

NHS

Costing Manual

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NHS COSTING MANUAL

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FOREWORD

The NHS Costing Manual was introduced in November 1999 to bring a greater degree of consistency to the production of cost information. The increasing emphasis on benchmarking performance reinforces the need for a comprehensive and consistent approach to costing.

This revised version of the Costing Manual takes on board the developmental needs for the national tariff, with the collection of spells data, as well as incorporating all lessons learnt from reference costs over the last 7 years and has produced a more detailed and increasingly prescriptive treatment of NHS costs. This is key if there is to be sufficient consistency to allow robust comparison and decision making using this data. This move to greater prescription will continue with the financial flows reform agenda.

This update to the Costing Manual is designed to bring the Manual in line with the current Reference Cost Guidance and to remove any overlap between the two and thus scope for any inconsistencies in guidance.

In addition this guidance reflects the move from FCE-based V3.5 HRGs to FCE & Spell-Based HRG4 to keep it consistent with the 2006/07 reference costs.

Over the coming months, to support the introduction of Patient Level Costing we will see the development of a number of costing standards developed by the Clinical Costing Standards Association of England (CCSAE).

As these develop it is expected that the superseded sections of the Costing Manual will be removed so to ensure that there is no conflicting guidance.

Many thanks go to all those who have contributed to the developments to date.

EXECUTIVE SUMMARY

This Manual sets out the principles and practice of costing to be applied in the NHS. It is not just designed to support the production of the National Schedule of Reference Costs and through this, the national tariff, but should also be used in developing and monitoring service and financial frameworks, as well as developments in and the monitoring and implementation of National Service Frameworks.

Costing must be undertaken on a full absorption basis. Costs should be matched to the services that generate them and should reflect the full and true 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 (Chapter 3). **For reference costs purposes this approach is mandatory.**

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. All NHS providers are expected to move along the continuum to establish high level control totals. More detailed costing beyond this high level applies to the majority of health services including services covered by HRGs. The mandatory requirements also apply to a more comprehensive range of service providers.

Since the original version of this Manual was introduced, a number of reference cost collections have been undertaken. This Manual has therefore been updated to reflect the changes implemented as part of these processes, and also for lessons learned. The latest update to this guidance reflects the move from FCE-based V3.5 HRGs to FCE & Spell-Based HRG4.

The scope of all services covered by this Manual will be increased to include a growing range of services covered by reference costs. We remain committed to working to include all services previously classified as hospital and community health services (HCHS) in future collections.

This is not the end point however, NHS costing and costing guidance are part of an iterative process that will continue while clinical practice and service delivery change and develop.

Through the sharing of unit cost information across the NHS and wider health arena, the National Schedule of Reference Costs (NSRC) seeks to facilitate meaningful discussions to support the modernisation agenda. The benefits of the NSRC have grown with the coverage of services and although the roll-out programme will continue, the emphasis has now shifted to the integral and proactive use of this information rather than just transparency and peripheral analysis.

The development and implementation of a national tariff underpin the need for robust, reliable costing information. In addition, as this data is being used more proactively by all parts of the NHS, the Department of Health and other associated bodies such as the Audit Commission, H.M Treasury, Office for National Statistics, private and voluntary organisations etc., then the need for comparable, high quality data is reinforced. This has strong links with ongoing work on data quality and accreditation. In turn, this reinforces the need for the full adoption of and compliance with the key underlying principles of the production and development of NHS costing generally and reference costs in particular.

NHS COSTING MANUAL

SECTION 1 INTRODUCTION AND PRINCIPLES

CHAPTER 1 – INTRODUCTION

1.1 The need for accurate information on the full cost of NHS services has taken on more importance over the past 7 years as new approaches to commissioning and the provision of services continues to be developed. However, the introduction of payment by results means that the production of accurate cost information is now of vital importance under this new financial regime, not only because reference costs feed into the production of the national tariff but also because NHS organisations will need to have detailed understanding of their cost base. This updated NHS Costing Manual is designed to reinforce these changes, as well as establishing clear principles for the costing of all NHS services. The data, when consolidated, provides a source of detailed financial information, relevant to commissioners as well as providers of NHS services. It can, 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;
- Negotiation of revised levels of funding.

1.2 All these elements are part of the modernisation agenda of the NHS and necessary to assess progress in the implementation of the NHS Plan.

1.3 To provide cost information that is accurate and relevant to clinicians, nurses 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/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 of NHS clinicians and managers, and form the building blocks for the development of Care Pathways.

1.4 This Manual is **mandatory** and should be followed by all NHS providers including Primary Care Trusts and PMS Plus pilot schemes providing Hospital and Community Health Services, unless otherwise stated. The Manual covers:

Chapter Two: the principles and key concepts that govern costing in the NHS. Where the Manual does not prescribe in detail the approach to be adopted, NHS providers must ensure that their chosen approach is consistent with the principles set out in this Chapter.

Chapter Three: the application of the principles and key concepts along the continuum of costing from the breaking down of total costs to high level control totals for each treatment function, service or programme through to the establishment of resource profiles and excess bed days. This includes specific reference to the use of Healthcare Resource Groups (HRGs) for resource profiling.

Chapter Four: the specific treatment of areas of inpatient and day case activity and costs, including those submitted at HRG level.

Chapter Five: the costing of specialist services, such as Bone Marrow Transplantation, Spinal Injuries, Renal Dialysis, Cystic Fibrosis and Rehabilitation.

Chapter Six: guidance on costing outpatient attendances including the casemix measures for outpatient attendances reported at HRG level.

Chapter Seven: the costing of other acute services, including Accident & Emergency, Radiotherapy and Chemotherapy. This chapter also includes specific treatment for radiology and pathology delivered through direct access to these services, thus not reported as part of a composite inpatient, day case or outpatient HRG.

Chapter Eight: guidance on costing therapy and other community based services, including community and outreach nursing and midwifery. It also includes costing of direct access therapy services.

Chapter Nine: the specific costing of Mental Health Services.

Chapter Ten: the specific costing of medical services provided by Ambulance NHS Trusts.

Chapter Eleven: guidance on the reconciliation process for Reference Costs, including the analysis statements and details of the Statement of Compliance that form part of the mandatory submission. There is also a requirement to detail services excluded from reference costs to aid reconciliation to final accounts and to inform future plans for inclusion.

CHAPTER 2 – PRINCIPLES AND KEY CONCEPTS

2.1 Principles

- 2.1.1 The costing of all services delivered by NHS providers should be governed by the following principles, 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.

The costing process should also be transparent with a clear audit trail.

- 2.1.2 It is acknowledged that configurations of cost centres differ across NHS providers. To address this apparent tension, NHS providers should identify cost centres which best reflect their service delivery for internal management purposes. These cost centres should however be able to clearly map to the treatment function/programme/service definitions required in the current Reference Cost Collection guidance.

2.2 Key Concepts

2.2.1 *Direct, Indirect and Overhead Costs*

- 2.2.1.1 Direct costs are those which can be directly attributed to the particular cost centre or patient. For example, the cost of drugs incurred by a doctor or paediatrics may be directly attributed by the pharmacy system. Hence, drugs could be a direct cost of paediatrics.
- 2.2.1.2 Indirect costs are those costs which cannot be directly allocated to a particular cost centre but can usually be shared over a number of them. Indirect costs need to be allocated to the relevant cost centres. 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.
- 2.2.1.3 Overhead costs are the costs of support services that contribute to the effective running of a health care provider. Overhead costs may include the costs of business planning, personnel, finance and the general maintenance of grounds and buildings. 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.

2.2.2 *Minimum Standard Categorisation of Costs*

2.2.2.1 To ensure consistency a minimum standard categorisation of costs has been established for the NHS. This is included at Appendix 1 and analyses costs between direct, indirect and overheads. These are **minimum** standards and where information systems allow costs that are categorised in the Appendix as indirect to be allocated directly to treatment function, this should be done. In no circumstances should costs included in the Appendix 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.

2.2.3 ***Fixed, Semi – fixed and Variable costs***

2.2.3.1 Costs should be classed as either:

- fixed. Where they are not affected by in-year changes in activity. For example costs such as rent and rates.
- 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. For example costs such as nursing staff.
- variable. Where costs vary directly with changes in activity. For example costs such as drugs.

2.2.3.2 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. It should be noted that there is an increasing level of audit interest.

2.3 **General Approach**

2.3.1 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 classification found in the current reference costs guidance.
- b. a continuous reconciliation process at all stages of the costing process is required to ensure all costs are recovered, and that costs can be matched to relevant services and final accounts.
- c. a “resource profile” analysis of the key conditions which represent a minimum of 80% of the high level control total in both activity and cost terms . Specific reference should be made to clinicians’ and nurses’ knowledge of the:

- conditions they treat

- frequency with which they are performed
- resources used to perform them.

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

- 2.3.2 Although the minimum requirement is for 80% of the high level control total in both activity and cost terms, this does not preclude organisations costing 100% of activity and costs in this way, if they so wish.

This Costing Manual should be used to produce retrospective baseline cost information that is used for Health Improvement Programmes, Service and Financial Frameworks and NHS service agreements, and in each of these situations, assumptions will need to be made about changes in activity and cost. These assumptions 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.

- 2.3.4 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.

- 2.3.5 No meaningful cost and activity information will be produced if this is undertaken as a pure financial exercise. This 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.

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SECTION 2

APPLICATION OF COSTING PRINCIPLES AND KEY CONCEPTS

CHAPTER 3 – THE APPLICATION OF NHS COSTING PRINCIPLES AND KEY CONCEPTS

3.1 Overview

- 3.1.1 This chapter explains how the general principles and key concepts should be applied in order to move from Level 1 to Level 4 of NHS costing. A flow chart showing the process can be found on page 21 of this Manual. For organisations who have implemented Patient Level Costing these principles still apply although “Direct Costs” can be read to mean directly attributed to the particular cost centre or to the patient.
- 3.1.2 The total quantum of cost in accounting terms is the full cost of the provision of all services. This includes staff, non-pay and the costs associated with capital [both interest and principal]. The total quantum will be the same as the costs shown in the final accounts.
- 3.1.3 Not all services are currently included in Reference Costs, although the level of services excluded has reduced each year. This total quantum therefore needs to be split between the services that are included and those that are excluded. Examples of services currently excluded are screening services and Learning Disabilities Services. A full list of these services can be found in the current year’s costing guidance. Trusts have to provide cost / activity data for services identified in the ‘Excluded’ column of the expenditure analysis statement, with a detailed breakdown identifying such services in the “services excluded” analysis statement.
- 3.1.4 As a guide, the sum of multiplying the individual unit costs by the individual activity in all categories included for Reference Costs, will be equal to the quantum of costs included in Reference Costs, as shown on the Reconciliation Statement.

LEVEL 1 – Establish Control Totals for Costing

3.2 General Ledger Reconciliation

- 3.2.1 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.
- 3.2.2 Where there are provider/provider agreements for support or treatment services, the costs and associated income should be treated as follows:-

For support services (in line with the principles outlined in Chapter 2):

- the **providing** NHS organisation should record **both** expenditure and income and these should be **matched** in line with the costing principles;
- the **receiving** NHS organisation should include the service costs in their total quantum of costs, and these costs should be treated for service costing purposes, as though the service had been provided internally and should therefore be allocated and apportioned if necessary on a consistent basis.

For treatment services:

- the **receiving** NHS organisation should record **both** the costs and activity. Such costs should be added to the cost of the Finished Consultant Episode/Spell/attendance/client if necessary;
- the **providing** NHS organisation should match the income and expenditure as with support services, but any resultant **activity (FCEs/ Spells/attendances etc) should be excluded** and reconciled through the appropriate statement detailed in Chapter 9. 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.

3.2.3 For costing purposes only the net cost/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 such as SIFT, NMET etc) 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 – Production of High Level Control Totals

3.3 Attribute Costs to Specialties/Services/Programmes/Patients

- 3.3.1 Costs should first be analysed between direct, indirect and overhead using the minimum standard analysis given in Appendix 1. Normally costs will need assigning to a general ledger account code comprising a mixture of direct, indirect and overhead costs.
- 3.3.2 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.
- 3.3.3 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 treatment function/service/programme to which they relate.
- 3.3.4 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 pooling brings together costs into identifiable groups e.g. wards, and allows 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 Appendix 2. In order to ensure consistency, no other measures should be used, in place of those specified.

3.4 Identification of Costing Pools

3.4.1 Where costs have not been directly attributed to the Patient, costing pools should be constructed so that the costs included can be allocated or apportioned using the same method. In constructing costing pools for some costs a specific approach is mandatory e.g. admission wards. Details of the approach to be taken for these costs can be found in Chapter 4. Costing pools can be constructed in different ways dependent on the nature of the costs included in them.

3.4.2 *Fixed and Semi-fixed Costing Pools*

Costing pools can be identified as fixed, semi-fixed and variable. The main fixed and semi-fixed costing pools are likely to be:

<u>Costing Pools</u>	<u>Basis of Apportionment</u>
wards	bed days
theatres	theatre hours/sessions
outpatients	attendances
diagnostics	weighted tests.

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

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 i.e. bed-days, theatre-hours or attendances. The units are obtained from the high level activity control totals.

3.4.3 *Variable Costing Pools*

The main variable costing pools are likely to be:

condition based

- wards	direct to condition
- theatres	direct to condition
- pharmacy	direct to condition
- diagnostics	direct to condition
- specialist nursing time	direct to condition

direct or condition-based. 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.

time based:

	<u>Basis of Apportionment</u>
- wards	bed days
- theatres	theatre hours/sessions
- outpatients	attendances

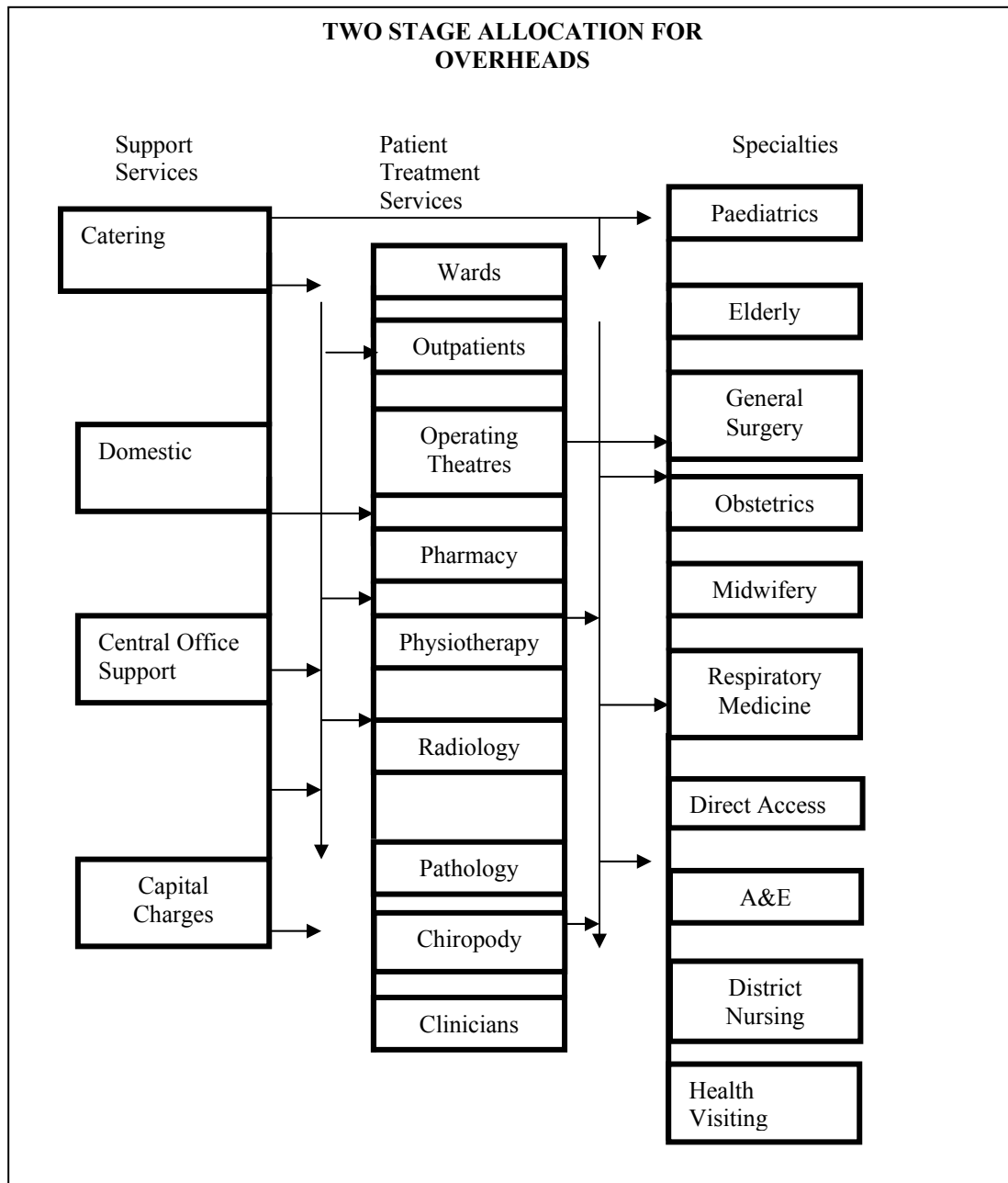
indirect or time-based. These relate to the time spent on ward, in theatre, in outpatients or with a client. These costs include catering provisions and linen where the quantity used depends on the time spent, for example, on a ward and is not dependent on the condition. The pooling of costs allows the 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 i.e. the appropriate control total activity level. For example, if ward time-based costs total £180,000 and the expected occupied time is 1,000 bed-days then the unit cost is £180 per bed-day.

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

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

- 3.4.4 Figure 1 shows the way in which cost centres are allocated or apportioned to specialties/services/ programmes. In line with the general principles, where a suitable work measure is available, these should be attributed directly to the treatment function/service/ programme. Where this is not possible, for support services, costing pools and cost centres, a two stage allocation process will be needed.
- 3.4.5 This Manual mandates a more standardised approach to methods of apportionment. These may be improved upon locally depending on local circumstances, but the key principle is relevance to the costs being apportioned. Full details are given in Appendix 2.
- 3.4.6 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/programme through the cost drivers. Direct access services will retain costs that will not be allocated to other areas e.g. pathology and these are reported separately.
- 3.4.7 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.
- 3.4.8 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.

Figure 1 – Apportionment Framework



3.5 Identification of Key Cost Drivers

3.5.1 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.

3.5.2 For inpatients for example:

<u>Driver</u>	<u>Costing Pool</u>
Length of Stay	Time Based Ward Costs (e.g. Catering, Laundry)
Admission	Condition Based Ward Costs (e.g. medical records)
Theatre Time	Time Based Theatre Costs
Number of Items Dispensed	Drugs (excluding high cost drugs where relevant)
High Cost Drugs	Actual Costs
Number of Diagnostic Tests	Radiology/Pathology (excluding tests)
High Cost Tests	Actual Costs
Number of Therapy Sessions	Physiotherapy/Occupational Therapy/Speech and Language Therapy

3.5.3 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.

3.5.4 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/programmes.

LEVEL 3 – Establish Control Totals at Point of Delivery

3.6 Disaggregation of High- Level Control Totals

3.6.1 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 e.g. day cases, outpatients, direct access. This may involve some further disaggregation of costs e.g. 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, 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 costing pools at Level 2. This stage is now mandatory for all services .

3.6.2 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:

- Costs which will be allocated to condition on the basis of:
 - * bed days for ward based costs
 - * theatre hours/sessions for theatre – based costs
 - * outpatient attendances for outpatient costs
 - * number of visits for direct access

- * number of clients for community nursing services
- Costs which are specific to a condition, such as drugs, dressings, surgical implants.

3.6.3 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.

