhead
- external contracts	Overhead
CAPITAL[2]	
Capital charges	Overhead
Adjustment on disposal of fixed assets	Overhead
EXTERNAL CONTRACT STAFFING AND CONSULTANCY SERVICES	
External contract staffing and consultancy services	Overhead
MISCELLANEOUS EXPENDITURE	
Students' bursaries	Overhead
Patients' allowances	Indirect
Auditors' remuneration	Overhead
Gross redundancy payments	Overhead
Net bank charges	Overhead
Patients' travelling expenses	Overhead
All other expenditure	Indirect/Overhead

[1]In some units certain medical and nursing staff may be shared between specialties in which case they will be allocated as an indirect cost to those specialties.
[2]Capital charges for assets, including a building or part of a building, must be charged directly to a treatment function if they are used by only one treatment function or allocated indirectly by appropriate methods if they are shared between specialties.

Annex B: The costing process



Annex C: Minimum standards for allocating and apportioning costs

Objective

1. The objective of these minimum standard methods for allocating and apportioning costs is to avoid unnecessary differences in reported costs for the same patient treatment caused by different methodologies.

2. The standard provides a minimum level of sophistication in cost allocation that we expect all NHS providers to achieve. We encourage more sophistication, in particular patient level costing, but only if it conforms to the underlying principles in this guidance.

Underlying principles

3. The principles which underlie the standard are that:

   (a) costs should be allocated directly wherever possible
   (b) apportionment methodologies for indirect and overhead costs should
      (i) be readily available and accurately measurable. Ideally, their accurate measurement should already be required for other purposes
      (ii) relate as closely as possible to the cost of the activity. For example, if diagnostic tests vary significantly in cost, the number of tests requires weighting appropriately before use as a tool for apportionment
      (iii) take account of the judgement of experienced clinicians, nurse managers, or other professionals. Advantage should also be taken of data available from tender specifications for support services
   (c) a two stage apportionment of support services (eg catering), via patient treatment services (eg A&E), to treatment function, service or programme is recommended where appropriate. In this way patient treatment services which require relatively high levels of support services will channel their costs through to the specialties they serve. A more complex multi-stage apportionment is possible in which, for example, part of the cost of one support service is apportioned to another, and vice versa. NHS providers are not precluded from using these more complex approaches and presenting them for audit, although multi-stage apportionment restricts the level of transparency in the costing process and should be avoided wherever possible
   (d) the structure of the objective analysis of costs by department (whether patient treatment services or support services) used for management and budgetary control by providers will vary according to each provider's management structure. Similarly the subjective analysis of cost by type within department will vary from provider to provider. It remains our intention not to dictate the cost structure used by NHS providers for management purposes but to set down principles which can be used flexibly within standard parameters for comparability.

Methodology

4. Under the two stage method, support services are generally apportioned first to patient treatment services. These, including their apportionment of support services, are then apportioned to treatment function. Where support services are directly attributable to patients they would be attributed directly to treatment function, for

example in proportion to patient days. PLICS organisations are likely to use a more sophisticated and less visible method.

5. If an NHS provider contains more than one site it is likely that elements of this two stage allocation to treatment function will be dealt with separately for each site. Corporate costs (eg trust headquarters) will be allocated to each site, prior to any site costs being allocated to treatment function. In reporting costs, however, organisation wide costs are required as this allows comparisons of the effective use of fixed assets including NHS estates.

6. In the case of some elements of overhead cost, for example the chair's office support, some NHS providers will have little available in the way of work measures for allocation of these costs. Apportionment in proportion to gross expenditure is a simple and consistent process for cost apportionment, and is still acceptable as a last resort.

7. If any of the elements of cost are significant (usually greater than 5 percent of total costs) attempts should be made to improve the basis of allocation of these costs.