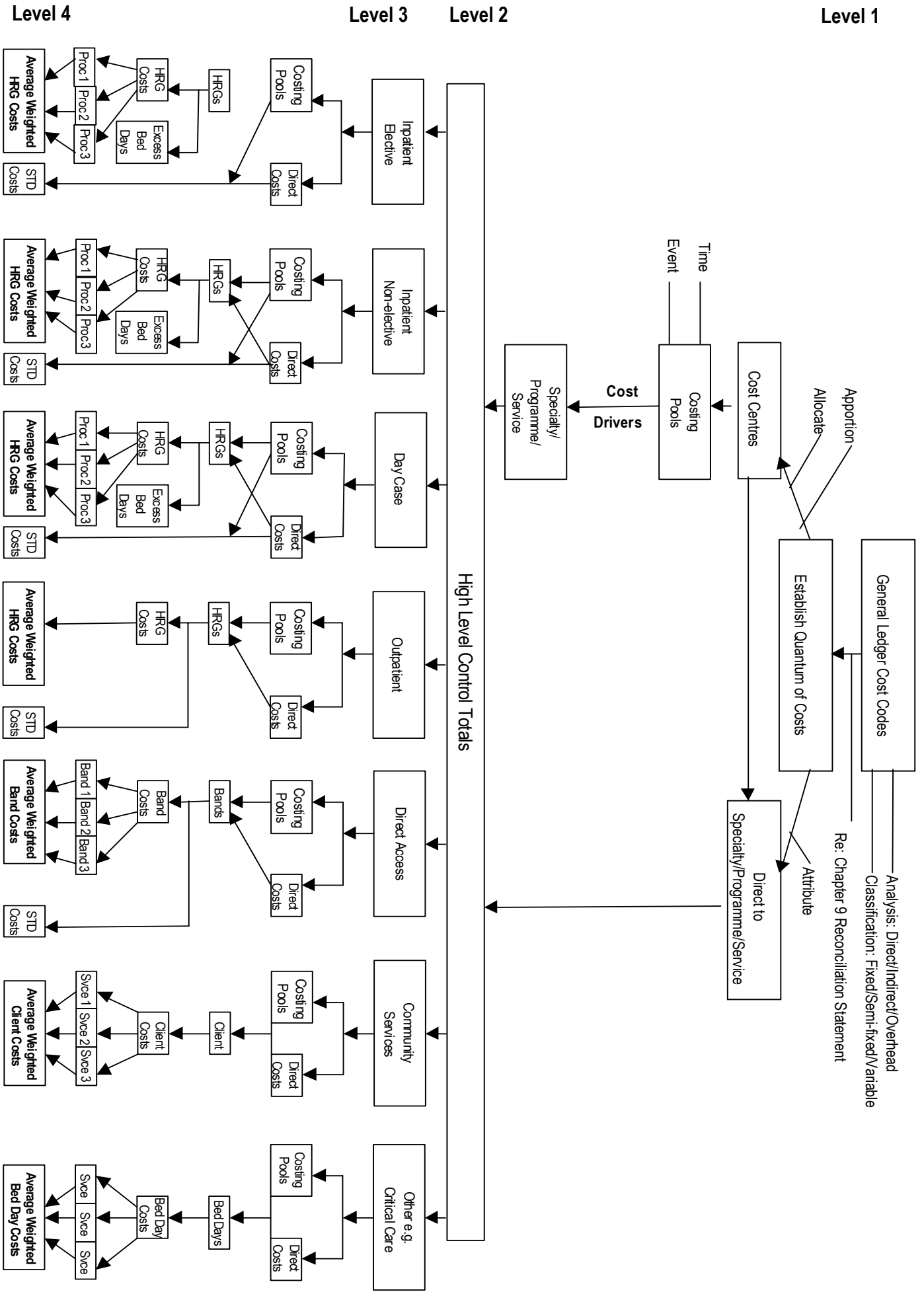
3.7 Identifying Relevant Activity Data

3.7.1 Care should be taken that the data are accurate. Inaccurate coding can seriously distort the resultant cost and activity data which has a knock on effect on evaluating overall performance. Much greater attention is being given to the quality of data, not least through the Data Accreditation Programme. Relevant activity data may come from a variety of sources such as:

Patient Records	Nursing Hand Held Records
General Ledger	Pharmacy Records
Theatre Records	Patient Administration System
Medical Records	Pathology & Radiology Systems
Oncology Records	Radiotherapy Systems

3.7.2 Activity data should be analysed across the points of delivery identified in section 3.5. In doing this, NHS providers should conform with the standard definitions of inpatient, day case etc. as detailed in this Manual and within the relevant Data Set Change Notices. In most cases these are consistent with the data dictionary. At the end of the process all those involved should have a clear understanding of the various sources of data and the quality of that data.

3.7.3 After following these two 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. Many services go beyond this, and providers of health services should ensure that they are fully aware of all the requirements for individual services.**



3.8 Capital Charges

- 3.8.1 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.

3.9 Road Traffic Accidents

- 3.9.1 Patients treated as a result of a **Road Traffic Accident** have been included in the past, with the income received from insurance recoveries being classified as Category C income for final accounts purposes, and so netted off from the costs incurred. With the change in the funding of these patients (central government agency), this income is now classified as Category A – Patient related income from PCTs. The activity and costs associated with the treatment of these patients should still be included in reference costs.
- 3.9.2 Road Traffic Accident (RTA) income is a reimbursement via a central government agency. It should therefore be treated in the same way as any other block contract (Category A) income, i.e. no adjustment should be made to costs for reference costs and no activity adjustment is required.

3.10 Provisions

- 3.10.1 All provisions should be treated consistently. The changes in provisions i.e. the costs and income that are reflected in the Income and Expenditure account that forms part of the Final Accounts need to be taken into account for reference cost purposes. This therefore becomes included as part of the Reference Costs quantum in any given year.
- 3.10.2 Where Trusts have made an increase / decrease in their provisions, this cost / income is part of the quantum of costs / expenditure for a given year. This is the basis of Reference Costs and should be included in the Reference Costs Submission. The inclusion of such expenditure would have an overall increase in the total quantum of costs [see below], 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.
An example of such provisions might be Clinical Negligence, or Bad Debt.

3.11 Category C Income

- 3.11.1 The categorisation of income in the Reference Costs Submission is very important. For this reason, further guidance has been issued detailing the income streams that are allowable as Category C income for Reference Cost purposes. This guidance is provided in the 2006/07 Reference Cost collection guidance and in subsequent Reference Cost documentations.

CHAPTER 4 – COSTING INPATIENT AND DAY CASE ACTIVITY (INCLUDING WARD ATTENDERS)

LEVEL 4 – Identification and Costing of Resource Profiles/ Client Groups

4.1 Introduction

- 4.1.1 Many services are now defined and costed at Level 4. The currency used to produce information at this level is relevant to the services involved. For some services, refinements to the analysis at this stage will continue as it is an iterative process.
- 4.1.2 The list of steps 1-5 relate to the provision of inpatient, day case and to a lesser degree outpatient services. More specific guidance on the costing of outpatients can be found in Chapter 6. The trend is for an increasing number of outpatient specialties to be costed at a more detailed level rather than by simple attendance. This recognises the move to undertake treatments and procedures in ambulatory rather than inpatient settings.
- 4.1.3 For the costing of community based services, more detail is given in Chapter 8.
- 4.1.4 Before undertaking further work and embarking on level 4 costing, it is recommended that all subsequent Chapters are read to ensure that all relevant services are costed and recorded at the relevant level using the appropriate currency.

4.2 Identification of Casemix Measure (for inpatients and day cases)

- 4.2.1 The purpose of this stage 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 within each point of delivery. HRGs are developed by clinical working groups from national data and are designed to group together episodes that are clinically coherent and consume similar amounts of resource.
- 4.2.2 NHS providers are required to select the HRGs that cover at least 80% of cost and activity at each point of delivery. Variations may result in the HRGs which are covered across those points of delivery. Nevertheless by adopting this approach, the HRGs which are selected and costed will better reflect a minimum of 80% of activity and cost rather than an aggregated approach for the treatment function which can be defined differently dependent on the organisational structure.
- 4.2.3 The focus of the costing method is on the relatively small number of HRGs which represent a high proportion of cost. These key HRGs will be identified by:
- running the HRG “grouper” (provided by the NHS Information Centre for Health and Social Care [NHS IC]) against providers’ actual activity data;
 - discussion with clinicians and nurse managers.

The HRG grouper will assign an HRG to each FCE/Spell.

4.3 Trimming and Truncation

- 4.3.1 For each HRG there are a small number of cases which have an abnormally high length of stay. If these episodes/Spells were excluded from the calculation of the HRG cost, the actual mean length of stay for that HRG would be skewed.
- 4.3.2 All episodes/Spells should have the relevant upper trimpoint applied. Instead of excluding outlier cases, **only the excess bed days beyond the upper trimpoint should be excluded**. This means that all episodes will be included and costed within the HRG including those which have been truncated. The excess bed days beyond the trimpoint should be costed separately and a cost per bed day reported. This eliminates outlier finished consultant episodes or patient spells and introduces a standard treatment for truncated episodes/spells and excess bed days. The cost and activity of the excess bed days should be reported separately within reference costs, and should be reported separately for elective and non-elective activity.
- 4.3.3 A spell is valid for inclusion if the discharge (last) FCE ends in the reporting period. All FCEs in that spell (irrespective of whether they took place in the reporting year) should be included. Where a spell continues into the next reporting period, all associated FCEs should be excluded.
- 4.3.4 Where organisations have not configured their systems to produce Spell level costs then the following algorithm can be used as temporary measure:

- 4.4.1 Having identified the HRGs, the key conditions/procedures within each HRG need to be determined. The next step, where costs have not already been calculated at a patient level, is to set up a clinical and resource profile for each of these.
- 4.4.2 A clinical profile involves detailed discussion with medical and nursing staff to assess what activities are undertaken and resources consumed each time a procedure or treatment of a condition takes place. In the first year of costing new services, this task may require considerable effort, but in subsequent years it may only need refining/updating. Organisations are encouraged to review clinical audit reviews, teaching tools for junior doctors, etc. which are already in existence, as the basis of a number of profiles may exist in other forms.
- 4.4.3 The resource profile for each key condition/procedure should include the activity units for each associated costing pool and the associated cost, as well as the variable items used in treating the condition.
- 4.4.4 This stage in the process can be extremely time consuming when services are being costed for the first time. Much of the work on this stage can be commenced in advance of final accounts information being made available from analysis of activity levels in previous years. All clinical and resource profiles should therefore be available prior to the production of the final costs so only minor adjustments will be needed when the final costs are being produced.
- 4.4.5 In establishing resource profiles, nurse managers/ward managers can readily provide relevant information. There are two areas where you should provide guidance during interviews to ensure that valid results are obtained. These areas are:
- **averaging.** For each condition, the aim is to derive an average usage for each variable item and there will be variations to this average which arise from, for example, differences between the severity of patients' conditions and differences between consultants' clinical practice. It may be necessary to determine the range of usage before arriving at an average. For example, the minimum data sets will give the lengths of stay for a sample of patients and these can be averaged. This does not imply that there is an "average patient".
 - **significance of costs.** The nurse managers/ward managers will be able to estimate the quantities of items consumed. Use the information to identify, for example, whether an item has a significant impact on costs and the quantities are important or whether an item is inexpensive. Some care is needed in dealing with high volume/low cost items and the effort should concentrate their use in relation to different conditions.
- 4.4.6 Condition based costs are evaluated from internally available data. For example, the unit cost of drugs will be available from Pharmacy. Other sources of cost data include Stores and Sterile Supplies Departments. Care is required with sterile supplies and other departments, so as not to use an internal charge which may include an allocation of fixed costs; either identify the true variable cost or make an approximation to it.

- 4.4.7 Time-based costs are evaluated by using an average unit cost for a bed-day, theatre hour/session, or outpatient attendance, derived from the appropriate costing “pool”.
- 4.4.8 Two examples of the resource profiles are shown overleaf to illustrate the above process.

Example 1 Please note – for illustration not updated for 06/07 Reference Costs & HRG4

TREATMENT FUNCTION:	GENERAL MEDICINE				
POINT OF DELIVERY:	INPATIENT NON ELECTIVE				
HRG:	A 22: NON-TRANSIENT STROKE OR CEREBROVASCULAR ACCIDENT< 70 W/O CC				
ICD CODE:	I634: CEREBRAL INFARCTION DUE TO EMBOLISM OF CEREBRAL ARTERIES				

COSTING POOL	POOL TYPE	MEASURE	UNITS	COST/ MEASURE	TOTAL COST
				£	£
WARD	TIME	BED DAYS	9.00	100	900
WARD	EVENT	ADMISSION	1.00	20	20
NURSING	TIME	BED DAYS	9.00	70	630
DIAGNOSTICS:-					
- MRI	EVENT	EVENT	1.00	170	170
- OTHER RADIOLOGY TESTS	EVENT	BANDED TESTS	2.00	20	40
- PATHOLOGY TESTS	EVENT	BANDED TESTS	10.00	6	60
THERAPIES:-					
- OCCUPATIONAL THERAPY	EVENT	SESSION	2.00	25	50
- SPEECH THERAPY	EVENT	SESSION	2.00	25	50
- PHYSIOTHERAPY	EVENT	SESSION	5.00	27	135
TOTAL COST					2,055

Example 2 Please note – for illustration not updated for 06/07 Reference Costs & HRG4

TREATMENT FUNCTION:	GENERAL SURGERY				
POINT OF DELIVERY:	INPATIENT NON ELECTIVE				
HRG:	F 82: APPENDECTOMY PROCEDURES< 70 W/O CC				
ICD CODE:	H018: EMERGENCY EXCISION OF APPENDIX OS				

COSTING POOL	POOL TYPE	MEASURE	UNITS	COST/ MEASURE	TOTAL COST
				£	£
MEDICAL STAFF	TIME	BED DAYS	3.00	100	300
WARD	TIME	BED DAYS	3.00	120	360
WARD	EVENT	ADMISSION	1.00	20	20
THEATRE	TIME	THEATRE TIME	0.75	600	450
THEATRE	EVENT	THEATRE TIME	1.00	60	60
TOTAL COST					1,190

4.5 Establishing Costed HRGs.

4.5.1 The data produced are now used to determine average HRG costs. By relating the costs to the specific activity for each condition/procedure, a weighted average HRG cost is derived, by multiplying the cost for each procedure/condition by the total number of episodes/spells for each condition/procedure. Any significant changes experienced will need to be recognised, as well as any changes in casemix resulting in a change in the range of relevant HRGs. This gives the total costs for each of the procedures/conditions costed, which are added together and divided by the total number of episodes/spells for the costed codes within the HRG. This calculation produces a weighted average HRG cost. This average cost is applied to all of the episodes/spells for the HRG within the point of delivery.

4.5.2 A check should be made at this point to ensure that at least 80% of the total costs and activity are being recovered. The additional cost associated with the excess bed days will need to be identified and this is covered below in costing the residue.

4.5.3 Two examples of the calculation of weighted HRG costs are shown below.

Example 1 Please note – for illustration not updated for 06/07 Reference Costs & HRG4

TREATMENT FUNCTION:		GENERAL MEDICINE INPATIENT NON ELECTIVE			
POINT OF DELIVERY:		A 22: NON-TRANSIENT STROKE OR CEREBROVASCULAR ACCIDENT < 70 W/O CC			
HRG:					
NO.	ICD CODE	DESCRIPTION	COST	EPISODES	TOTAL COST
			£		£
1	I634	CEREBRAL INFARCTION DUE TO EMBOLISM OF CEREBRAL ARTERY	2,055	40	82,200
2	I650	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY	1,748	20	34,960
3	I661	OCCLUSION AND STENOSIS OF ANTERIOR CEREBRAL ARTERY	2,147	10	21,470
4	I672	CEREBRAL ATHEROSCLEROSIS	2,239	10	22,390
				80	161,020
WEIGHTED AVERAGE COST [161,020/80] FOR HRG A 22 : NON-TRANSIENT STROKE OR CEREBROVASCULAR ACCIDENT < 70 W/O CC					<u>£2,013</u>

Example 2 Please note – for illustration not updated for 06/07 Reference Costs & HRG4

TREATMENT	GENERAL SURGERY				
FUNCTION:	INPATIENT NON ELECTIVE				
POINT OF DELIVERY:	F82: APPENDICECTOMY PROCEDURES< 70 W/O CC				
HRG:					

NO.	ICD CODE	DESCRIPTION	COST	EPISODES	TOTAL COST
			£		£
1	H018	EMERGENCY EXCISION OF APPENDIX 0S	1,190	60	71,400
2	H022	PLANNED DELAYED APPENDICECTOMY NEC	1,361	20	27,220
3	H038	OTHER OPERATIONS ON APPENDIX 0S	998	10	9,980
				90	108,600

WEIGHTED AVERAGE COST [108,600/90] FOR HRG F 82 : APPENDICECTOMY PROCEDURES < 70 W/O CC	<u>£1,207</u>
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4.6 Costing the Residue

4.6.1 Within each point of delivery, the residue will consist of two elements:

- a. the above average cost relating to the excess bed days;
- b. the uncosted residue relating to the low cost and low volume HRGs.

Prepared using the resource profiles, the costed HRGs should cover a minimum of 80% of each services' costs for treated patients. This process will lead to a residue of costs for each treatment function covering the less frequent procedures/diagnoses. These costs provide a "standard cost" for the remaining activity at HRG level. All costs should be attributed to a HRG even where a profile has not been produced. For reference costs purposes, standard costs are denoted by a flag ("S") in the reference costs collection.

4.6.2 While standard costs are accepted for this residual activity, it should be noted that increasingly, acute service providers are costing 100% of activity using profiles. In addition, if standard costs are used, these should be reviewed and weighted as necessary. Examples of standard costs reflect some of the low costs recorded at HRG level in the past. Organisations are expected to apply logic and local knowledge to these figures, e.g. the cost of treating a bunion would generally be expected to be lower than for an appendectomy, when both are in General Surgery, even though the cost for each procedure is submitted as a standard cost.

4.6.3 For Elective and Non-Elective Inpatients there will be three groups of cost analysis within each high level control total:

- HRG Based Costs - for truncated episodes/spells;
- Cost of Excess Bed days;
- Residual Cost - not profiled, but submitted at HRG level using standard costs.

4.6.4 For day cases there will be:

- HRG Based Costs;
- Residual Cost - not profiled, but submitted at HRG level using standard costs.

4.6.5 The cost per day, for the excess bed days, should include only the costs associated with the time based ward costing pool, and any associated variable costs. This is primarily hotel and nursing costs and drugs, dressings, etc. It is not expected to include expensive costs except in very exceptional circumstances. This cost per day is multiplied by the number of excess bed days to give the total cost associated with the excess bed days.

4.6.6 Once the total cost associated with the excess bed days has been established, the total cost of the uncosted activity (U codes) can be identified. As a minimum requirement this should be divided by the number of uncosted episodes/spells to produce a simple average cost per residual episode/spell. This may be refined if data is available locally. These FCEs/Spells need to be attributed to the relevant HRG even where these HRGs have not been resource profiled. This will limit distortions to overall efficiency calculations.

4.6.7 Once these steps have been completed, the production of resource profiles and the residual unprofiled activity will have been costed. As a final check, a comparison with the previous level control totals should ensure that all relevant costs have been included in the process.

4.7 Selection of HRGs

4.7.1 Previously HRGs were selected at treatment function level, which resulted in some HRGs being costed for some admission types which were relatively small. By selecting the HRGs covering at least 80% at each **point of delivery, within each treatment function**, this may result in variations in the HRGs which are covered in each point of delivery. Nevertheless by adopting this approach, the HRGs which are selected and costed will **better reflect the minimum level of costs and activity** rather than an aggregated approach for the treatment function which can be defined differently dependent on the organisational structure.

4.7.2 Organisations that are costing at a spell level rather than a FCE level will be able to select the HRGs based solely on the point of delivery and so will avoid having this variation across specialities.

4.8 Truncating / Trimming of Activity

4.8.1 The production of the first National Schedule of Reference Costs showed the variability in the application of the upper national trimpoints. The application of these trimpoints continues to remain **Mandatory**. The production of excess bed day information, for 2006/07 at both an FCE and Spell level, is of importance to NHS providers and their commissioners.

- 4.8.2 The cost of an excess bed day can be profiled and subsequently produced by HRG (if this is particularly high) or using a standard cost. **However, these costs and activity must be reported by individual HRG, within that treatment function, or at organisation wide level (999) if this is the provider's approach to costing.**
- 4.8.3 Given that the cost of an excess bed day may vary with the patient type, i.e. for a planned (elective) or emergency (non-elective) admission, the number and costs of excess bed days are reported separately for elective and non-elective excess bed days.
- 4.8.4 **Unclassified data (U code HRGs)¹** by definition, have a trim point of zero. **All** bed days relating to unclassified data should therefore **be reported as excess bed days** and costed accordingly, and the activity adjusted for within the activity reconciliation statement. It should be noted that the costs and activity relating to U codes are **excluded from the Index calculations**. Currently, the national tariff value attributed to U codes is zero. This move should encourage an evaluation of this activity to minimise this recording.

4.9 Costing the Residue

- 4.9.1 Excess bed days need to be calculated, as a minimum, on the basis of the total cost of these excess bed days divided by the number of excess bed days. These costs should include primarily low intensity nursing, drugs, dressing and hotel costs except in exceptional circumstances.
- 4.9.2 Activity which has not been resource profiled, should be attributed, as a minimum an average treatment function cost. These FCEs/Spells should then be attributed to an HRG and these costs should be reported under the respective HRG.

4.10 Alternative Service Delivery

- 4.10.1 Following moves towards regulation of a range of therapists, it seems appropriate to clarify the costing guidance in this area. Where therapists and practitioners such as chiropractors, acupuncturists, etc. form part of a team providing a range of services, for example, in orthopaedics, pain management, etc., their costs and associated activity, (as well as related oncosts) should be included in the respective cost pool. This approach is consistent with the principles of full absorption costing and matching costs to the services that generate them.
- 4.10.2 Where services provided by these practitioners are discrete services / clinics, e.g. aromatherapy massage, acupuncture, these services are still excluded.

4.11 Admission / Pre-Admission Wards, Assessment Units, Observation Wards

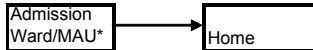
¹ See NHS IC guidance as to why activity groups to the U code HRG

4.11.1 Different approaches to the recording and costing of time spent in admission wards / medical assessment units distorts unit cost information and makes comparison difficult. Therefore a different approach for such wards has been adopted since 2003. However, it is important to note that this approach applies to all such wards irrespective of whether they form part of the Accident and Emergency Department. For costing purposes, the costs of admission wards should be treated as if it was its own service/ward in its own right, with its own FCEs (even if needed to be artificially created) and allocated to the relevant HRG

4.11.2 The figure below highlights this requirement diagrammatically

Example 1

FCE 1



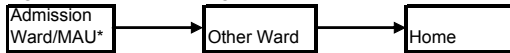
Treatment for costing purposes:

Include and Cost FCE 1 as V code

Where to report in 2006-07 Reference Costs collection files? - Non Elective Workbook, Not Leading to Admitted (NLTA) sheet.

Example 2

FCE 1



Treatment for costing Purposes:

Include FCE 1 and cost as V code. Cost FCE 2 separately

Where to report in 2006-07 Reference Costs collection files? - FCE 1: Non Elective Workbook, Leading to Admitted (LTA) sheet.

FCE 2: Non-Elective, under relevant TFC

Example 3

FCE 1



Treatment for costing Purposes:

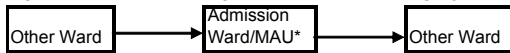
Include FCE's 1 and 2 and cost separately as V codes. Cost FCE 3 & FCE 4 separately

Where to report in 2006-07 Reference Costs collection files? - FCE 1&2: Non Elective Workbook, Leading to Admitted (LTA) sheet.

FCE 3&4: Non-Elective, under relevant TFC

Example 4

FCE 1



Treatment for costing Purposes:

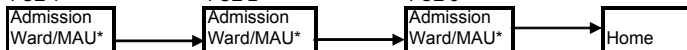
Count and Cost each FCE separately. Report FCE 2 as V code

Where to report in 2006-07 Reference Costs collection files? - FCE 2: Non Elective Workbook, Leading to Admitted (LTA) sheet.

FCE 1&3: Non-Elective, under relevant TFC

Example 5

FCE 1



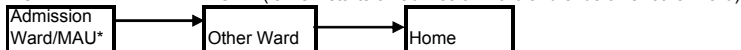
Treatment for costing Purposes:

Cost Each admission ward episode separately, costed as V code activity

Where to report in 2006-07 Reference Costs collection files? - FCE 1,2&3: Non Elective Workbook, Not Leading to Admitted (NLTA) sheet.

Example 6

FCE 1



Treatment for costing Purposes:

Count Observation Ward Activity as a V prefix FCE (artificially create an FCE) and report separate costs of the observation wards

Count and cost the 'other ward' FCE 1 to exclude any Observation Ward/MAU costs.

If you need to artificially produce an FCE, then you may wish to report V prefix activity against the eventual admitted HRG

Where to report in 2006-07 Reference Costs collection files?

FCE 1 (artificial, for reference costs only) : Non Elective Workbook, Leading to Admitted (LTA) sheet. FCE 1: Non-Elective Workbook, under relevant TFC

*Please note that the term "Observation wards/MAU" includes Admission, Pre-Admission and Assessment Units

4.12 Costing of Critical Care Services

- 4.12.1 The costs associated with critical care services are high and they only relate to a limited number of patients. Where these costs are included as an overhead on treatments and procedures they significantly distort costs and lead to wide variations.
- 4.12.2 To maintain consistency in approach therefore, the costs and associated activity for stays in critical care should be excluded from the composite cost and length of stay for the treatment and procedure (HRG). Any stay in critical care should be extracted from the overall length of stay prior to grouping activity. A separate cost per bed/cot day should then be produced.
- 4.12.3 Discrepancies can arise when counting occupied bed days for all types of Critical Care Services Activity. For reference costs purposes the counting of critical care services occupied bed days should follow the [Connecting for Health Data Dictionary definition](#) (i.e. Date of Discharge – Date of Admission + 1)
- 4.12.4 The reported cost per occupied bed day must fully reflect the costs incurred on average for an entire day, taking into account, where appropriate, the additional costs incurred where more than one patient occupies that bed during a single day, for example, additional laundry / linen costs, etc.
- 4.12.5 All types of Critical Care Services should be treated in this way. Costing methodologies need to at least support the national Reference Cost collection process, so for guidance on the full list of Critical Care categories that need to be treated this way and the units of currency that should be used please refer to the Reference Cost guidance.
- 4.12.6 Where a Critical Care unit comprises of more than one type of critical care, e.g. a combined ITU and HDU or a ward has a ring fenced Critical Care Bed, every effort should be made to distinguish between the costs and activity for each individual type. It is advised that in the absence of any other data, providers should use the pro rata number of beds within a combined critical care unit to report appropriate costs and bed day information between the different categories of critical care. Where specialist critical care beds are maintained, e.g. burns, neurosurgery, these should be reported separately in line with the definitions for specialist services. Where separate reporting is not possible or feasible, combined data should be submitted in the lower grade category (see 2006/07 reference costs paragraph 140) so as not to over-inflate available capacity. Thus, where a combined ITU and HDU exist, and individual service data cannot be identified and reported separately, all data should be submitted as HDU.
- 4.12.10 Many organisations have critical care outreach teams that operate outside the parameters of the discrete critical care unit. The costs of such teams should be included as an on-cost on the appropriate critical care unit, and any activity relating to these teams should be excluded. It is anticipated that in future years, as activity data capture for these outreach teams improves, the reference costs collection will require this information to be reported separately in both cost and activity terms.
- 4.12.11 Some organisations provide Adult, Neonatal and/or Paediatric Critical Care retrieval services. To support the 2006/07 Reference Costs collection

organisations that have a separately identifiable retrieval service should separately record their costs and activity.

4.13 Obstetrics & Other Maternity Services

- 4.13.1 For obstetrics, where a patient passes between consultants or into a GP bed as part of a single obstetrics episode/spell the whole costs should continue to be brought together and recorded as one FCE/spell for the relevant HRG. The activity recorded is the delivery episode/spell in the majority of cases. The number of episodes/spells should not be artificially inflated by the recording of well babies in order to reduce the unit costs. Where a baby is discharged at the same time as the mother, this is one delivery episode/spell for reference costs purposes.
- 4.13.2 Some babies who are unwell need additional care and treatment e.g. special care. This will generate activity in these areas and should be counted separately and recorded against the relevant services.
- 4.13.3 Delivery episodes/spells do not always happen in hospital, and midwives undertake home deliveries in some cases. As these deliveries result in relevant health service activity, they are costed and recorded. As they occur outside the hospital setting, recording them as inpatients or day cases is not appropriate. Details on the costing and reporting of these deliveries can be found in Chapter 9 on Community Based/Outreach Services.
- 4.13.4 The costs associated with epidurals used as routine pain relief for deliveries should not be treated as exceptional items. The costs of these should be included as part of the overall costs of deliveries and should not be treated any differently from other forms of pain relief treatments. Likewise, routine HIV/Aids tests are offered to mothers and these costs should be treated as an overhead on the cost of the relevant service usually through obstetrics outpatients/ante natal clinics.
- 4.13.5 Community deliveries should also be costed on an HRG basis. They should be costed and reported separately from hospital-based deliveries, however it has been recognised that deliveries only record one element of maternity care. Other elements of activity and cost information for other aspects of maternity care should also be costed at unit cost level. Chapter 6 of this NHS Costing Manual deals specifically with the costing of outpatients and highlights the standard treatment for DNA's etc.

4.14 Elderly Medicine

- 4.14.1 Elderly medicine is provided in a number of different ways by NHS providers. For many elderly patients, an acute period of care also leads to a period of rehabilitation care, occasionally followed by long term inpatient care. In some places the acute and rehabilitation components may be delivered within the treatment function of general/integrated medicine, in other places it is split between general medicine and geriatrics. This means that it is not possible to distinguish between acute, rehabilitation and long stay care, on the basis of treatment function alone.

- 4.14.2 For episodes discharged from the treatment function of geriatrics, **costing** should be undertaken **using HRGs for the period of care up to the acute treatment function trim point** for that HRG. How subsequent bed days should be costed and reported will vary, depending on the clinical reason for the stay past the trimpoint.
- 4.14.3 The excess bed days [those past the trimpoint] for patients in elderly medicine may have resulted from :
- i. Clinical factors meaning that the patient remains in hospital for a longer than expected length of time; or
 - ii. The patient having a period of rehabilitation at the end of their hospital stay, prior to discharge.
- 4.14.4 Excess bed days in elderly medicine that have resulted from medical complications, e.g. a diabetic patient requiring longer than average to heal after a hip replacement, should be costed and reported accordingly at excess bed day level.
- 4.14.5 Days in excess of an expected length of stay that relate to rehabilitation, e.g. prolonged physiotherapy after a hip replacement, prior to discharge, should be costed and reported on an occupied bed day basis, in line with the reporting requirements for Rehabilitation Services, detailed in Chapter 5 of this Manual. The treatment of intermediate / continuing care services for patients including those in elderly medicine may be found under section 5.1.4.

4.15 Patients with Haemophilia

- 4.15.1 Elective and non-elective inpatients, with the primary diagnosis for admission being haemophilia are shown separately from other general medicine patients [using treatment function code 309]. This allows the high costs associated with blood products to be identified to the relevant group of patients and will not distort the costs of other inpatients.
- 4.15.2 Where the primary diagnosis is for another medical problem e.g. appendectomy, there is no change in the grouping hierarchy, and activity and costs will still be associated with the dominant treatment or procedure, including the costs of associated clotting products. This is a valid reason for cost variations, although it may involve only a small number of patients in any given year.
- 4.15.3 Separate categories appear for outpatient services requiring information at first and follow up level. This allows the costs of blood and other clotting products to be directly attributed to these clinics and reduce distortions elsewhere. This separation will continue to ensure that the previous cross subsidisation associated with these services remains removed. These changes do not impact on the treatment of costs for inpatient and other services.

4.16 HIV / AIDS

- 4.16.1 Detailed costing of these services has been undertaken in the NHS as part of a review of funding in previous years. The introduction of a separate analysis of these services built on this work and required little additional work to be undertaken. Full details of the mandatory costing requirements, including those for reference costs are included below.
- 4.16.2 Where secondary related illnesses develop, this can lead to admission into hospital. As with any elective and non-elective admission, the episode/spell will be grouped on the primary diagnosis and reason for admission e.g. pneumonia, viral infection etc. There is no change in this approach for such services provided to patients with a secondary diagnosis of HIV/Aids.
- 4.16.3 The costs associated with outpatient services need to be separately identified as treatments with combination drug therapy for example, need to be directly attributed to these services to prevent distortions elsewhere. Separate categories within outpatients will continue to be used.
- 4.16.4 For reasons of patient confidentiality, information is required on a total attendance basis only.

4.17 Ward Attenders / Ward Attendances / Regular Admissions

- 4.17.1 It remains important to correctly identify and cost different types of ward attenders. From April 2005, this activity will be collected and recorded as outpatient activity, in line with the DSCN 32/2004.
- 4.17.2 The following definitions are taken from the NHS Data Dictionary, which can be found at <http://www.connectingforhealth.nhs.uk/datastandards/datadictionary>.

Ward Attenders / Ward Attendances

Defined as “are PATIENTS who come into a WARD to receive nursing care, but have not been admitted to hospital and do not stay in the WARD. They may need care because of diseases or injuries or other factors such as pregnancy that can affect their health. You need to record details about these PATIENTS since they use WARD resources, such as staff time and other facilities.”.

- 4.17.3 From a costing perspective and in line with the NHS Data Dictionary, for patients attending a ward for examination or treatment by a Doctor then this is to be treated as Outpatient activity (see section 6). To clarify, if the activity meets the Outpatient definition (and is pre-booked), then report on the relevant Outpatient worksheet. Whereas if the activity meets the outpatient definition and is not pre-booked then report the costs as an overhead and exclude the activity.
- 4.17.4 Attendances for specialist care such as Chemotherapy, Radiotherapy, and Renal Dialysis, etc. should also be costed as detailed in subsequent chapters. All costs for these services are reported together, irrespective of setting. The activity and costs of such care should NOT be reclassified as ward attenders.

- 4.17.5 For Reference Costs, a new section is included to identify the number of attendances and the unit cost per attendance.

Regular Day Admissions (also known erroneously as Regular Day Attendances)

- 4.17.6 *“A patient admitted electively during the day, as part of a planned series of regular admissions for an on-going regime of broadly similar treatment and who is discharged the same day. If the intention is not fulfilled, and one of these admissions should involve a stay of at least 24 hours, such an admission should be classified as an ordinary admission. The series of regular admissions ends when the patient no longer requires frequent admissions”.*
- 4.17.7 In activity terms, a series of regular admissions would not become a finished episode/spell until the series ends. From a costing perspective, this can consume a significant level of resources over an extended period.
- 4.17.8 This activity should be treated as day case for costing and reporting for central returns purposes. These patients are admitted with the intention of same-day discharge. As an on-going regime can extend over several months, the costing of regimes is inappropriate for central reporting purposes, although it may be appropriate for clinical and internal management requirements.
- 4.17.9 For central reporting through reference costs, the costing of these regular day admissions will be based on the number of admissions each year, and a cost per admission, casemix adjusted wherever possible.
- 4.17.10 Attendances for specialist care such as Radiotherapy, Renal Dialysis, Cystic Fibrosis, etc., should be reported through the specialist services element of the return, even where these services are delivered by regular day admissions. For specialised services, all costs and activity are reported together, regardless of the setting in which the care is delivered.

Regular Night Admission (also know erroneously as Regular Night Attendances)

- 4.17.11 *“A patient admitted electively for the night, as part of a planned series of regular admissions for an on-going regime of broadly similar treatment and who is discharged in the morning. If the intention is not fulfilled, and one of these admissions should involve a stay of at least 24 hours, such an admission should be classified as an ordinary admission. The series of regular admissions ends when the patient no longer requires frequent admissions”.*
- 4.17.12 For central reporting and costing, the approach is identical to that outlined for regular day admissions [*paragraphs 4.17.6 – 4.17.10 refer*].

4.18 Regular Attendances at [Day Care Facilities](#)

4.18.1 A range of services are provided through NHS Day Care Facilities. In costing these services, the following definition of day care facilities, taken from the NHS Data Dictionary, should be used:

“A DAY CARE FACILITY provided for the clinical treatment, assessment and maintenance of function of PATIENTS, in particular, though not exclusively, those who are elderly, mentally ill or have learning difficulties. They may be called Day Hospitals, Centres, Facilities or Units.

DAY CARE FACILITIES may be financed, planned and run solely by NHS organisations or solely by non-NHS organisations or jointly between NHS and non-NHS organisations. Jointly run facilities should still be managed by only one ORGANISATION.

The facilities specifically do not have hospital beds and function separately from any ward.”

4.18.2 The number of attendances per patient will vary due to the different nature of the patient's condition. Generally the number of places each day is fixed e.g. 20 patients each day and over 5 days this gives 100 patient days.

4.18.3 The recording and costing of services has been inconsistent in the past and the need for more consistency and greater prescription is recognised. The costing approach should be adopted for all day care facilities, and not just those which form part of the reference costs return.

4.18.4 Discussions with the NHS have revealed that the degree of detail within routine recording and data collection for these types of facilities varies enormously. The definitions and recording of patient days are more consistent, however, and comply with NHS Connecting for Health [NHS CfH] standards

4.18.5 For unit costing, therefore, the activity requirement is cost per patient day. In preparing total and unit costs, NHS organisations should adopt the costing principles and concepts detailed in this Manual. Resulting figures and cost information should be robust and withstand audit scrutiny.

4.18.6 Note that any additional costs that are incurred when an inpatient concurrently attends a day care facility (and where their bed is not filled, but is retained for their later use) should be removed from the total cost of the day care facility and be reported as part of the composite cost of that inpatient care. No day care facility activity should be counted for such patients.

4.19 Inpatients with a Zero Length of Stay

4.19.1 There may be occasions when inpatients are recorded as having a zero length of stay in bed day terms. Often this occurs when patients are admitted as an inpatient but are discharged within the same day.

4.19.2 When this occurs, the formula that must be used for reference cost purposes is : -
“date of admission less date of discharge + 1”.

This therefore means that no inpatient Finished Consultant Episode (FCE) or Spell will have a length of stay of less than one day. Day case data is not affected by this requirement.

CHAPTER 5 - COSTING SPECIALIST SERVICES (INCLUDING REHABILITATION SERVICES)

5.1 Background

5.1.1 Work is ongoing to define the range and scope of specialist services and as these definitions emerge, they will be assessed and costing requirements adjusted if necessary to ensure consistency where possible. It is the aim to ensure reference costs and commissioning requirements are consistent wherever possible, thus minimising the workload on NHS staff.

Rehabilitation Services

5.1.2 Some conditions require treatments and procedures to deal with acute elements of their care, but the medical care needs to continue over a longer period in order for patients to be rehabilitated. Rehabilitation does not start when an acute episode ends, but is part of the overall approach to care. When the need for acute surgery or other care is coming to an end, the emphasis of the care changes, even when patients have to stay in hospital.

5.1.3 A significant number of bed days are used in this type of care, and for this reason rehabilitation should continue to be separately identified. If discrete rehabilitation wards also include acute beds, where possible, the costs and activity relating to this acute, non-rehabilitation care should not be reported as rehabilitation, but should be reported using the appropriate HRG4 classification and treatment function. Where this is not feasible, it is acceptable to include all activity undertaken on rehabilitation wards as “Rehabilitation”.