8. Table 6 and Table 7 set out the minimum standard for allocation in:

   (a) the first stage, from support services, indicating which departments should be allocated directly to treatment function (T) and which via patient treatment services (PTS) and with which unit of apportionment
   (b) the second stage, from patient treatment services to treatment function, indicating the recommended unit of apportionment.

9. These apportionment methods should only be used once all the possibilities for allocating costs directly to treatment function have been exhausted. Annex A gives guidance as to which cost types should be allocated directly for reference costs.

10. The tables should be read alongside the accompanying notes.

Table 6: First stage allocation of support services

Department	Allocated to	Apportionment methodology	Notes
Building maintenance	PTS	Building volume	1
Capital charges - equipment	PTS	Specific equipment	8
Capital charges - other	PTS	Floor area	9
Catering	PTS or T	Number of meals provided	1,2,3
Central office support	PTS	Gross cost of PTS	1
Chief executive	PTS	Gross cost of PTS	1
Domestic	PTS	Usage by area	1
Employee services	PTS	Staff numbers	
Energy/water etc	PTS	Heated volume	1
Engineering maintenance	PTS	Building volume	1
Laundry/linen	PTS or T	Usage/patient day	1,2,4
Medical records	T	Outpatient attendances plus admitted patient and day case episodes	6
Miscellaneous	PTS	Gross cost of PTS	1
Portering/ transport	PTS or T	Weighted patient days	1,2,5
Procurement	PTS	Number of orders raised	
Purchase of tertiary referrals	T	Actual cost of referrals	
Site overheads (excluding capital charges)	PTS	Building volume/floor area	1

Department	Allocated to	Apportionment methodology	Notes
Training, education	PTS	Weighted number of persons employed	7

Table 7: Second stage allocation of patient treatment services to specialties

Department	Apportionment method	Notes
A&E department	Direct allocation	10
Artificial limb and wheelchair	Item issued, or to non-acute	
Audiology	Direct to ENT or audiological services	
Clinicians	Direct allocation	10
Community dental services	Direct allocation to relevant community service	
Community medical services	Direct allocation to relevant community service	
Community nursing and midwifery	Direct allocation to relevant community service	
Day care facilities	Direct allocation or pro-rata attendances	10
Dietetics	Attendances	
ECG	Weighted requests	
EEG	Requests as per guidance on radiology services	11
Health promotion	To commissioner	
Industrial therapy	To community or occupational therapy	
Lithotripsy	Attendances	
Medical illustration and photography	Number of requests	11
Medical physics	Weighted number of requests	11
Miscellaneous patient treatment services	Gross expenditure of specialties	
Nuclear medicine	Weighted requests	12
Occupational therapy	Contacts	17
Operating theatres	Operating time / sessions	14
Optical services	Direct to ophthalmology	
Outpatient clinics	Direct allocation or pro-rata attendances	10
Pathology	Test bandings	15
Pharmacy	Number of issues	16
Physiotherapy	Contacts	17
Podiatry	Attendances	
Psychology	To relevant service / appointments	
Radiology	Bandings	18
Radiotherapy	Direct to HRG based on number of treatments / fractions	
Speech therapy	Contacts	17
Wards	Direct allocation or pro-rata bed days	10

1. All support services should be allocated to patient treatment services before overheads so that they are included in the gross cost of patient treatment services for apportionment of relevant overhead costs. Where support services have been subject to a tender exercise, advantage should be taken where possible of recent tender specifications to analyse service requirements and costs by department.

2. The choice between apportionment directly to treatment function or service or via patient treatment services will depend on whether the work measure data is available most accurately by treatment function or service or by patient treatment services. Treatment function should be used if in doubt.

3. For catering, the number of meals provided should be used as a more realistic basis for the allocation of catering costs because these can be provided to areas other than wards.

4. For laundry and linen, admitted patient days and day cases should have the same weight unless better information is available.

5. Portering and transport costs should be apportioned by patient days only as a last resort after grouping staff by theatre, ward and treatment function where appropriate in order to weight patient days appropriately for each treatment function's use of portering and transport. Advantage should be taken of any service requirement and cost analysis by department available from recent tender specifications.

6. In the absence of better information outpatient attendances, admitted patients and day cases should be given equal weight since the work in medical records depends largely on the number of records updated and extracted.

7. It is not acceptable to apportion these costs by staff numbers only. Appropriate weight, determined locally, must be given to those departments whose skill base requires more extensive and frequent training.

8. Capital charges for equipment of material value must be allocated directly to patient treatment services and shared between treatment function based on a realistic measure of use.

9. Other capital charges are likely to be predominately buildings and fixtures. Where capital charges are available by building block, the charge for each block should be apportioned to the patient treatment services occupying the block in proportion to their floor area. Corridors and common areas should be shared equally between those occupying the block, pro-rata to floor area. If support space is redundant and it would be inequitable to share its costs between the outposts of the block its cost should be spread throughout the unit as an overhead in a similar way to unit office support.

10. Refer to Annex A for treatment of clinicians and nursing staff.

11. If this department is likely to have a material effect on cost apportionment, requests should be weighted by reference to sampling and to the judgement of the departmental head if better methods are not available. However, for many providers this department will be of small cost and unweighted requests are an acceptable basis of allocation.

12. Note 11 may apply, or weight as per the manual of accounts.

13. If computerised systems are not available to assess operating time by treatment function, approximations should be made based on manual records including theatre sessions.

14. The costs should be identified and calculated in line with the groupings listed in the current reference costs guidance. These costs can be used for internal as well as external charging.

15. It is assumed that the variable drugs cost will be identifiable to wards, consultant or treatment function directly. Other costs should be apportioned on this basis in the absence of other information.

16. Contacts should be used, as this is consistent with the approach for direct access.

17. The costs should be identified and calculated in line with the groupings listed in this guidance. These costs can be used for internal as well as external charging.

Annex D: Costing standards for ambulance service providers

Table 8: Costing standards for ambulance service providers

Description	Class.	Analysis	Currency			
			Calls (1)	Hear and treat (2)	See and treat (3)	See and treat and convey (4)
PAY						
General and senior management						
Chairman and non executive directors	Fixed	Indirect				
Chief executive	Fixed	Indirect				
Non-operational directors	Fixed	Indirect				
Director of A&E Services	Semi-fixed	Direct	%	%	%	%
Director of Patient Transport Services	Semi-fixed	Direct				
Administrative and clerical						
Finance	Semi-fixed	Indirect				
Personnel	Semi-fixed	Indirect				
Stores	Semi-fixed	Indirect				
Secretarial support	Semi-fixed	Indirect				
Information	Semi-fixed	Indirect				
Communications and computing	Semi-fixed	Indirect				
Reception staff	Fixed	Indirect				
Customer care / complaints officer	Semi-fixed	Indirect				
Transport / vehicles support officer	Semi-fixed	Indirect				
Control staff						
A&E control	Semi-fixed					
- *AMPDS audit*		Direct	100%			
- *Call assessors*		Direct	100%			
- *Call taker supervisors*		Direct	100%			
- *Rota management scheduler*		Direct	100%			
- *Cat C FCP*		Direct		100%		
- *CSD and alternative pathways manager*		Direct		100%		
- *Telemed*		Direct		100%		
- *Urgent care desk*		Direct		100%		
- *Call performance manager*		WTE of 1&2	%	%		
- *Air desk staff*		Incidents			%	%
- *Controllers*		Incidents			%	%
- *EMD despatchers*		Incidents			%	%
- *Incident command desk*		Incidents			%	%
- *Hospital desk assistants*		Direct				100%
- *Administrative assistant*		WTE of 1-4	%	%	%	%
- *CAD administrator*		WTE of 1-4	%	%	%	%
- *CAD loggist*		WTE of 1-4	%	%	%	%
- *Divisional manager EOC*		WTE of 1-4	%	%	%	%
- *Duty manager*		WTE of 1-4	%	%	%	%
- *EOC commander*		WTE of 1-4	%	%	%	%
- *EOC trainers*		WTE of 1-4	%	%	%	%
- *Regional EOC training co-ordinator*		WTE of 1-4	%	%	%	%
- *Regional head of EOC*		WTE of 1-4	%	%	%	%
PTS control	Semi-fixed	Direct				
Shared control	Semi-fixed	Indirect				
Ambulance liaison staff	Semi-fixed	Direct				
Ambulance personnel						
Training officers	Semi-fixed	Indirect				