5.1.4 Also if non discrete rehabilitation wards also include discrete rehabilitation beds then, where possible, the costs and activity relating to these beds should be reported as discrete rehabilitation.

5.1.5 Rehabilitation services continue to be separately reported in reference costs using occupied bed day basis as the activity currency. Occupied bed days are more relevant for these services in cost terms than completed episodes.

5.1.6 The separate identification of rehabilitation bed days for the reference cost collection describes:

- Patients who are admitted for rehabilitation,
- Patients who are treated on a discrete rehabilitation ward / unit, or
- Patients who are treated under treatment function code 314.

5.1.7 The rehabilitation category **should not** be used to describe:

- The cost of activity beyond an HRG trimpoint for any “acute” or non-specified HRG. This should still be reported as excess bed days.
- Routine, post-operative rehabilitation. The costs of this should be reported in the composite costs of the relevant HRG.

- 5.1.8 The types of patients that require rehabilitation vary considerably. These have been reflected in the new HRG4 categories – for more information on the Rehabilitation HRGs see the Reference Cost Guidance section “Services Separately Identified”. In previous collections, some patients such as those with spinal injuries were already separately identified elsewhere in the collection. Spinal Rehabilitation HRGs have now been developed.
- 5.1.9 For the purposes of Reference Costs, Rehabilitation Services are those provided to enable a patient to improve their health status, and involve the patient actively receiving medical attention. The costs and activity associated with “Intermediate” or “Continuing Care”, (effectively long-term care with little or no medical treatment), with no expected health/independence improvement **remain excluded** from rehabilitation services.
- 5.1.10 Rehabilitation Services for patients with Mental Health problems should be costed and reported as part of Mental Health Service inpatients, and not under rehabilitation services as defined here.

Renal Dialysis

- 5.1.11 The requirements for renal dialysis services were clarified in the 2003 review of specialist services and the release of the National Service Framework on Renal Services and are reflected in HRG4.
- 5.1.12 Dialysis sessions i.e. each session of dialysis treatment on a given day for each patient, continue to be used for reference costs purposes. A more detailed definition of a session can be found in the specialist commissioning guidance. To assist NHS providers in planning their work to provide this mandatory collection and return, the working definition of each session for each patient across the financial year can be used.
- 5.1.13 This approach is consistent with other high cost treatments such as radiotherapy and chemotherapy. In the same way, dialysis should be excluded from HRGs and the costs shown separately. It should be noted that this pattern will continue for all high cost treatments that can be delivered in a variety of settings.
- 5.1.14 Unlike some other high cost treatments, dialysis can be undertaken outside the hospital setting. Home dialysis should therefore be separately recorded.
- 5.1.15 For dialysis undertaken using the ‘hub and spoke’ configuration, the activity and costs should be recorded within the submission of the NHS provider with contractual responsibility for the delivery of the care
- 5.1.16 Section 5, Specialist Services, of the Reference Costs guidance details the HRGs that Renal Dialysis activity and costs need to be grouped by
- 5.1.17 In costing CAPD and APD, the cost of the bags (i.e. per session) is a major cost driver. Following feedback from NHS colleagues in 2005/06, it has come to light that these bags can differ in size, so the costs per session were not very comparable. For 2006/07, therefore, patient days should be used as the unit of

activity as a proxy for sessions. The cost of the fluids for exchange, plus the operating costs of the machine facilitating the exchange, should be included.

- 5.1.18 In a number of cases, drugs related to associated conditions are required e.g. anaemia. These drug costs should be treated as any other cost of treatment and attributed at the point of delivery or as in outpatients, the point of commitment, unless separately identified in 2006/07. Whilst in 2005/06 EPO memorandum information was recorded in statement Z it is now separately identified within the High Cost Drugs HRGs.

Bone Marrow Transplantation (BMT)

- 5.1.19 In working on the definitions of specialist services, it has become clear that there are cost variations between the different types of Bone Marrow transplantation and that these are masked within one grouping.
- 5.1.20 In a change for 2006/07, the new Bone Marrow Transplant HRG4 should now be used to report costs/activity. It should be noted that the age split (18/19) in HRG4 is different from previous years (16/17).
- 5.1.21 Post transplantation drugs, particularly anti-rejection drugs are a significant cost driver and these have a significant distorting effect on outpatient costs after a patient is discharged as an inpatient. In many cases these costs are treated as an overhead across a wider category of patients. To address the concerns of NHS commissioners and providers about the costs of these services, post transplantation outpatients are separately identified within the outpatient classification.
- 5.1.22 As for all transplantation services, the general principle for Reference Costs purposes is that the costs and activity relating to the recipient of a transplant are reported using the appropriate transplant HRG / service code category, whilst the cost and activity relating to a transplant donor are reported using the relevant HRG as appropriate (e.g. SA18Z Bone Marrow or Stem cell Harvest). This approach should ensure that all relevant activity is captured and reported.

Kidney (Renal) Transplantation

- 5.1.23 Kidney Transplants can be performed when donor organs are received from both live and deceased donors. The impact in cost terms when the replacement organ comes from a live donor can be significantly different. There is a need for after care costs for both the donor and recipient for example, and this has an impact on hospital resources.
- 5.1.24 To acknowledge these refinements, and to reflect the differences in the treatment of adults and children, the categories to be used for costing kidney transplants have been refined and now the new relevant HRG4 categories should be used. It should be noted that the age split (18/19) in HRG4 categories is different from previous years collections (16/17).

- 5.1.25 The cost of kidney transplants should include the costs incurred of matching to suitable donors. For live donors there is now a separate HRG for recording the cost and activity of the pre-transplantation work up i.e. LA11Z Kidney pre-transplantation work-up – live donor. For non-live donors the cost of kidney transplants should be included in the composite costs of the relevant recipient HRG4.
- 5.1.26 Post transplantation drugs, particularly anti-rejection drugs are a significant cost driver and these have a significant distorting effect on outpatient costs after a patient is discharged as an inpatient. In many cases these costs are treated as an overhead across a wider category of patients. To address the concerns of NHS commissioners and providers about the costs of these services, post transplantation outpatients are separately identified within the outpatient classification. This applies across all transplantation services and not just kidney transplantation.

Spinal Injuries

- 5.1.27 In the past, many aspects of these services have been included with orthopaedics. In line with the work on defining specialist commissioning for these services, where specialist spinal injury units exist, the specialist elements of this work should be costed and shown separately, in a way which better reflects the cost variation of specialist work.
- 5.1.28 Only eight units have been identified under the specialist commissioning work and **only these units will be allowed to submit details within this category**. These units are:-
- I. Royal National Orthopaedic Hospital (Stanmore), The Royal National Orthopaedic Hospital NHS Trust
 - II. The Duke of Cornwall Spinal Treatment Centre, Salisbury District Hospital, Salisbury Health Care NHS Trust
 - III. National Spinal Injuries Centre, Stoke Mandeville Hospital, Buckinghamshire Hospitals NHS Trust
 - IV. The Princess Royal Spinal Injuries Unit, Northern General Hospitals Division, Sheffield Teaching Hospitals Foundation NHS Trust
 - V. Pinderfields General Hospital, Mid Yorkshire Hospitals NHS Trust
 - VI. Regional Spinal Injuries Centre, Southport & Formby District General Hospital, Southport & Ormskirk Hospital NHS Trust
 - VII. North of England Regional Spinal Injuries Centre, Middlesbrough General Hospital, South Tees Acute Hospitals NHS Trust
 - VIII. The Midland Centre for Spinal Injuries, The Robert Jones & Agnes Hunt Orthopaedic Hospital NHS Trust.
- 5.1.29 When these patients undergo surgery, the hierarchy has grouped episodes with long lengths of stay to the minor surgical procedures, e.g. fitting of catheter. This has led to distortion. For spinal injury patients within the above units, patients should be recorded and costed on **an occupied bed day** basis as length of stay is a more powerful cost driver in these circumstances than the majority of surgical procedures.

- 5.1.30 Where surgery is undertaken, the costs of surgery should be costed and recovered through the occupied bed day cost, i.e. all costs associated with the surgery should be treated as an oncost on the inpatient stay. It should be noted that this costing treatment is in direct opposition to the treatment of all other forms of inpatient / day case care. Treating surgery as an oncost and reporting costs on an occupied bed day basis is only applicable to the specialist spinal injuries units in those organisations listed above in paragraph 5.1.27
- 5.1.31 Some teaching hospitals (outside the above-specified list) still have concerns about the spinal work they undertake and the appropriateness of some of the existing HRGs to accurately reflect this activity. For 2006/07, these NHS Trusts should use the new HRG4 and outpatient classifications. No organisation should exclude these services from their reference costs submission.
- 5.1.32 This approach is consistent with that adopted within the Specialist Commissioning Definition for Spinal Injuries. A separate costing category for spinal injuries for outpatients also exists.

Cystic Fibrosis

- 5.1.33 Cystic Fibrosis services were separately identified and costed for the first time in 2003. The development of separate cost information for these services has been facilitated by the production of national specialised services definitions for Cystic Fibrosis.
- 5.1.34 For consistency with other specialised services, the costs of these services outpatients should be split between adults and children. A change on last year is that children are defined as up to and including 18 year olds, whilst adults are 19 years old and beyond.
- 5.1.35 Cystic Fibrosis should be used where a patient is receiving treatment for their cystic Fibrosis condition, not where a patient with cystic fibrosis is receiving medical treatment for other, unrelated conditions. For reference cost purposes the cost and activity data for these services should not be reported using these HRGs, but rather, re-classified into the relevant Cystic Fibrosis patient category.
- 5.1.36 As with the costing of other NHS Services, the start point has to be a control total which is the full cost of cystic fibrosis services. This control total should fully comply with the NHS costing principles, primarily relating to full absorption costing and the matching principle.
- 5.1.37 This control total is vital for the accurate costing of these services. Although the classifications can be split between outpatient and inpatient settings, the categories are not mutually exclusive.
- 5.1.38 Within the specialist definitions, five bands of patients have been identified. The bands are derived primarily on severity of the condition. The bands are:-

Band 1

Patients, who come only to outpatients, receive outpatient care in terms of input from physiotherapist, doctors, social workers, dieticians, etc.

Band 2

Patients who receive the above and in addition receive outpatient intravenous antibiotics 3-4 times a year. They may be occasionally admitted. The input as an outpatient may be more intense.

Band 3

Similar to 1 and 2 but essentially intravenous antibiotics are received as an inpatient 3-4 times a year. They may also have diabetes, require feeding gastrostomies, and clearly have a higher input.

Band 4

These patients have severe disease, come into hospital 3-4 times a year for intravenous antibiotics, and have increasing disease severity. They may have diabetes and more resistant organisms. They may be under consideration for transplantation.

Band 5

These patients have usually been in band 4 for at least a year and need to stay in hospital for 4-6 months awaiting transplantation or palliative care. They are unable to go home because of oxygen dependence, nocturnal ventilation and feeding gastrostomies and need intravenous antibiotics every day, sometimes for 2-3 years. Patient's life expectancy is usually no more than a year to 18 months.

- 5.1.39 Bands 1 and 2 relate primarily to care delivered through outpatient settings. As with other outpatient services, they are counted and costed on a per attendance basis.
- 5.1.40 Band 2, 3 and 4 patients may have been inpatient episodes throughout the year and therefore these episodes need to be counted and costed as finished consultant episodes in each band.
- 5.1.41 Band 5 patients can spend an exceptionally long period of time in hospital and finished consultant episodes (as for spinal injuries) are not a true reflection of overall activity and resource intensity in a given year. For Band 5 inpatient care, therefore, the services should be reported and costed on an occupied bed day basis. The number of Band 5 patients that are treated as an inpatient during a given year will be shown as a Memorandum item within the return.

CHAPTER 6 - COSTING OUTPATIENT ATTENDANCES AND PROCEDURES

6.1 Background

- 6.1.1 There has been a growing move to better reflect the complexity of clinical work undertaken in a variety of settings over the last few years. The national costing guidance has sought to reflect this trend with costs being attributed to reflect the changing delivery and the casemix associated with activity.
- 6.1.2 In outpatients and other ambulatory settings, there has been a trend to undertake treatments and procedures that have, in previous years, been performed as inpatients or in day case settings.
- 6.1.3 With the development of HRG4 and its increased setting independence, HRG4 groupings are now applicable to outpatients so there are now consultation only attendances and procedural attendances within outpatients.

6.2 Scope of Outpatient Costing

- 6.2.1 All outpatient attendances (on first and follow up basis and by staff group that lead the service) and procedures (using HRG4) have to be costed and reported through reference costs regardless of whether they are consultant led or not..
- 6.2.2 Please note that for reference costs it is outpatient attendances that have a pre-booked appointment that are to be separately identified and costed.
- 6.2.3 Outpatients that are not pre-booked should also be separately identified and costed but this is more to aid the understanding of organisations costs than to support the reference cost collection. For reference cost purposes the costs are to be treated as an outpatient overhead.
- 6.2.4 Private work by consultants is **excluded**. Clinics provided by NHS providers in the community or in GP surgeries should be included where these form part of a service agreement for NHS patients and where the income flows to the responsible NHS provider.
- 6.2.5 Not all tests etc. are delivered at the same time as they are requested due to the differing practices within NHS providers. To achieve consistency in costing terms, tests, drugs etc. should be included at the **point of request/commitment** by the clinic staff and not when they may be delivered. Further details on this are included in the subsequent sections of this chapter.
- 6.2.6 All outpatient clinics are included in Reference Costs. In some instances, the categories used go beyond treatment function level. Activity and costs are required at first and follow up attendance level, where not casemix adjusted.
- 6.2.7 Please note that both face to face and non-face to face activity is only valid if it directly entails contact with the patient or with a proxy for the patient, such as the parent of a young child. A non face-to-face contact should replace the need for an

outpatient face-to-face attendance. Telephone contacts solely to inform patients of results are excluded. Contacts about the patient, either face to face or non-face to face, cannot be counted as valid activity in any service reported in Reference Costs (however, see below for exception).

- 6.2.8 There is only one exception to this rule and this is for “370MT Oncology Multi-professional Teams meeting about Patient”. This group has been included as a trial in order to verify if these costs are material. For reference costs the cost per meeting should be recorded, not the cost per team member.

6.3 Attendance Based

- 6.3.1 All outpatient attendances are costed at an individual attendance level. This includes those attendances which include a procedure, which are separately reported. They are linked to the outpatient event itself and any additional treatment and procedure undertaken is recorded separately. It is acknowledged that linking outpatients into an overall episode of care is a future aim, but at this stage, costs are attached to individual attendances as a first step.

- 6.3.2 Where procedures are reported, there is no requirement to differentiate between first and follow up attendances.

- 6.3.3 Treatments and procedures undertaken within outpatients should be included in Reference Costs returns.

6.4 Approach to Outpatient Activity Collection for the Reference Costs Collection

- 6.4.1 A revised definition for outpatient clinics has been used since 2001. It moved away from ‘consultant-led’ clinics as being the sole basis for the collection of data. The concerns which led to this change centred on the view that ‘consultant-led’ is very restrictive and no longer truly reflects the more flexible delivery of services and ignores a range of activities provided to patients. The change in classification to ‘**consultant-responsible**’ clinics has been well received as it allows activities performed by nurses and other healthcare professionals to be included.

- 6.4.2 [Outpatient clinics](#) therefore relate to those clinics with pre-booked [appointments](#) for which a consultant is clinically responsible whether they are present at the clinic or not. All consultant responsible clinics are included in the exercise where the activity, costs and income are counted against the service agreement with the NHS provider. This includes clinics held in a variety of locations and not just those held within main hospital sites and GP practice premises. Where a clinician or nurse holds outpatient clinics whilst acting in a private capacity, these are not recorded against the NHS organisation’s activity and cost base and therefore are excluded from the exercise from a provider perspective. The same ‘rules’ apply to outpatient clinics held by a clinician or other primary care practitioner as part of the plus element of a PMS contract.

- 6.4.3 As procedures being undertaken in outpatients are now acknowledged, there is no longer any need to re-record outpatient procedures as day cases to gain an

advantage in efficiency terms. NHS organisations that have been recoding activity in this way can therefore reduce their workload in this area, and release resources to record procedures in the locations relevant to delivery.

- 6.4.4 For costing outpatient activity at treatment function, sub-treatment function or service level, the costs of investigations, tests, drugs or other care that are not unbundled, should be included at the point of commitment, up to the point where the patient accesses another service that is separately reported in reference costs.
- 6.4.5 For example, in some organisations all tests etc. are provided as part of a first outpatient attendance (in effect a one-stop service). In other organisations, patients return for blood tests etc. at their convenience or on an appointment basis, prior to a follow up outpatient appointment. In both circumstances, the costs of all tests and supplementary care should be reported as part of the first outpatient attendance only, as they are generally completed prior to a subsequent (follow up) outpatient attendance.
- 6.4.6 Some patients attend radiotherapy clinics, and do not have any form of radiotherapy treatment covered by the radiotherapy HRGs. These are therefore outpatient appointments that can be classified as consultant-responsible in line with current definitions. Where a radiotherapy treatment is undertaken (regardless of setting), the radiotherapy costs still fall into the relevant radiotherapy HRG category. Where no treatment occurs, a separate category within outpatients has been included. These attendances to see a relevant clinical professional are therefore included at first and follow up level.
- 6.4.7 A separate category for spinal injuries outpatients also features in the outpatient analysis. This should be used by the designated specialist units detailed in paragraph 5.1.27 **only**.
- 6.4.8 For the full list of categories used to record outpatient refer to the current reference cost guidance and collection files.

6.5 Costing Approach

- 6.5.1 The costing approach used for the costing of outpatients is consistent with that Used for inpatients and day cases.



- 6.5.2 The costs will fall into three categories:

- time based costs e.g. staff time
- standard costs e.g. blood tests
- event based costs e.g. equipment costs

Each of these categories is discussed in detail below.

6.6 Time Based Costs

6.6.1 For outpatients, this will relate primarily to staff time. The options available for the allocation of staff time are:

- patient related time; or
- total time

6.6.2 Total time would allow the identification of all staff time, including the time that was allocated to patients that failed to attend for their outpatient appointment (DNAs). Many NHS providers have already adopted a policy of 'overbooking' outpatient clinics to allow for DNAs and to ensure that the productive time in outpatients is maximised.

6.6.3 Whilst the level of DNAs is a significant managerial issue in some areas, for the purposes of reference costs, staff time and the costs associated with **DNAs**, should be **treated as an overhead** on patient related time. (For the treatment of DNAs in mental health, please see Chapter 9 on Costing Mental Health Services).

6.6.4 Staff costs should therefore be allocated on the basis of patient related time analysis. This will provide a consistent basis for costing of this element of outpatient costs.

6.6.5 It is acknowledged that detailed time analysis of the proportion of staff time spent on outpatient procedure related activities will not be readily available at this level. Where no duration is available, medical input will be required. Clinical and nursing estimates of the varying levels of input by staff should be used to support the development of relevant resource profiles for outpatient procedures. These estimates should be consistent with the accounting principle of prudence and the standard practice for the allocation and apportionment of overheads detailed in Appendix 2 of the Costing Manual.

6.7 Attributing Standard Costs

6.7.1 This section covers other direct costs which can be attributed to resource profiles on the basis of standard costs. This is linked with the allocation of relevant costs at the time they are committed rather than the time they may actually be delivered. This is due to the different methods of delivery used by NHS providers. Some operate a 'one stop' system where all tests are carried out within the clinic itself whilst others set appointments for patients to return at a later point to access the various tests requested.

6.7.2 The costs, where not unbundled, which should be allocated to resource profiles in this way include:

- pathology costs
- equipment costs (where these can be directly attributed to the individual profile of care)
- other care (including any therapy-based care required as part of the attendance).

6.7.3 Standard costs for specialist equipment and these services are already produced for use as part of internal charging systems within NHS providers and are now to be applied to attendance based costing for outpatient clinics.