Description	Class.	Analysis	Currency			
			Calls (1)	Hear and treat (2)	See and treat (3)	See and treat and convey (4)
District managers	Semi-fixed	Indirect				
Station officers	Semi-fixed	Indirect				
Pts staff	Variable	Direct				
Hcs drivers	Variable	Direct				
Paramedics	Variable	Time per 3&4			%	%
Technicians	Variable	Time per 3&4			%	%
- *Hospital ambulance liaison officer*	Variable	Direct				100%
- *Emergency care practitioner*	Variable	Time per 3&4			%	%
- *Ambulance support officer*	Variable	Time per 3&4			%	%
- *Emergency care assistant*	Variable	Time per 3&4			%	%
- *Health care referral team*	Variable	Time per 3&4			%	%
- *All other A&E grades*	Variable	Time per 3&4			%	%
Ancillary staff						
Catering staff	Fixed / semi-fixed	Indirect				
Domestics	Fixed / semi-fixed	Indirect				
Workshop staff	Semi-fixed	Indirect				
NON PAY						
Supplies and services clinical						
Drugs	Variable	Time per 3&4				
Medical gases	Variable	Time per 3&4				
Medical equipment	Semi-fixed	Time per 3&4				
Equipment maintenance	Semi-fixed	Time per 3&4				
Protective clothing	Semi-fixed	Time per 3&4				
Supplies and services general						
Provisions	Semi-fixed	Indirect				
Uniforms	Semi-fixed	Indirect				
Contract laundry	Semi-fixed	Indirect				
Hardware and crockery	Fixed	Indirect				
Linen: disposable	Variable	Indirect				
Linen: non-disposable	Semi-fixed	Indirect				
Establishment expenses						
Printing and stationery	Semi-fixed	Indirect/overhead				
Postage	Semi-fixed	Indirect/overhead				
Books and magazines	Semi-fixed	Indirect/overhead				
Telephone rental	Semi-fixed	Indirect/overhead				
Telephone calls	Semi-fixed	Indirect/overhead				
Travelling and subsistence expenses	Semi-fixed	Indirect				
Control equipment	Semi-fixed	Indirect				
Course fees	Semi-fixed	Indirect				
Training costs	Semi-fixed	Indirect				
Advertising and promotional expenses	Semi-fixed	Indirect				
Removal expenses	Semi-fixed	Indirect				
Transport and moveable plant						
- *Ambulance*		Time per 3&4			%	%
- *Rapid response vehicle*		Time per 3&4			%	%
- *Personal lease response vehicle*		Time per 3&4			%	%
- *Health care referral team vehicle*		Time per 3&4			%	%
- *HALO vehicle*		Time per 3&4			%	%
- *4x4 ambulance*		Time per 3&4			%	%
- *Alternate response vehicle*		Time per 3&4			%	%

Description	Class.	Analysis	Currency			
			Calls (1)	Hear and treat (2)	See and treat (3)	See and treat and convey (4)
- *Major incident unit*		Direct				%
- *Motor cycle*		Direct			%	
Fuel and oil	Variable	Time per 3&4				
Fuel pump maintenance	Semi-fixed	Time per 3&4				
Mot tests	Semi-fixed	Time per 3&4				
Spares and parts	Semi-fixed	Time per 3&4				
Workshop equipment	Semi-fixed	Time per 3&4				
Accident repairs	Semi-fixed	Time per 3&4				
Hire of Vehicles	Semi-fixed	Time per 3&4				
Rail services	Variable	Direct				
Vehicle insurance	Semi-fixed	Time per 3&4				
Ambulance car service	Variable	Direct				
Vehicle inspection	Semi-fixed	Time per 3&4				
RAC costs	Semi-fixed	Time per 3&4				
Tail lift maintenance	Semi-fixed	Time per 3&4				
Petrol licences	Semi-fixed	Time per 3&4				
Premises and fixed plant						
Fuel oil	Semi-fixed	Overhead				
Electricity	Semi-fixed	Overhead				
Gas	Fixed	Overhead				
Water and sewerage	Fixed	Overhead				
Refuse collection	Fixed	Overhead				
Cleaning materials	Semi-fixed	Indirect				
Cleaning contracts	Fixed	Overhead				
Furniture and fittings	Fixed	Indirect				
Office equipment	Fixed	Indirect				
Photocopier rentals / copies	Fixed	Overhead				
Computer hardware and software	Semi-fixed	Indirect				
Air conditioning	Fixed	Overhead				
Computer licence fees	Semi-fixed	Indirect				
Radio licence fees	Semi-fixed	Indirect				
Control equipment and consumables	Semi-fixed	Indirect				
Rates	Fixed	Overhead				
Rents	Fixed	Overhead				
Building and engineering	Fixed	Overhead				
Garden maintenance	Fixed	Overhead				
Brokers fees	Fixed	Overhead				
Building insurance	Fixed	Overhead				
Engineering plant insurance	Fixed	Overhead				
Miscellaneous expenses						
Medical malpractice insurance	Fixed	Overhead				
Medical reports	Fixed	Time per 3&4				
Employer liability insurance	Fixed	Overhead				
Net bank charges	Fixed	Overhead				
Management consultancy fees	Semi-fixed	Overhead				
Central services received	Semi-fixed	Overhead				
Occupational health	Semi-fixed	Overhead				
Audit fees	Fixed	Overhead				
All other expenditure	Semi-fixed	Indirect/overhead				
Capital						
Capital charges	Semi-fixed	Overhead				
Profit / loss on disposal	Semi-fixed	Overhead				

Key to table

SS	Support service
D	Direct service
	An emergency and urgent share is due here
	No emergency and urgent allocation
%	All costs split to identified currencies
100%	All costs to this currency

Table 9: Suggested allocation methods for some indirect or overhead costs

Description	To	By work measure	Currency			
			Calls (1)	Hear and treat (2)	See and treat (3)	See, treat and convey (4)
Overhead departments						
Chairman and chief executive	SS or D	Gross cost of services provided				
Administration	SS or D	Gross cost of Services Provided				
Personnel	SS or D	Staff numbers or WTEs				
Finance	SS or D	Gross cost of services provided				
Catering	SS	No. of meals provided				
Estates	SS or D	Building volume				
Linen	D	Time per 3&4				
Laundry	D	Time per 3&4				
Domestic	SS or D	Floor area				
Miscellaneous	SS or D	Gross cost of services provided				
Business development	SS or D	Gross cost of services provided				
Capital charges land and buildings	SS or D	Floor area				
Support service departments						
Training	D	Weighted no. of persons employed				
Quality	D	Gross cost of services provided				
Control rooms	D	WTE				
Workshops	D	Time per 3&4				
Non-patient transport	D	Weighted time spent				
District managers	D	Time per 3&4				
Information department	D	Weighted time spent				
Computers and communications	D	Weighted time spent				
Customer care	D	Weighted time spent				
Medical equipment	D	Time per 3&4				
Capital charges vehicles	D	Actuals				
Direct services						
A&E service		Time per 3&4				
PTS service						

Key to table

SS	Support service
D	Direct service
	An emergency and urgent share is due here
	No emergency and urgent allocation
%	All costs split to identified currencies
100%	All costs to this currency