6.8 Event Based Costs

6.8.1 It is not appropriate to allocate some costs directly to specific groupings as they relate to the event as a whole i.e. costs relate to the clinic rather than individual elements within it.

6.8.2 These costs should be identified and allocated and apportioned to the clinics as overheads. The methodology used should be consistent with Appendix 2 of the Costing Manual.

6.9 Costs of Fixed Assets

6.9.1 Capital charges can have a significant impact on the cost of outpatients. This is influenced by the location in which the clinic is held. All consultant responsible clinics are included at this point, where they are operated by NHS providers. This is consistent with the costing principle of reference costs providing the costs of NHS services to NHS patients.

6.9.2 Increasingly NHS providers are offering outpatient clinics in a variety of settings and where these clinics are operated by the NHS provider, and the associated activity and costs relate to service agreements, then these should be included in the exercise. This includes clinics that may be held outside a central department and provided in other premises which may / may not be owned by the NHS provider. If **outpatient clinics are held by consultants acting in a private capacity**, and are not part of the NHS provider's income stream, then these **are excluded**.

6.9.3 The production of outpatient attendance costs by location may be significant for a NHS provider's internal management as costs may vary. For reference cost purposes however, the outpatient attendances should be reported on an organisation wide basis as for inpatient and day case activity. Even where internal

management consider separate sites as entities in their own right, the entire NHS provider is the recognised reporting unit for central returns and reference costs comply with this approach.

6.9.4 The use of equipment in outpatient clinics and for treatments and procedures undertaken in outpatients, needs to be included in the total quantum of costs for reference costs, and this cost needs to be attributed to outpatients on a consistent basis as used for inpatient and daycase activity. Some equipment may be apportioned directly to individual treatments (see section 6.7 above) e.g. lasers for the treatment of some dermatology cases. General equipment may also be used, and these will need to be allocated to the clinic and apportioned to the resource profiles as an overhead.

6.9.5 In allocating equipment costs two methods are acceptable:

- cost per minute
- cost per use

Most NHS providers already use one of these methods and currently this is left to local discretion as to which is most appropriate. Given the wide range of equipment in use in NHS providers, both methods may be used dependent on the different types of equipment. No other methods of apportionment or allocation are to be used for the costing of NHS services, other than the two specified.

6.10 Overhead Costs

6.10.1 Outpatient costs will also include the relevant level of overheads. These fall into two main categories:

- clinic/ treatment function/ location specific
- NHS organisation wide.

6.10.2 The clinic/treatment function/location specific costs should be apportioned in line with the guidance included in this chapter and the guidance contained in Appendix 2 of this Costing Manual.

6.10.3 Outpatients will also bear an element of NHS provider overheads including human resources, finance etc. The apportionment of these costs should be consistent across the organisation and points of delivery within specialties. The general guidance on this is contained in Appendix 2 of this Costing Manual.

6.11 Summary

6.11.1 The main points to be considered when undertaking costing of outpatient attendances at procedure level are:

- Annualised figures should be reported for activity and unit costs.

- Outpatient procedures should be reported separately, where required. Where an outpatient procedure is reported, an outpatient attendance (either first or follow up) cannot also be counted for this same activity. Where organisations are unable to separately identify outpatient procedures undertaken, they should report all outpatient activity data using first and follow up attendance categories, split between adult and child, as appropriate.
- All consultant responsible clinics should be included regardless of location.
- Costs should be included when committed.
- Costs should be split based on:
 - time related costs
 - standard costs
 - event based costs
- Representative medical estimates of patient related staff time are acceptable.
- Standard costs to be used for some direct costs e.g. pathology.
- Direct costs to include costs of associated therapy care.
- Equipment costs should be allocated on a cost per use or cost per minute basis, as best reflects local practice.
- All relevant overheads should be included; this covers clinic/location/ treatment function overheads in addition to an element of NHS provider wide overheads.

CHAPTER 7 – COSTING OTHER ACUTE SERVICES

7.1 Accident and Emergency Medicine (Emergency & Urgent Care)

- 7.1.1 Accident and Emergency Medicine (A and E) tends to be associated with 24 hour manned units capable of dealing with blue light ambulance cases ([Accident and Emergency services](#) are defined as per the Connecting For Health (CFH) Data Dictionary. New data requirements for A&E were mandated from 1 October 2006, in [DSCN 05/2006](#).). This type of unit however is only one element of the classifications of Accident and Emergency services.
- 7.1.2 For other forms of Accident and Emergency services which do not provide a fully manned 24-hour service, the introduction of HRG4 means that the same casemix measures are to be applied as for 24 hour manned units.
- 7.1.3 The costs of these units need to be available and treated in a consistent and transparent way. As a first step therefore the activity base for all other Accident and Emergency units is client-based attendances.
- 7.1.4 In summary therefore for Accident and Emergency units the number of client-based attendances and a cost per HRG/FCE/Spell/attendance is required for
- 24 hour Accident and Emergency Departments/Casualty Departments
 - Non 24 hour Accident and Emergency Departments/Casualty Departments
 - Discrete Minor Injury Units and
 - Walk In Centres
- 7.1.5 Where Minor Injuries Units are not discrete, but form part of an A&E department, the costs of such units should be included as an on-cost onto the A&E department itself, rather than being separately reported. Any activity that is collected should be excluded from the reference costs return.
- 7.1.6 Situations do occur when patients are brought to the A&E Departments by ambulance and despite the best efforts of staff, the patient is Dead on Arrival (DoA). These patients have to be certified as dead by a clinician. These form a distinct category from those patients that die in an A&E Department. These are recorded within the A&E department but do not incur high levels of resource utilisation. These patients need to be recorded within the A&E category, although as a separate activity from HRG related activity.
- 7.1.7 Full details of the Accident and Emergency groupings, including the DoA category can be found in Accident and Emergency collection files of the 2006/07 reference costs collection.
- 7.1.8 In line with the costing of all NHS services, the full costs of these services should be included. This will include costs of salaried GPs, as well as the cost of other medical and nursing input, equipment, support service etc.

Observation / Pre-Admission Wards / Medical Assessment Units and Beds

7.1.9 Cost and activity data for these types of wards and units should be reported as detailed in paragraph 4.11.

7.2 Radiotherapy and Chemotherapy

7.2.1 Radiotherapy and Chemotherapy treatment costs should be separated out of the composite costs of other treatments and shown separately.

Radiotherapy

7.2.2 Radiotherapy treatment costs should be separated out of the composite costs of other treatments and shown separately on a full absorption basis. Radiotherapy HRGs are to be used for the treatment costs of radiotherapy services only, regardless of the location in which the treatment is given, e.g. outpatient, inpatient/day case, etc.

7.2.3 The activity and costs need to be categorised using the new HRG4 categories which include both Planning HRGs and Delivery HRGs supported by the new OPCS 4.3 codes, split inpatient, outpatient and other.

7.2.4 Please note that it is possible for one outpatient attendance to generate both a planning HRG and a delivery HRG.

7.2.5 The collection currency for the they deliver of Radiotherapy is fractions in the financial year, **not the number of courses of treatment**. A single patient undergoing 6 fractions will thus be reported as 6 in the relevant HRG category. This reflects the fact that collecting courses of treatment rather than individual patient treatment activity can distort cost variation in service delivery.

Chemotherapy

7.2.6 A similar costing approach is adopted for chemotherapy although based on cycles delivered rather than fractions delivered.

7.2.7 Unlike radiotherapy, this service is not provided in discrete or dedicated settings. Some costs of administering the treatment are integral to other costs such as ward costs. The principle of full absorption costing still applies and so the 'Drug' Chemotherapy HRG4 categories are to be used for reporting the treatment costs (i.e. chemotherapy drugs (including any pharmacy dispensing on cost) and associated drugs to deal with the symptoms or side effects of the chemotherapy drugs themselves) of chemotherapy services whilst the 'Attendance' Chemotherapy HRG4 categories should be used to report any other costs incurred as a result of delivering the Drugs.

7.2.8 With the introduction of HRG4 categories there is no separate guidance for Chemotherapy for Solid or Non-Solid tumours.

7.3 Radiology (Diagnostic Imaging)

- 7.3.1 In a change from the 2005/06, radiology services activity and costs must now be separately identified irrespective of the admission status (eg, inpatient, day case, outpatients, services accessed directly) of the patient. Also the new HRG4 groupings are to be used when reporting this activity. This is a change from previous years where Radiology bandings (related to the Korner bandings A to L) were used for services accessed directly only. The new Radiology HRGs are available on the Information Centre website.
- 7.3.2 Please note that the Connecting For Health (CFH) Coding Guidance only mandates the coding of high cost imaging within an Inpatient setting whilst this costing guidance requires all imaging within an Inpatient setting to be costed and so local systems may need to be used to ensure an accurate count is produced.
- 7.3.3 Radiology tests associated with national comprehensive **screening services are still excluded** from the collection at this point, but will be included at a later date. Pilot work on a full range of screening services is planned.
- 7.3.4 In line with the costing of all NHS services, the full costs of these services should be included.

7.4 Directly Accessed Pathology Services

- 7.4.1 The information requirement for direct access pathology is based on the number of tests within nine broad categories. More detailed information regarding the definition of a test has been provided in the 2006/07 Reference Costs guidance.
- 7.4.2 The category of phlebotomy within pathology services directly accessed by a patient was introduced largely as a result of requests from PCTs, who provide a blood collecting service, but have no access to laboratories in order to carry out pathology tests. This category should therefore be used for discrete phlebotomy services only. Non-discrete phlebotomy services should continue to be included as part of the composite cost of the relevant pathology treatment function, as in previous years.
- 7.4.3 Pathology tests associated with national comprehensive **screening services are still excluded** from the collection at this point, but will be included at a later date. Pilot work on a full range of screening services is planned.
- 7.4.4 In line with the costing of all NHS services, the full costs of these services should be included.

7.5 Audiological

- 7.5.1 Outpatient clinics for audiological medicine are currently identified and costed separately and this will continue. The revised definition of 'consultant – responsible' clinics permits the inclusion of outpatient attendances and hearing tests conducted by audiologists and audiological technicians where this is not a discrete service.

- 7.5.2 Audiology activity and costs that are done as part of ENT outpatient appointments or referrals from ENT outpatient appointments should be included within the ENT Outpatient activity and costs;
- 7.5.3 Audiology activity and costs that are done via referrals from GPs should be included as Audiology Outpatient clinics under treatment function 254 or 310 within Outpatients.
- 7.5.4 As well as hearing tests, a range of other services are provided through audiology departments.
- 7.5.5 The range of services relating to hearing aids and neonatal screening that form part of the mandatory collection are identified as follows:
- Fitting of hearing aids & counselling (including those issued for tinnitus) on an attendance basis;
 - Assessments (including hearing tests)
 - Fitting of hearing aid (initial fitting of new or replacement aid, including counselling) [NB this excludes the actual cost of the hearing aid itself]
 - Follow up attendances (including counselling)
 - Counselling and Issue of Aids for Tinnitus (including the issue of white noise generators, pillow maskers, etc.)
 - Hearing Aids;
 - Analogue Standard Aids
 - Analogue Superior Aids (including Directional control)
 - Digital Aids [NB this includes the cost of the entire hearing aid, whether they be capitalised or not].
 - Repair Services (including postal, patient attendance and “drop off”); &
 - Neonatal Screening.
- 7.5.6 At this stage, no differentiation for the above services is made between adults and children
- 7.5.7 Not all clinics are held on central hospital premises, but the service is provided on a more localised basis. Where a NHS provider has contractual responsibility for the provision of the service, then these services need to be included in reference costs, regardless of location. The contractual costs involved in delivering these services should be included for comparative purposes.
- 7.5.8 The cost of the hearing aids issued is separately identified. Costs of other repairs, moulds, tubes etc. should be included as an integral cost driver of the clinics.
- 7.5.9 It is recognised that new hearing aids are not issued solely to new patients and that new stronger aids may be required as a patient’s hearing deteriorates, or a fault occurs which requires a new aid. It is **not** necessary to differentiate between hearing aids issued between these differing categories of patients. It is expected that more detailed cost and activity information will be developed in the future linked to client groups, and the provision of associated services such as counselling for patients suffering ear loss for example.

- 7.5.10 A further service that forms part of audiology is neo-natal screening. These costs should form part of the control total for the audiology services. In providing unit cost information, the basis of this data should be the number of neonates screened.
- 7.5.11 No separate costing guidance is provided on the costing of services resulting from these screening tests. If follow up treatments or interventions are required, this activity should be treated as inpatient or outpatient services, as appropriate, and standard costing guidelines for these services apply.

7.5 Direct Access Services

- 7.5.1 The changes in service provision have led to an increasing range of services being accessed without recourse to hospital clinicians. Increasingly, GPs are accessing services directly in order to make informed decisions about patient requirements and needs, prior to any consultant referral being made. As this range of services continues to expand, there is a need to ensure that these services are costed consistently.
- 7.5.2 The general principles of full absorption costing and the matching principle still apply. These services should not be costed at marginal cost. They are an alternative form of service delivery and should therefore be costed using the same principles and process as other forms of delivery.
- 7.5.3 The costing of these services should also be clear and transparent, and in line with other services, are subject to audit.

CHAPTER 8 – COSTING COMMUNITY BASED/OUTREACH SERVICES

8.1 Background

- 8.1.1 Costing community services at staff group level has been the subject of debate and pilots over several years. One of the major stumbling blocks to move to a consistent activity baseline has been the lack of a standard minimum data set and detailed service descriptions for the majority of services commonly classified as “community services”.
- 8.1.2 Costing pilots undertaken in previous years, alongside feedback from NHS organisations, have considered the costing of a range of community services. Given the high level of participation and the consistency of the findings and comments, it was felt that this constituted a sound base from which to produce interim reference costs and benchmarks for a range of community services.
- 8.1.3 Reference costs in the acute sector have been linked with Healthcare Resource Groups (HRGs). Due to the problems of data sets and definitions outlined above, these are not fully available for community services. This should not prevent improvements in the costing of these services from progressing however, nor for interim measures to be included as part of the National Schedule of Reference Costs for these services.
- 8.1.4 The roll out of community services achieved to date has built on the evolutionary approach adopted. This was extended in 2001 and a comprehensive range of services are now included.
- 8.1.5 The costing guidance and definitions that follow, form the basis of costing community services including the mandatory collection for the National Schedule of Reference Costs. As with all reference cost information, the analysis is based on retrospective data. The range of community services will continue to be refined until all services are included. In addition, the basis of these services remains iterative as data quality improves.
- 8.1.6 This guidance also applies for outreach services. These services reflect changes in the way health services are being delivered with less clearly defined boundaries around service delivery. For a number of services, this can result in the same staff delivering services in ward settings in acute hospitals and outside such settings to provide a continuity of care to patients.

8.2 Scope of Community Services Covered

- 8.2.1 The principles and requirements included in this Manual relate to the following range of mandatory services:
- Nursing Services for Children
 - School-based Children’s Health Services (Vaccinations & Others)
 - Specialist Nursing Services (Community and Outreach)
 - District Nursing Services

- Health Visiting Services (Post Natal, Vaccinations/Immunisation, Other)
- Rehabilitation Services
- Other [Chiropody, Podiatry, Dietetics, Diabetes, Dentistry, Hospital at Home, Specialist Palliative Care]
- Midwifery
- Medical (Vaccinations & Other)
- Therapy Services [Physiotherapy, Occupational Therapy, Speech & Language Therapy, Dietetics Therapy, Orthoptics Therapy]

8.2.2 Whilst the general trend is to standardise activity measures wherever possible, these must be representative and reflective of the services being provided. These services are very divergent and therefore, while achieving some standardisation, some differences have resulted.

8.2.3 The range of services and the benchmarks to be introduced are consistent with those being pursued elsewhere, wherever possible. Some of the provisional work was undertaken in conjunction with Northern Ireland, particularly exploring benchmarks which cross the health/social services division.

8.2.4 As these services are increasingly delivered in a range of settings, input from other health professionals, including practice nurses will occur. As reference costs relate to the full costs of the provision of these services, the costs of staff, travel, dressings etc, need to be included to meet the NHS costing principles. All relevant costs have to be included to ensure comparability and the key issue is the cost of services and not the funding stream. Services that are categorised as GMS and PMS are excluded however.

8.2.5 Given the differences, each group of services are considered in turn.

8.3 Definitions for Costing of Nursing Services

8.3.1 A major stumbling block in the past has been the lack of standard definitions of services in the community sector. This is particularly true around the different nursing services. Where an individual NHS provider, (NHS Trust, Primary Care Trust or PMS plus pilot) has separately defined nurses or nursing groups not specifically identified below, these should be included in the Specialist Nursing “other” category. The exception to this is Practice Nurses (who are employed and exclusively funded from GMS resources), as these staff are excluded.

8.3.2 For all types of district nursing and specialist nursing services, there is a requirement to distinguish between services provided to children, and those to adults. The following definitions are to be used when reporting child and adult data :-

- Children (up to and including 18 years old); &
- Adult (over 18).

8.3.3 *District Nursing Services* - to include district nursing duties.

- 8.3.4 *School-based Children's Health Services* - to include school nurses, routine medical checks, sexual health advice, and family planning services. This work is sub-divided between Vaccination Programmes and Other services. No child and adult reporting distinction is required in this category.
- 8.3.5 *Specialist Nursing Services* - this includes a range of specialist services detailed below. Cost and activity information should be calculated and submitted for **each category** where these services are provided, even if they are not separately identified within financial ledgers. This supersedes previous guidance.
- 8.3.6 *Family Planning* - this relates to services provided through clinics. The approach is consistent with that for other outpatient-based attendances and Chapter 6 on outpatients should be used for the costing of these services. If other family planning services are provided outside the clinic setting e.g. through Health Visitors in schools this will be included as part of Health Visiting and should not be reallocated to family planning.
- 8.3.7 *Community Midwifery* - This relates to home deliveries, antenatal and post-natal visits carried out in a community-based setting, including the patient's home.
- 8.3.8 *Nursing Services for Children*
 In addition to specialist nursing categories and school-based children's health services, the NHS provides a range of other nursing related services for children. These services have been sub-divided from the specialist and school-based services outlined in paragraphs 8.3.4 and 8.3.5.
 This grouping includes the following elements : -
- Judicial System Support (including Child Protection and Family Therapy);
 - Development Services for Children;
 - Paediatric Liaison; &
 - Other child nursing services not specifically included in Specialist Nursing and School Based Children's Health services.
- It specifically excludes specialist nursing services [see paragraphs 8.6 –8.7 below].
- 8.3.9 *Therapy Services* - these relate to Physiotherapy, Occupational Therapy and Speech and Language therapy. They should reflect all community-based activity not included as inpatient/day case/outpatient/direct access measures. Direct access to these community based services should be included in the community submission
- 8.4 Activity and Cost Measures**
- 8.4.1 Total contacts are the key activity measure for many of these services.
- 8.5 Nursing Services for Children**
- 8.5.1 The scope of services included in this section is defined in paragraph 8.3.8.
- 8.5.2 Separate costs are required for these services, although they may not correspond to traditional cost centre analysis.

8.5.3 In activity terms, a number of different / separate elements are identified as comprising these services. Total contact activity and corresponding unit costs will be on a cost per contact basis, and all services should be reported as one composite activity and unit cost.

8.5.4 The costing principles for these services are as detailed in Chapters 2 and 3 of this Manual.

8.6 School-based Children's Health Services

8.6.1 A number of health services and health checks are performed through educational facilities. School-based services, while having significant levels of nursing input, also have input from community physicians.

8.6.2 In costing these school based services therefore, it is required that the full cost of delivering these services, not just associated nursing costs, should be included. Details on the reporting of other community medical services can be found in paragraph 8.13 below.

8.6.3 Unlike Nursing Services for Children, school based services are sub-divided for reference costs purposes. Separate reporting is required for: -

- Vaccination Programmes (this includes Vaccination Programmes such as Rubella, Tuberculosis and Meningitis).
- Other services (this includes routine medical checks, sexual health advice, family planning, smoking cessation, substance abuse advice & support, etc.).

8.6.4 In costing and reporting terms, the activity measure for vaccination programmes is the number of vaccinations given and a cost per vaccination given. The unit cost will include all costs (including administration, nursing and medical costs), and not just the cost of vaccines where these are part of the service costs.

8.6.5 For all other elements of these services, reporting is based on number of total contacts and a unit cost per contact in the financial year.

8.6.6 In a response to feedback from the NHS, the "other services" category will be subdivided into "one to one" services and "group services". This is a new requirement from 2005/06. The introduction of the latter category allows organisations to separately cost and report group activity. However, where a school-based practitioner provides group sessions, each group contact should be counted as one "group services" contact in the financial year. This is irrespective of the size of the group involved.

8.7 Specialist Nursing Services

8.7.1 The full list of categories which fall within specialist nursing services is to be found in section 6 of the 2006/07 Reference Costs collection.

- 8.7.2 As stated, data needs to be supplied for both community based nursing staff and hospital based nursing staff providing on-going care outside the hospital setting.
- 8.7.3 Continence services includes all clients of these services i.e. those in regular receipt of supplies as well as those being attended by these nurses. This approach also applies to Band 5 Stoma Care. All patients in receipt of supplies rather than being attended by a specialist nurse should be reported as non face to face activity.
- 8.7.4 A further refinement is the sub-division of all categories between: -
- Children (up to and including 18 years old); &
 - Adult (over 18).
- 8.7.5 For specialist nursing services particularly, an increasing amount of interaction with patients is via telephone, e.g. for advice and support, rather than on a face-to-face basis. In some cases, the vast majority of patient interaction is on a “remote” basis, i.e. non-face-to-face.
- 8.7.6 It is acknowledged that the move to telephone-based patient interaction is a growing trend, and to integrate this activity and cost with face-to-face data would be inappropriate, and could lead to distortion in the data reported. Therefore, cost and activity data for all areas of specialist nursing services is sub-divided further between:
- No. of total face-to-face contacts in the financial year
 - No. of non-face-to-face total contacts in the financial year (optional requirement at present).
- 8.7.7 The activity base for these services is total contacts within each category detailed above. All services, particularly outreach services, should be costed on a full absorption cost basis and not using a marginal cost approach.
- 8.7.8 The assumptions, principles and processes for the costing of these services must be robust and withstand audit scrutiny.
- 8.7.9 It should be noted that this categorisation specifically **excludes** services associated with Drugs and Alcohol services. These are included in Chapter 9 on Mental Health.

8.8 District Nursing Services

- 8.8.1 The activity base is total contacts.
- 8.8.2 For these nursing services (as with Specialist Nursing Services), a great deal of interaction is increasingly via telephone, i.e. advice, rather than at face to face level.

8.8.3 As detailed in paragraph 8.7.5, the separate (optional) category for non-face-to-face contacts is retained, as is the split between services delivered to Children and those delivered to Adults.

8.9 Health Visiting Services

8.9.1 Health Visiting services include a range of activities. Some aspects of these services cannot be directly attributed to individual clients, e.g. the public health role, health promotion, etc., in the same way as direct treatment services.

8.9.2 Some elements of the services are more clearly defined and these are separately identified for consistency and comparison with other areas of service provision.

8.9.3 The three sub-divisions currently required are as follows : -

- Vaccinations and Immunisations
- Post-Natal Visits
- All Other Health Visiting Services

8.9.4 Vaccinations and Immunisations are to be separately identified for consistency with school based programmes and GP based services. This will allow an overview of these services across all sectors. The costs of these services are fully inclusive of all costs, e.g. clinic costs, staff costs, travel costs (for home visits), etc. as well as the cost of the vaccine.

8.9.5 In terms of activity counting, activity will be based on the number of individual vaccinations given in a year. For example, if 2 vaccinations from a course of 3 are given in the year, this will count as 2. This will allow for uncompleted courses as it is the individual number of vaccinations and immunisations that are the activity unit.

8.9.6 Post-natal visits are separately identified for community midwives, and post-natal visits carried out by health visitors are reported for consistency. As with vaccinations, the full costs of this service element need to be identified for the unit cost per visit.

8.9.7 When counting activity for Post Natal Visits, the following should be noted: -

- Post natal visits are those visits undertaken up to 28 days after the birth.
- The collection currency for post natal visits for health visitors is the visit itself. From a Reference Cost perspective, therefore it does not matter whether the health visitor sees the mother, baby or both, as the activity counted is the visit itself.
- Visits should only be counted where the patient was seen. Costing and counting treatment should follow the principle used for 'did not attend' (DNAs) in a clinic setting, where the cost of these are an oncost on the service itself, and the activity is not counted.

- 8.9.8 All other services, including costs associated with the public health role of Health Visitors, are to be costed and reported on a total contacts in the financial year basis. The costs of health promotion should be included as an on cost of the provision of Health Visiting services. This would therefore include any post natal visits that occur after 28 days later than the birth.
- 8.9.9 In response to feedback from the NHS and in acknowledgement of changes to service delivery, the 'other services' category is subdivided into 'one-to-one services' and 'group services'. The introduction of the latter category allows organisations to separately cost and report group activity. Where a Health Visitor provides group sessions, each group contact should be counted as **one** 'group services' contact in the financial year. This is irrespective of the size of the group involved, or the age range of the group participants.
- 8.9.10 As discussed in paragraph 8.7.6, the 'other services' category has been further subdivided into face to face contacts and non face to face contacts.
- 8.9.11 All other services, including costs associated with the public health role of Health Visitors, are still costed and reported on a client basis.

8.10 Dietetics, Chiropody and Podiatry

- 8.10.1 Primarily the delivery of these services is through appointment based clinics. Elements of the work can be delivered to patients whilst registered as an inpatient or on a peripatetic basis.
- 8.10.2 For the current purposes of costing these services, the following rules apply:-
- For Inpatients – any input from these services is included as part of the inpatient cost in the same way as other support services. No separate reporting is necessary, as this is part of the composite inpatient costing and reporting
 - For Clinics – these should be costed on an appointment basis and should be based on a full absorption costing
 - Peripatetic Appointments – these should also be fully costed but not separately identified from clinic based appointments.

8.11 Community Dentistry

- 8.11.1 These services should be costed on an attendance basis. No casemix measures are currently used for these services.
- 8.11.2 The costing of these services should fully comply with the principles, concepts and guidance included in this manual.

8.12 Community Midwifery Services

- 8.12.1 The separate costing of community (home) deliveries was introduced in 2001. This element is mandatory and steps should be taken to ensure information is routinely collected where this information is not readily accessible from midwifery records and systems.
- 8.12.2 Other services provided by community midwives may be carried out in a hospital-based outpatient setting, e.g. ante-natal clinics and details of these can be found in Chapter 6.
- 8.12.3 Other maternity based support services, such as Parent craft classes, etc., are still excluded.

8.13 Community Medical Services

- 8.13.1 As with other community-based staff, community physicians, etc., provide a range of services. This guidance has already identified the activity and cost elements of these services in relation to vaccination programmes through schools.
- 8.13.2 In addition to these vaccination programmes, community physicians also undertake other vaccination work and advice, e.g. travel clinics. However, there is no requirement in 2006/07 to distinguish between vaccination programmes and other types of vaccination services. The reporting requirements are therefore a single unit cost per vaccination and a total number of vaccinations for all vaccinations and immunisations carried out by community physicians, irrespective of whether these are part of a programme, or delivered as an ad hoc service. In costing these services, full absorption costing should be used, with any income / fees from patients matched to the expenditure, thus reporting the quantum charged to contractual arrangements.
- 8.13.3 Vaccination programmes that are jointly funded by non-NHS providers (including GPs) should not be reported in Reference Costs 2006/07, as such unit costs are not calculated on a total absorption costing basis and thus may distort national averages. The costs incurred by the NHS provider for this element of service (including administration, nursing and medical costs, and appropriate oncosts) should be **excluded** from Reference Costs, as should all associated activity.
- 8.13.4 All other (non-vaccination / immunisation) services are to be reported in aggregate form using total contacts in the financial year as the collection currency. There is no requirement to separately identify community medical services that are provided to a group.

8.14 Therapy Services

- 8.14.1 As with other types of support services and care, where these services form part of an inpatient/day case episode, their costs are included as part of the overall treatment cost. Where a referral to these services is generated through an outpatient attendance, these costs are included as part of the outpatient attendance costs as outlined in the NHS Costing Manual. This is consistent with

the approach for all outpatient attendances regarding the commitment of resources.

- 8.14.2 Sometimes these services can be provided without a direct link to inpatient or outpatient based care. These services may also be provided in community settings and through direct access to these services. Contacts are the key activity measure, and this applies to community-based provision of therapy services in **all NHS providers**. This approach is consistent with activity counting for direct access to these services.
- 8.14.3 Direct access services can be in any setting, but the patient accesses the service by direct referral from a health professional, e.g. GP, rather than through a hospital consultant inpatient / outpatient event.
- 8.14.4 These services may also be provided in community settings and through direct access to these services. Direct access entails the patient accessing the service through a direct referral from a health professional, e.g. GP, rather than through a hospital consultant inpatient / outpatient event.
- 8.14.5 Community based services are those delivered outside a main hospital site. They may be delivered by community based staff or on an outreach basis. The services may, but not exclusively, be follow-on treatments from earlier events, or relate to continuing care in community settings. In 2004, services reported as community should include direct access to services provided in a community setting.
- 8.14.6 Since 2005/06 for each service, two categories form the basis of cost and activity analysis. These are: -
- Adult Services
 - Children's Services
- 8.14.7 As a result of feedback from the NHS, the activity currency for these services has changed since 2005/06. For each category in therapy services, data must be reported for the total number of contacts in a financial year (not first contacts) and a unit cost per contact. This will ensure that reported unit cost differences can be related to the differing costs of similar clinical practice, rather than differences in the average number of contacts that a patient has within a particular course of treatment.

8.15 Family Planning Services

- 8.15.1 The costs associated with family planning clinics and attendances should comply with the costing principles and the additional guidance given for the costing of outpatient attendances issued as Chapter 6 of this Manual and attached at Annex 1 to this guidance. In costing family planning attendances, NHS providers should ensure that they include all relevant costs and particular attention is drawn to the inclusion of all drug costs (e.g. antibiotics) and not just the costs of contraceptives.

CHAPTER 9 – COSTING MENTAL HEALTH SERVICES

9.1 Mental Health Services

9.1.1 Guidance on the costing of a range of mental health services was included for the first time in 2001. The range of services has since been extended and now covers:

- mental health outpatients/community appointments
- mental health outpatients/community services – specialised services
- mental health inpatients (including secure units)
- mental health inpatients services – specialist services
- mental health specialist teams
- domiciliary visits
- regular attendances at day care facilities

9.1.2 These services are further sub-divided based on the age of the clients into three bandings of adult, children and elderly. This is consistent with the approach adopted by the National Service Framework for mental health services.

9.1.3 In the preparation of cost and activity data for these services, the service definitions included in the Mental Health Service mapping exercise should be used. These can be found on at <http://www.mhcombinedmap.org/Support.aspx> (or see Appendix 3):

Changes to the Specialist Mental Health Teams collection is an initial move towards bringing the financial mapping exercise and reference costs closer together where this is feasible.

9.2 Outpatient and Community Services

9.2.1 The artificial construct of a single 'booked appointments' collection category for combined outpatient and community services activity has been abandoned. Therefore, outpatient and community services data are to be identified and separately reported.

9.2.2 If a service meets the NHS Data Dictionary definition of an outpatient service and there is a pre-booked appointment then the activity and costs are to be included in the outpatient category. If it meets the definition and there is no pre-booked appointment and the service is not an excluded service then the costs are to be treated as an outpatient overhead.

9.2.3 In addition, these services for adults continue to be sub-divided further, to provide separate activity and cost data for drug and alcohol services and other types of outpatients. In a change to previous collections, the split between drug and alcohol and other types of outpatients will be introduced for mental health services provided to children. Costs and activity relating to Methadone Swallow and Depot Injection Clinics continue to be excluded from the Reference Costs 2006/07 collection.

9.2.4 Due to the particular nature of mental health services, DNAs (did not attend) utilise considerable mental health resources. Reference Costs 2006/07 requires all DNA outpatient activity to be identified and reported separately as a memorandum item. There is no requirement to submit unit cost data for DNAs. This means that:

- The total cost of a specific outpatient service, calculated using total absorption costing methodology should be identified, for each category of collection, for each of first and follow up outpatient attendances in mental health.
- Activity for the total number of face to face attendances for each of first and follow up attendances should be identified.
- Unit cost for each type of attendance should be calculated by dividing total cost by the total number of face to face attendances for each of first and follow up attendances.
- In addition, total number of DNAs for each of first and follow up attendances should be reported as a memorandum item. This activity must not be included in the total face to face activity reported, nor in the calculation of the unit cost per face to face attendance, as to do so would inappropriately dilute the reported unit costs.

9.2.5 In a change for 2006/07 non-face to face activity is now valid for inclusion in mental health services data providing it meets the Connecting For Health Definition for Non Face to Face activity (plus pre-booked).

9.2.6 In the preparation of cost and activity data for these services, the service definitions included in the Mental Health Service mapping exercise should be used which can be found in Appendix 3..

9.3 Inpatient Services (including Secure Units)

9.3.1 2001 saw the introduction of costing of mental health inpatient stays on an occupied bed day basis. Secure units were included in subsequent years. For consistency, the unit cost information is based at occupied bed day level. As with other elements of mental health services, the service mapping definitions should be used for:-

- Local Psychiatric Intensive Care Units
- Low Secure Services
- Medium Secure Services
- High Dependency Secure Provision
- Maximum Secure Units (see para 9.3.2)
- Child & Adolescent Secure Services (see para 9.3.3)

9.3.2 The three Maximum Secure facilities in England (Broadmoor, Rampton and Ashworth) are sub-divided from High Dependency Secure provision. These establishments and the services they provide are distinct from other secure units.

9.3.3 The four designated units that are required to submit data for Child and Adolescent Secure Services are:

- I) Newcastle,
- II) Birmingham
- III) Salford
- IV) South London & Maudsley

9.3.4 Based on feedback from the NHS providers of these services, refinements in costing are mandated for maximum security and high dependency secure services providers. Activity for these services remains on an occupied bed day basis, but the activity and costs are now analysed over five clinical groups : -

- Women's Services
- Mental Health / Psychosis
- Learning Disabilities &
- Personality Disorders &
- Dangerous and Severe Personality Disorder [for Maximum Secure Units only].

9.4 Specialist Services

9.4.1 In addition, costing requirements and guidance for a range of other specialist services have also been introduced. Where these services are delivered through inpatient beds, the activity currency is occupied bed days. For services delivered through outpatient clinics, in the community, etc., 'booked appointments' should be used for consistency.

9.4.2 The specialist services that should also be costed in line with this Manual are:-

- Autistic Spectrum Disorder
- Eating Disorder Services (sub-divided between services for children and adults)
- Mother and Baby Units.

As with specialist community mental health teams, the service definitions used in the Mental Health Service Mapping exercise (see Appendix 3) should be used where applicable.

9.4.3 The inclusion of these services brings the majority of costs for mental health services into the collection. Work is still ongoing to develop costing for psychological therapy services and support services such as self-help and advocacy schemes.

9.5 Domiciliary Visits

9.5.1 Domiciliary Visits (DVs) by consultant psychiatrists and psychologists, which result in a separate fee being paid, should be shown separately. The unit costs should reflect the **true and full cost of these visits** e.g. travel, drugs and an appropriate share of overheads etc and not just salary costs or the actual fee (payment) given.

9.6 Regular Attendances at Day Care Facilities

- 9.6.1 A range of services are provided through NHS day hospitals/centres/units. Primarily these provide services for the elderly and rehabilitation services as well as mental health and learning disability patients. Often patients attend these hospitals/centres for a number of days each week and the number of attendances per patient will vary due to the different nature of the patient's condition. Generally the number of places each day is fixed e.g. 20 patients each day and over 5 days this gives 100 patient days. Likewise if a patient attends one day per week for 26 weeks this equates to 26 patient days.
- 9.6.2 There has been some inconsistency in costing and counting approaches to date with some providers including these services and others omitting them in both activity and cost terms. From 2003 onwards the costs and activity for these day hospitals/centres/units will form part of the collection for elderly, stroke, and mental health services. Centres catering primarily for the long term physical disabled and learning disability patients are still excluded (as all other services for these patient categories are also excluded).
- 9.6.3 Discussions have identified that little patient specific information is routinely recorded for patients attending these units/hospitals. However, in an attempt to try to distinguish categories for reporting mental health day care facilities, the 2006/07 collection subdivides the single category of previous years into three, 1 for each of:
- Child,
 - Adult &
 - Elderly
- 9.6.4 Where data is unavailable to enable separate reporting by patient age, all activity and costs should be reported as 'adult'. The basis for inclusion will remain as the total number of patient days and a unit cost per day, for each category.
- 9.6.5 Although it is acknowledged that a range of services/interventions can take place during each day, and this is determined by each patient's condition, this development is seen as being the first stage in introducing these services into the reference costs collection.
- 9.6.6 Note that any additional costs that are incurred when an inpatient concurrently attends a day care facility (and where their bed is not filled, but is retained for their later use) should be removed from the total cost of the day care facility and be reported as part of the composite cost of that inpatient occupied bed day. No day care facility activity should be counted for such patients.

This ensures that the:

- Reported costs of inpatients (on an occupied bed day basis) are fully reflective of the costs incurred by such patients;
- Inpatient is not double-counted in activity terms (e.g. as an inpatient occupied bed day and a day care facility attendance)

- Costs of the day care facility are not overstated.

Thus:

- The total cost of the day care facility must therefore reflect the total cost of the service, less those costs that relate to inpatients attending the day care facility.
- The total activity of the day care facility must therefore reflect the total activity of the day care facility, less the activity relating to those patients who attend but are also currently admitted to that NHS provider as an inpatient.
- Dividing this adjusted total cost by the adjusted activity will produce an appropriate unit cost per patient day for the day care facility.

9.6.7 The above principle also applies to Mental Health inpatients that attend outpatient clinics whilst being an admitted inpatient (adjust cost and ensure activity is not double-counted). Thus, no outpatient activity should be counted for admitted inpatients. In certain circumstances, it may be applicable to non-mental health Elderly day care facilities, where treatment is similar.

CHAPTER 10 - COSTING MEDICAL/PARAMEDIC SERVICES PROVIDED BY AMBULANCE NHS TRUSTS

10.1 Background

- 10.1.1 This chapter relates to the costing of medical/paramedic services provided by Ambulance NHS Trusts. The principles and key concepts and their application, contained in Chapters 2 and 3 of this Manual are also applicable to the costing of these services.
- 10.1.2 These services related primarily to the delivery of clinical services provided by paramedics and technicians. The extension of costing into these new areas will allow a wider view of performance across an extended range of service indicators in this area.

10.2 Service Coverage

- 10.2.1 The activity and costs included in the collection relate to **incidents** for Emergency (999) calls, Urgent and Emergency High dependency transfers. **Note that the activity data should reflect the activity levels per the annual KA34 ORCON return to the Department of Health;** Incidents should therefore be less than the number of calls shown in line 01 of the KA34 – see also paragraph 96 below. Response data will continue to form part of the Reference Costs collection from an activity requirement perspective only.
- 10.2.2 Patient Transport Services (PTS) provided by NHS Ambulance Trusts, NHS Direct (where appropriate) and air ambulance services activity and costs continue to be excluded from the main Reference Costs return however the activity and costs are included in the mandatory “Excluded Services” worksheet.
- 10.2.3 All of Helicopter Emergency Medical Services (HEMS) activity and costs continue to be excluded from the reference costs collection.
- 10.2.4 As in previous years, the basis of activity for Paramedic Services provided by Ambulance NHS Trust is incidents, not responses. This differs from calls, responses and patients. The collection is based on a full year’s activity and costs as for other NHS services and will be reported on the same timescales as detailed throughout this guidance.
- 10.2.5 The following should be noted for ‘Incidents’:
- An incident is an event that results in one or more calls being made to the emergency ambulance service provider.
 - For example, five calls re: the same event equals one incident.
 - An incident may result in a response by an ambulance resource, e.g. an ambulance, rapid response vehicle, motorbike, etc., or may result in a transfer to other NHS Services, e.g. NHS Direct, etc.
 - The number of incidents will be equal to or less than the number of calls received, but may be greater or less than the number of responses.

- For example, the number of incidents will be more than the number of responses where an incident does not result in a response.
- The number of incidents will be less than the number of responses where more than one type of response is issued.
- With regard to 'Major Incidents', where resources are solely dedicated to providing cover for major incidents, these should continue to be reported separately in the Reference Costs collection, using the appropriate category. Where resources are not dedicated to major incidents, they should be included in the composite Category A, B and C return, as appropriate.

10.2.6 Similarly for responses:

- Activity relates to the number of responses activated, including abortive responses.
- Where more than one type of response is issued, e.g. Rapid Response and Ambulance, these will count as two responses.
- Responses include those by Rapid Response Vehicles, Fast Response Vehicles, Paramedic Response Units, Ambulances, Motorbikes, Pushbikes, etc.
- The exception to the above treatment relates to potential or actual major incidents. In these cases, the 'standard' response may be the dispatch of a pre-determined number of personnel and vehicles. For these incidents only, this counts as a single response. If subsequently, additional crews, vehicles, etc., are required, this should be counted as a second, third, etc. response as required.
- Some ambulance service providers may use the term 'activation' for this type of activity.

10.2.7 The analysis will cover:

- Incidents of Category A (Red) calls, defined as 'Patients who are or maybe life threatened and will benefit from a timely clinical intervention', analysed and costed over 32 codes;
- Incidents of Category B (Amber) calls, defined as 'Patients who require urgent face to face clinical attention but are not immediately life threatened', analysed and costed over 32 codes;
- Incidents of Category C (Green) calls, defined as 'Patients who do not require an immediate or urgent response by blue light and may be suitable for alternative pathways of care', analysed and costed over 23 codes;
- Other 999 calls analysed and costed across 4 categories;
- Urgent and Emergency Transfers combined.

As in 2005/06 cost and activity data for Category B and Category C incidents are required to be reported separately.

10.2.8 Certain classifications are no longer required for Category C. The categories to be used for the analysis of calls are in section 12 of the 2006/07 Reference Costs guidance.

10.2.9 The five categories to be used in the analysis of other 999 calls are:

- Major incidents / airports
- Out of Hours service (where NHS ambulance provider has taken over the responsibility of providing this service from GPs, and where the service is commissioned by PCTs)
- Transferred for telephone advice
- Unclassified / uncoded
- Other.

10.2.10 No further subdivision of the combined urgent and emergency transfers category will be included at this point. The collection files will therefore only include one further category for these types of transfer.

10.2.11 Although changes have been made to the original collection requirements that were introduced in 2003, the process of monitoring and reviewing of the collection requirements, as with all costs and classifications, will continue in future years. Since 2005/06. in terms of additional benchmarking opportunities, and whilst incidents remain the agreed reporting requirement for unit costs, all activity data for journeys and calls, as well as responses, are included into all aspects of the 2006/07 collection. Definitions and activity reported for calls and journeys should be those used for the **KA34 ORCON** return to the Department of Health.

10.3 Activity Measures

10.3.1 Activity measures are 'incidents' about which calls have been received. This gives the most comprehensive coverage of services and allows analysis of all calls. These include calls transferred to NHS Direct, hoax and nuisance calls etc. Incidents are the base activity measure for costing these services for reference costs.

10.3.2 In some situations more than one type of response will be dispatched to a given incident. Where more than one type of response is deemed necessary, such as a rapid response and a fully equipped ambulance, these should be recorded as two separate responses.

10.3.3 For activity and reference cost terms, responses include all types of responses, unless specifically stated e.g. air ambulance. These can come from a variety of different forms of transport from rapid/fast response vehicles, motorbikes and cycles, to ambulances.

10.3.4 One exception applies to this standard approach. This relates to potential or actual major incidents. In these cases, through emergency planning procedures, a 'standard' response will already have been determined. In these cases a pre-determined number of personnel and vehicles will form a standard response to a given type of incident. For these incidents only, the standard response is counted as a single response and the individual components should not be separately reported. If subsequently additional crews, vehicles etc. are required, these count as separate responses due to changes in the incident being addressed.

10.3.5 In terms of additional benchmarking opportunities, and whilst incidents remain the agreed reporting requirement for unit costs, it has been decided to include activity

data for journeys and calls, as well as responses, into all aspects of the 2005/06 collection onwards. Definitions and activity reported for calls and journeys should be those used for the KA34 ORCON return to the Department of Health.

10.4 Service Costing

- 10.4.1 As outlined above, the costing of these services should fully comply with the principles and concepts outlined in this Manual.
- 10.4.2 In costing these services attention should be paid to the clear and transparent allocation of direct costs to the relevant services. Wherever possible costs should be directly attributed to services. Levels of indirect and overhead costs should be apportioned with due attention to their relationship to service provision. The approach and resulting figures should be robust and stand the test of audit scrutiny.
- 10.4.3 Wherever possible, the overall approach to reference costs is based on services relating to presenting and/or final diagnosis. In this respect the allocating of costs and activity for these services has parallels with those of Accident and Emergency (A & E) services.
- 10.4.4 Like A & E services, emergency ambulance services carry an element of costs associated with a 'state of readiness'. They are therefore staffed and equipped to deal with 'expected' levels of throughput. These costs should be included in the costing of these services to ensure the principle of full absorption costing is met.
- 10.4.5 As a first step in undertaking the costing analysis, it is important to apply the matching principle to ensure the expenditure relates solely to the services to which it is attributed.
- 10.4.6 Similarly expenditure should be net of any Category C income including commercial income. Trading activities do not form part of this analysis, although maintenance costs associated with vehicle repairs should be attributed to the relevant vehicles in line with current accounting practice.
- 10.4.7 Other forms of commercial income should also be netted off from the cost base. For example where an emergency service is provided on standby at football matches, the commercial income received should be netted off emergency service provision. In activity terms any resulting emergency activity generated should be deducted from the total emergency responses.
- 10.4.8 Following on from this, clear control totals need to be established for the different elements of service provision as applicable
- Patient Transport Service (PTS)
 - NHS Direct
 - Out of Hours Services
 - Emergency Service
 - Urgent / Emergency Transfers

The first two elements are not currently part of the reference costs collection.

- 10.4.9 The resulting costing analysis is dependent on the degree of analysis undertaken in the above stage. If as part of the above stage, staff grades, vehicles, etc. are directly attributed to these service classifications, the degree of manual intervention required is minimised.
- 10.4.10 When attributing or allocating staff and vehicle costs, it should be remembered that the cost of PTS vehicles/crews used to support emergency services in given situations should be included in the costs for these services, and not under patient transport.
- 10.4.11 The full quantum of costs for all services should reconcile to expenditure within the final accounts, subject to the above amendments regarding income. This acts as a check that all costs are included in the return which is based on actual costs in a given year.
- 10.4.12 The actual costs figure will not reconcile to contractual income. This is not of concern for the production of reference costs which are actual, retrospective costs. Any cross-subsidisation of work should be avoided however particularly in the light of financial flows reforms and the development of a national tariff.
- 10.4.13 To assist with the detailed costing of these services a minimum classification of costs for use by Ambulance service providers is attached at Appendix 4 of this Manual. This differs in some areas from the standard classification for NHS providers and from local analysis which has been used in the past.
- 10.4.14 Whilst this classification states the minimum national standard there are restrictions on the ability to adapt these locally. Movement is allowed from overhead to indirect classification and from indirect to direct. No movement or reclassification in the opposite direction is permissible. If for example an organisation sought to treat a direct cost as an indirect cost this is contrary to the mandatory regulations within this Manual and is deemed to be non-compliance as required by the signed Statement of Compliance.
- 10.4.15 In developing this Manual, particular concerns have been raised in relation to waiting/down time. This has parallels with the theatres and A and E Departments. 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.
- 10.4.16 In costing these services, it is important that all costs are included in the relevant cost pools. These may be an amalgam of different cost centres, and may cut across cost centres. All staff and associated costs need to be attributed and allocated to the activity as defined above.
- 10.4.17 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.

- 10.4.18 It is important that the reconciliation statements are completed in order to enable the Central Department team to check that NHS providers are adhering to the full absorption costing principles detailed in this Manual. It should be noted that these statements form part of the formal return.
- 10.4.19 As with the costing of all NHS services, the providers of these services should ensure compliance with all relevant parts of this mandatory Manual and not just the specific elements in this Chapter.

CHAPTER 11 - RECONCILIATION TO ACCOUNTS AND ACTIVITY SOURCES

- 11.1.1 When costing services it is important to ensure that the total costs included in the relevant accounts can be reconciled to the quantum of costs used in the activity costing analysis as a check to ensure all appropriate costs have been fully included.
- 11.1.2 In addition activity levels used should be reconciled to available activity data sources e.g. HES/SUS.
- 11.1.3 In producing costs for inclusion in the National Schedule of Reference Costs, the main purpose is to include **all** costs that relate to the delivery of health services for NHS patients from NHS resources.
- 11.1.4 The full absorption cost principle is therefore applied. The direct, indirect and overhead costs of the services should be included. In addition, NHS providers should ensure that the costs of services should be included even when the service is not directly provided i.e. provider to provider contracts. These contracts can cover clinical services e.g. pathology analysis services, as well as support services. Details of this treatment are found in Chapter 3. The related activity should also be adjusted.
- 11.1.5 The reconciliation analysis statement for expenditure levels used in Reference Costs analysis can be found in Appendices 2 and 3 of the Reference Costs guidance.

NHS COSTING MANUAL

SECTION 3

APPENDICES

Cost Analysis

As a guide to the minimum analysis of costs and as part of the process of applying standards to ensure a consistent framework for costing, the following classification has been included in this Manual.

The purpose of this analysis is to enable the providers and commissioners of healthcare to have a degree of confidence in the analysis of costs and cost behaviour changes in response to fluctuating activity levels.

This appendix should be read and used in line with the principles outlined in the main text.

General Notes

The analysis detailed follows a broad subjective analysis, which oversimplifies the position in many areas. For some of the elements in this analysis, two categories are given. The first is the preferred analysis but where current information systems prevent the achievement of analysing costs in this way, the alternative should be adopted. All NHS providers should seek to attain the transfer to the target analysis as opportunities present themselves.

Description

Analysis

GENERAL/SENIOR MANAGERS

Chief Executive	Indirect
Senior Managers' Pay - Board Level	Direct/Indirect
Senior Managers' Pay - Other	Direct/Indirect

MEDICAL (See Note 1)

Consultants	Direct
SHMOs, Medical Assistants	Direct
Associate Specialists	Direct
Staff Grade Practitioners	Direct
Senior Registrars	Direct
Registrars	Direct
Senior House Officers	Direct
House Officers	Direct
Hospital Practitioners	Direct
Clinical Assistants and sessions in BTS	Direct
Staff Fund Payments	Direct
Senior Clinical Medical Officers	Direct
Clinical Medical Officers	Direct
Sessional CHS Appointments	Direct
Clinical Representatives on Management Teams	Overhead

DENTAL

Hospital Consultants	Direct
SHDOs, Assistant Dental Surgeons	Direct
Associate Specialists	Direct
Staff Grade Practitioners	Direct
Senior Registrars	Direct
Registrars	Direct
Senior Dental House Officers	Direct
Dental House Officers	Direct
Dental Practitioners	Direct
Community Health SDOs and DOs	Direct
Trainees in Community Dentistry	Direct

DescriptionAnalysis**NURSES AND MIDWIVES (See Note 1)**

Senior Nursing Staff (District Nursing Officer and Directors of Nursing Services)	Indirect
Senior Nurses 1 to 5 (including Senior Tutors)	Indirect
Senior Nurses 6 plus Grades H and I	Direct
Grades F and G	Direct
Grades D and E	Direct
Grade C	Direct
Grade B	Direct
Grade A	Direct
Student/Pupil Nurses	Direct

PROFESSIONS ALLIED TO MEDICINE

Professions allied to medicine (excluding Speech Therapists)	Direct/Indirect
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Note 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.

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/Orthodontic Technicians	Direct
Pharmacy Technicians	Direct
Dental Hygienists, Dental Surgery Assistants, Dental Therapists	Direct
All other Technicians	Indirect
District/Trust Work Staff	Indirect

<u>Description</u>	<u>Analysis</u>
OPTICIANS	
Opticians	Direct
PHARMACISTS	
Pharmacists	Indirect
ADMINISTRATIVE AND CLERICAL	
Other Administrative and Clerical Staff NHS staff on protected Salary Scale	Direct/Indirect Direct/Indirect
ANCILLARY STAFF	
Ancillary Staff negotiated by Whitley	Direct/Indirect
Ancillary Staff not negotiated by Whitley	Direct/Indirect
Orthopaedic Appliance Grades	Direct/Indirect
MAINTENANCE STAFF	
Building Trade Operatives	Indirect
Maintenance Technicians	Indirect
Maintenance Craftsmen	Indirect
Maintenance Assistants	Indirect
Planner Estimators	Indirect
Upholsterers	Indirect
HEALTH CARE ASSISTANTS	
Health Care Assistants	Direct
NON-NHS STAFF (Note 1)	
Medical	Direct
Dental	Direct
Nursing	Direct
Professions Allied to Medicine	Indirect
Professional and Scientific	Indirect
Professional and Technical - PTB	Indirect
Opticians	Direct
Pharmacists	Indirect

<u>Description</u>	<u>Analysis</u>
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NON-NHS STAFF (Continued)

Administrative and Clerical - Typing and Secretarial Skills	Indirect
Administrative and Clerical - Other	Indirect
Ancillary Staff	Indirect
Maintenance Staff	Indirect
Ambulance Staff	Direct

CHAIRMAN'S AND NON-EXECUTIVE MEMBERS' REMUNERATION

Remuneration	Overhead
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SUPPLIES AND SERVICES - CLINICAL

Occupational and industrial therapy equipment & 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

Description

Analysis

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

Description

Analysis

PREMISES AND FIXED PLANT (Continued)

Building maintenance	
- equipment and materials	Overhead
- external contracts	Overhead
Gardening and farming	
- equipment and materials	Overhead
- external contracts	Overhead

CAPITAL (Note 2)

Capital Charges	Overhead
Adjustment on disposal of fixed assets	Overhead
Depreciation on donated assets	Overhead

EXTERNAL CONTRACT STAFFING AND CONSULTANCY SERVICES

External contract staffing and consultancy services	Overhead
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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

Note 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.

Minimum Standard Method for Allocation and Apportionment of Costs

1. Objective.
2. Underlying Principles.
3. Overall Approach.
4. Cost Allocation Methods by Department.
5. Notes on Specific Costs and Work Measures.

1. Objective

The objective of the minimum standard on cost allocation is to avoid differences in reported costs for the same patient treatment caused by unnecessary differences in cost allocation and apportionment methods between different NHS providers.

The standard therefore provides a minimum level of sophistication in cost allocation which it is expected that all NHS providers will achieve. More sophistication is encouraged but only where the principles conform to the underlying principles of NHS costing as outlined in this Manual.

2. Underlying Principles

The principles which underlie the standard are that:

- costs should be allocated **directly** to specialties, cost centres/cost pools wherever possible;
- work measures for use in allocating and apportioning material indirect and overhead costs should:
 - be readily available and accurately measurable. Ideally their accurate measurement should already be required for other purposes;
 - 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.

It is expected that these will be met for the majority of eventualities.

If no work measure is available which fulfils both these requirements, e.g. in a change over year for services, alternative approaches should be sought, including taking advantage of the judgement of experienced clinicians, nurse managers, or other appropriate professionals, until adequate data can be produced. NHS providers should be able to achieve the requirements outlined above within one year of any transitional arrangements. Advantage should also be taken of data available from tender specifications for support services;

- a two stage apportionment of support services, via patient treatment services, to treatment function/service/programme is recommended where appropriate. This is outlined in the main text. In this way patient treatment services which require relatively high levels of support services will channel their costs through to the specialties they serve.

It is possible to conceive and justify a more complex multi-stage apportionment in which, for example, part of the cost of one support service is apportioned to another, and vice versa. Again, the principles of full absorption costing must be applied in more sophisticated methodologies. In accordance with the objectives set out above these more complex approaches are not rejected and no NHS provider is precluded from using them and presenting them for audit,

although multi-stage apportionment restricts the level of transparency in the costing process and should be avoided wherever possible.

- the structure of the (objective) analysis of costs by department (whether patient treatment services, e.g. Accident & Emergency, or support services, such as catering) used for management and budgetary control by providers will vary according to each individual provider's management structure. Similarly the (subjective) analysis of cost by type (e.g. nurse grade A, electricity) within department will vary from provider to provider. It remains the intention at this point of the Department of Health 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.

3. Overall Approach

3.1 Specification of Costs

In order to specify costs in a way which will be readily understood nationally these guidelines refer to:

- **departmental analysis of costs.** This forms the basis of the recommended methods of allocation of indirect and overhead costs;
- **analysis of costs by type.** This is used to identify which cost types should be treated as direct, indirect and overhead.
- advice on which cost types should be treated as fixed, semi-fixed and variable.

The use of these formats is not intended to prescribe their use for internal management information and budgetary control purposes, but to improve external benchmarking through greater consistency.

3.2 Definition of Specialties

Specialties are defined on the same basis as in the Data Dictionary for the purposes of cost allocation and apportionment. For further information on treatment function definitions please refer to the current Reference Costs guidance.

3.3 Two Stage Cost Allocation

Overview

A two stage apportionment method is used where Support Services are generally apportioned first to Patient Treatment Services. Patient Treatment Services, including their apportionment of Support Services, are then apportioned to treatment function. Where Support Services, for example catering, are directly attributable to patients they would be attributed directly to treatment function, for example in proportion to patient days.

Separate Sites

If a 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 (e.g. Trust HQ's) 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.

Overhead Apportionment

In the case of some elements of overhead cost (for example Chairman's Office Support Services) 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.

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.

4. Cost Allocation Methods by Department

4.1 Stages

Sections 4.2 and 4.3 which follow set out the minimum standard for allocation in:

- the first stage, from Support Services, indicating which departments should be allocated directly to treatment function and which via Patient Treatment Services and with which unit of work measurement;
- the second stage, from Patient Treatment Services to Treatment function, indicating the recommended unit of work measurement.

These apportionment methods should only be used once all the possibilities for allocating costs DIRECTLY to treatment function have been exhausted. Appendix 1 gives guidance as to which cost types should be allocated directly for Reference Costs.

4.2 First Stage Allocation of Support Services

Department Reference	Allocated to	By Work Measure	Reference to Notes in Section 5
a Domestic	PTS	Floor area cleaned	1
b Catering	PTS or T	Number of Meals Provided	1,2,3
c Laundry/Linen	PTS or T	Patient Days	1,2,4

Department Reference	Allocated to	By Work Measure	Reference to Notes in Section 5
d Portering/ Transport	PTS or T	Weighted Patient Days	1,2,5
e Engineering Maintenance	PTS	Building Volume	1
f Building Maintenance	PTS	Building Volume	1
g Energy/Water etc	PTS	Heated Volume	1
h Site Overheads (exc. Capital charges, below)	PTS	Building Volume	1
a Chief Executive	PTS	Gross Cost PTS	1
b Central Office Support	PTS	Gross Cost of PTS	1
c Employee Services	PTS	Staff Numbers	
d Procurement	PTS	Number of Orders Raised	
e Medical Records	T	OP Attendances plus IP & DC Episodes	6
Training, Education	PTS	Weighted number of persons employed	7
Miscellaneous	PTS	Gross Cost of PTS	1
Purchase of tertiary referrals	T	Actual Cost of Referrals	
Capital Charges, - Equipment	PTS	Specific Equipment	8
Capital Charges, - Other	PTS	Floor Area	9

PTS = Patient Treatment Services
T = Treatment Function

4.3 Second Stage Allocation of Patient Treatment Services to Specialties

It is assumed that where possible costs have been allocated directly and these methods of allocation and apportionment apply to residual costs.

Department Reference	Method of Apportionment	Reference to Notes in Section 5
a Wards	Direct Allocation or pro-rata Bed Days	10
b Out Patient Clinics	Direct Allocation or pro-rata Attendances	10
c Day Care Facilities	Direct Allocation or pro-rata Attendances	10
d Accident and Emergency Department	Direct Allocation	10
e Community Medical Services	Direct Allocation to relevant Community service	
f Community Nursing and Midwifery	Direct Allocation to relevant Community service	
g Community Dental Services	Direct Allocation to relevant Community service	
Clinicians	Direct Allocation	10
a Artificial Limb and Wheelchair	Item Issued, or to Non-Acute	
b Audiology	Direct to ENT or Audiological Services	
c Chiropody	Attendances	
d Dietetics	Attendances	
e ECG	Weighted Requests	
f EEG	Requests as per guidance on Radiology Services	11
g Health Promotion	To Commissioner	

Department Reference	Method of Apportionment	Reference to Notes in Section 5
h Industrial Therapy	To Community or Occupational Therapy	
i Lithotripsy	Attendances	
j Medical Illustration and Photography	Number of Requests	11
k Medical Physics	Weighted Number of Requests	11
l Miscellaneous Patient Treatment Services	Gross Expenditure of Specialties	
m Nuclear Medicine	Weighted Requests	12
n Occupational Therapy	Contacts	13
o Operating Theatres	Operating Time / Sessions	14
p Optical Services	Direct to Ophthalmology	
q Pathology	Test Bandings	15
r Patient Transport Services [specifically does not relate to Ambulance Service providers]	Patient Journeys	
s Pharmacy	Number of issues	16
t Physiotherapy	Contacts	17
u Psychology	To relevant service/ appointments	
v Radiology	Bandings	18
w Radiotherapy	Direct to HRG, based on no. of treatments / fractions	
x Speech Therapy	Contacts	

5. Detailed Notes on Specific Costs and Work Measures

The notes which follow refer to the numbers shown in the right hand column of the tables in Section 4.

1. All Support Services should be allocated to PTS before Overheads so that the former will be included in the gross cost of PTS 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/Service or via PTS will depend on whether the work measure data is available most accurately by Treatment function/Service or by PTS. The former should be used if in doubt.
3. For **catering**, the number of meals provided should be used as it is a more realistic basis for the allocation of catering costs as these can be provided to areas other than wards.
4. For **laundry and linen**, in-patient days and day care 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. **Medical Records.** In the absence of better information outpatient attendance and inpatient and day case episode should be given equal weight since the work in Medical Records depends largely on the number of records updated and extracted.
7. **Training and Education.** 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 PTS 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 PTS's 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 Appendix 1 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 **Nuclear Medicine.** Note 11 may apply, or weight as Manual of Accounts.
- 13 **Occupational Therapy.** Contacts should be used.
- 14 **Operating Theatre.** If computerised systems are not available to assess operating time by treatment function, approximations should be made based on manual records including theatre sessions.
- 15 **Pathology.** 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.
- 16 **Pharmacy.** 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.
- 17 **Physiotherapy, Occupational Therapy and Speech & Language Therapy.** Contacts should be used, as this is consistent with the approach for direct access.
- 18 **Radiology.** 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.

Mental Health Services Definitions

The following definitions have been taken from the Mental Health Service Mapping website. Further information can be found at the address outlined in Chapter 8.

Please note, for completeness, all of the definitions from this site have been included here. The Reference Costs Collection does not require the submission of data for all these service areas, and care should be taken to ensure that only that data included in the collection is submitted.

Definitions relating solely to the provision of Social Services have not been included in this Appendix, and where joint service provision is in operation, these services should be treated as **excluded** for reference costs purposes..

Inpatient Services

These include the following :-

▪ **Acute Inpatient Units/Wards**

General acute wards may be on a general hospital site, part of a psychiatric hospital or in a purpose built separate unit. They are designed to assess and treat patients who are acutely unwell. Lengths of stay should therefore be under six months, although problems with discharge may mean that this is not achieved in practice.

Acute Inpatient Units/Wards may be externally purchased.

▪ **Local Psychiatric Intensive Care Units**

Psychiatric intensive care units provide care for the acutely unwell who need intensive nursing care in order to maintain the safety of themselves and/or others. Lengths of stays are usually in the order of weeks or maximally a few months.

Local Psychiatric Intensive Care Units may be externally purchased.

▪ **Continuing Care - Residential Rehabilitation Units**

Rehabilitation units are non-acute NHS facilities designed to provide continuing care for people with severe and enduring mental illness who are judged to be too chaotic or unwell to tolerate the environment of a residential place in the community. While not designed for permanent residency, a small number of rehabilitation patients may effectively live in the unit for many years. The characteristics of a rehabilitation unit are:

- a hospital or community base
- 24 hour nursing care
- the provision of treatment and rehabilitation
- regular input from a multi-disciplinary psychiatric team
- the patient is under the day to day care of a psychiatric consultant.

Residential Rehabilitation Units may be externally purchased.

Secure Units

These include the following :-

- **Local Low Secure Services - Longer-term Care**
Longer-term low secure care may be provided by slow stream rehabilitation services and other designated low secure units, in some areas referred to as high dependency units. Wards may be locked all the time or be lockable, but will have higher staff: patient ratios than an ordinary open ward. Length of stay will usually be in excess of six months and often years.
Local Low Secure Services - Longer-term Care may be externally purchased.
- **Local Medium Secure Services**
Medium secure care is generally provided at a regional level by regional forensic services in regional and interim secure units.
Local Medium Secure Services may be externally purchased.
- **High Dependency Secure Provision**
This refers to hospital units designated for the purpose by the Secretary of State under the 1999 NHS Act. It includes services within that hospital specifically designed to meet the needs of people with a mental illness, a learning disability (who may require secure care but may not have mental health co-morbidity) or a personality disorder who require secure care. Access to this level of secure care is normally from the courts, prisons and transfers from lower levels of secure mental health care.

Community Mental Health Teams [CMHTs]

A Community Mental Health Team is a multidisciplinary team offering specialist assessment, treatment and care to adults with mental health problems in their own homes and the community. CMHTs may provide a whole range of community-based services themselves, or be complemented by one or more teams providing specific functions.

A CMHT:

- is recognised as a multidisciplinary team of two or more disciplines by service managers
- serves adults of working age with mental health problems as its identified client group
- does most of its work outside hospitals (although it may be hospital based)
- has four or more members of staff
- offers a wider range of services than just structured day care.

The different types of CMHTs include :-

- **Crisis Resolution Teams**
A crisis resolution team (sometimes called home treatment) provides intensive support for people in mental health crisis in their own home: they stay involved until the problem is resolved. It is designed to provide prompt and effective home treatment, including medication, in order to prevent hospital admissions and give support to informal carers.
Crisis resolution teams have the following characteristics:
 - a multi-disciplinary team
 - availability to respond 24 hours a day, 7 days a week
 - staff in frequent contact with service users, often seeing them at least once on each shift

- provision of intensive contact over a short period of time
- staff stay involved until the problem is resolved.

Crisis resolution teams may be externally purchased

Crisis resolution teams **MUST** be a discrete service and not constitute part of a CMHT.

▪ **Assertive Outreach Teams**

Assertive Outreach Teams, known also as ‘assertive community treatment teams’, provide intensive support for the severely mentally ill people who are ‘difficult to engage’ in more traditional services. Many will often have a forensic history and a dual diagnosis. Care and support is offered in their homes or some other community setting, at times suited to them.

Workers can be involved in direct delivery of practical support, care co-ordination and advocacy as well as more traditional therapeutic input. The aim of the service is to maintain contact and increase engagement and compliance.

Assertive outreach teams should have the following characteristics:

- a team approach (not intensive care management by individual members of community mental health teams)
- a team caseload no larger than 12 service users for each member of staff
- a defined client group
- planned long-term working with individuals
- much of the work outside a service setting
- evening and weekend availability with 24 hour access to an on-call system for service users on the team caseload.

Assertive Outreach teams may be externally purchased.

An assertive outreach team is a discrete service and not part of another team.

▪ **Homeless Mental Health Services**

A team or service that works specifically with homeless mentally ill people.

Homeless Mental Health teams may be externally purchased.

▪ **Emergency Clinics / Walk-in Clinics**

An open-access clinic that can provide assessment by mental health professionals and referral to appropriate agencies/services.

▪ **A&E Mental Health Liaison Services**

A rapid assessment service for people with mental health problems who use an A&E Department. The service may be provided by a psychiatrist, mental health nurse or social worker. The characteristics of the service are that the patient will be seen rapidly, regardless of their place of origin, and a risk assessment will be carried out. The service may provide follow up care and treatment, or may refer to primary care or specialist mental health services.

A&E mental health liaison services may be externally purchased.

▪ **Mental Health Crisis Intervention Services**

Other mental health crisis intervention services providing assessment **and** intervention for psychological or emotional crises should be listed here. DO NOT include services for home treatment of individuals otherwise requiring hospitalisation – these should be classified as Crisis Resolution Services (above). If crisis intervention is one of the functions of another service such as a CMHT, it should be listed as a function under that service.

These services must:

- have dedicated staff
- undertake only short term intervention, referring clients to other services if longer term follow up is indicated

These services may be externally purchased.

- **Access & Crisis Services**

Note this category includes the new generation of mental health crisis services which go beyond conventional on-call cover. However, to obtain complete coverage of provision, it also includes more traditional services such as Approved Social Workers (ASW) and Emergency Duty Teams (EDT) although these are no longer meet the definition of mental health crisis services.

- **Emergency Duty Teams**

Emergency duty teams are an 'out-of-hours' emergency service provided by social services departments. **EDTs should always and only be included here if they have the capacity to respond to mental health emergencies and are staffed by Approved Social Workers who can carry out assessments under the Mental Health Act 1983.** These services may be externally provided.

- **ASW Services**

Approved social workers are social workers specifically approved and appointed under Section 114 of the Mental Health Act 1983 by a local social services authority 'for the purpose of discharging the functions conferred upon them by this Act'. Among these, one of the most important is to carry out assessments under the Act and to function as applicant in cases where compulsory admission is deemed necessary. Before being appointed, social workers must undertake post-qualification training approved by the Central Council for Education and Training in Social Work (CCETSW).

ASWs working in adult mental health services such as CMHTs, Crisis Teams, Assertive Outreach Teams, and Emergency Duty Teams should be listed under that service even if they contribute to the social service department ASW duty rota. **Only list here ASWs who contribute to ASW duty but do not work in adult mental health services listed elsewhere.**

Specialist Services

- **Autistic Spectrum Disorder**

- **Eating Disorder Services**

- **Mother and Baby Facilities**

Designated inpatient facilities for mothers with mental illness where their babies can accompany them.

Mother and Baby facilities may be externally purchased.

Ambulance NHS Trusts – Guidance Notes and Definitions

□ Calls

- This relates to the total number of calls received, including hoax, nuisance calls, etc., and calls transferred from police control systems.
- Calls may result in a response, be transferred for advice, e.g. to NHS Direct, other NHS Services, etc., or result in no further action being taken.
- Multiple calls may be recorded for one incident, e.g. Road Traffic Accidents.
- Please note that calls are not required for Reference Costs returns. This definition is included here as an information item only.

□ Incidents

- An incident is an event that results in one or more calls being made to the emergency ambulance service provider. **For example, five calls re: the same event equals one incident.**
- An incident may result in a response **by an ambulance resource**, or may result in a transfer to other NHS Services, **e.g. NHS Direct**, etc.
- The number of incidents will be equal to or less than the number of calls received, but may be greater or less than the number of responses. For example, the number of incidents will be more than the number of responses where an incident does not result in a response. The number of incidents will be less than the number of responses where more than one type of response is issued.
- Incident activity data is collected as part of Reference Costs to enable further analysis to be undertaken, e.g. the calculation of a responses to incident ratio, in order to better understand the services provided. There is no requirement for a unit cost per incident to be calculated or submitted.
- **With regard to ‘Major Incidents’, where resources are solely dedicated to providing cover for major incidents, these should continue to be reported separately in the Reference Costs collection, using the appropriate category. Where resources are not dedicated to major incidents, they should be included in the composite Category A and B&C combined, return, as appropriate.**

□ Responses

- For information, the following relates to responses.
- These are the number of responses activated, including abortive responses.
- Where more than one type of response is issued, e.g. Rapid Response and Ambulance, these will count as two responses.
- Responses include those by Rapid Response Vehicles, Fast Response Vehicles, Paramedic Response Units, Ambulances, Motorbikes, Pushbikes, etc.
- The exception to the above treatment relates to potential or actual **major incidents**. In these cases, the ‘standard’ response may be the dispatch of a pre-determined number of personnel and vehicles. For these incidents only, this counts as **a single response**. If subsequently, additional crews, vehicles, etc., are required, this should be counted as a second, third, etc. response as required.
- Please note, that some ambulance service providers may use the term ‘activation’ for this type of activity.
- **Please note, in a change to the 2003 collection, responses are not required for Reference Costs returns. This definition is included here as an information item only.**

Costs and activity data should be reported under the category used by the individual NHS provider. E.g. where an organisation has re-categorised certain calls from amber to red, the organisation should report these calls under the ‘red’ category. In this instance, the organisation provides a ‘red’

response and so incurs 'red' response costs, irrespective of whether nationally the response is deemed to warrant a 'red' classification. This is consistent with other Reference Costs guidance, where NHS providers report actuals.

Approach to Costing

The approach outlined below is the minimum level of guidance.

Prior to undertaking the costing analysis, it is important to apply the Matching Principle to ensure that the costs submitted are those that relate solely to NHS expenditure. Costs should therefore be net of Category C income, and activity relating to such income should not be included as part of the returns. E.g. Where a 999 service is specifically provided at football matches, the commercial income received should be netted off from total expenditure, and the emergency activity relating to the football matches should be deducted from the total emergency activity.

From a costing perspective, the first stage is to identify the total costs of the different elements of service provision as applicable : -

- Emergencies
- Urgents
- Emergency / Urgent Transfers (usually between providers)
- Patient Transport Services
- NHS Direct
- Out of Hours.

This involves determining the number of staff, vehicles, etc. used to deliver the service elements. If designated PTS vehicles are used to support Emergency crews in given situations, these costs need to be attributed to Emergency **and not** PTS Services.

The actual costs in all cases are unlikely to reconcile to contractual income. This is not an issue for Reference Costs purposes, as the key is actual costs incurred by an NHS provider for the delivery of a given service.

To assist in the costing process, which is based on full absorption costing, a minimum classification of costs is attached at Annex 1 to this guidance. In addition, guidance on allocation methods to be used for a range of indirect and overhead costs is also attached at Annex 2. This reflects consistent practice across the NHS, where possible.

"Downtime"

One of the main issues for Ambulance NHS Trusts is the costing of waiting / down time, particularly for Emergency crews. In this respect, these services are no different from other NHS services such as theatres and Accident & Emergency departments.

In costing these services, it is important that all costs are included in the relevant cost pools. These may be an amalgam of different cost centres, and may cut across cost centre costs. All staff and associated costs need to be attributed and allocated to the activity as defined above.

To allow consistency in the costing process, downtime should not be costed as a separate element. The costs of providing a service will inevitably include elements of waiting, etc., but all such costs are relevant to the service itself. 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.

ANNEX I : SUBJECTIVE ANALYSIS & COST CLASSIFICATION : FOR AMBULANCE NHS TRUSTS ONLY

<u>DESCRIPTION</u>	<u>CLASSIFICATION</u>	<u>ANALYSIS</u>
<u>PAY</u>		
<u>General & Senior Management</u>		
- Chairman & Non Executive Directors	Fixed	Indirect
- Chief Executive	Fixed	Indirect
- Non-Operational Directors	Fixed	Indirect
- Director of Accident & Emergency Services	Semi - Fixed	Direct
- Director of Patient Transport Services	Semi - Fixed	Direct
<u>Administrative & Clerical</u>		
- Finance	Semi - Fixed	Indirect
- Personnel	Semi - Fixed	Indirect
- Stores	Semi - Fixed	Indirect
- Secretarial Support	Semi - Fixed	Indirect
- Information	Semi - Fixed	Indirect
- Communications & Computing	Semi - Fixed	Indirect
- Reception Staff	Fixed	Indirect
- Customer Care / Complaints Officer	Semi - Fixed	Indirect
- Transport / Vehicles Support Officer	Semi - Fixed	Indirect
<u>Control Staff</u>		
- A & E Control	Semi - Fixed	Direct
- PTS Control	Semi - Fixed	Direct
- Shared Control	Semi - Fixed	Indirect
- Ambulance Liaison Staff	Semi - Fixed	Direct
<u>Ambulance Personnel</u>		
- Training Officers	Semi - Fixed	Indirect
- District Managers	Semi - Fixed	Indirect
- Station Officers	Semi - Fixed	Indirect
- PTS Staff	Variable	Direct
- HCS Drivers	Variable	Direct
- Paramedics	Variable	Direct
- Technicians	Variable	Direct
- Other Accident & Emergency Staff	Variable	Direct
<u>Ancillary Staff</u>		
- Catering Staff	Fixed / Semi - Fixed	Indirect
- Domestic	Fixed / Semi - Fixed	Indirect
- Workshop Staff	Semi - Fixed	Indirect

<u>DESCRIPTION</u>	<u>CLASSIFICATION</u>	<u>ANALYSIS</u>
<u>NON - PAY</u>		
<u>Supplies & Services - Clinical</u>		
- Drugs	Variable	Direct / Indirect
- Medical Gases	Variable	Direct / Indirect
- Medical Equipment	Semi - Fixed	Direct / Indirect
- Equipment Maintenance	Semi - Fixed	Direct / Indirect
- Protective Clothing	Semi - Fixed	Direct / Indirect
<u>Supplies & Services - General</u>		
- Provisions	Semi - Fixed	Indirect
- Uniforms	Semi - Fixed	Indirect
- Contract Laundry	Semi - Fixed	Indirect
- Hardware & Crockery	Fixed	Indirect
- Linen : Disposable	Variable	Indirect
- Linen : Non - Disposable	Semi - Fixed	Indirect
<u>Establishment Expenses</u>		
- Printing & Stationery	Semi - Fixed	Indirect / Overhead
- Postage	Semi - Fixed	Indirect / Overhead
- Books & Magazines	Semi - Fixed	Indirect / Overhead
- Telephone Rental	Semi - Fixed	Indirect / Overhead
- Telephone Calls	Semi - Fixed	Indirect / Overhead
- Travelling & Subsistence Expenses	Semi - Fixed	Indirect
- Control Equipment	Semi - Fixed	Indirect
- Course Fees	Semi - Fixed	Indirect
- Training Costs	Semi - Fixed	Indirect
- Advertising & Promotional Expenses	Semi - Fixed	Indirect
- Removal Expenses	Semi - Fixed	Indirect
<u>Transport & Moveable Plant</u>		
- Fuel & Oil	Variable	Direct
- Fuel Pump Maintenance	Semi - Fixed	Indirect
- MOT Tests	Semi - Fixed	Indirect
- Spares & Parts	Semi - Fixed	Indirect
- Workshop Equipment	Semi - Fixed	Indirect
- Accident Repairs	Semi - Fixed	Indirect
- Hire of Vehicles	Semi - Fixed	Indirect
- Rail Services	Variable	Direct
- Vehicle Insurance	Semi - Fixed	Indirect
- Ambulance Car Service	Variable	Direct
- Vehicle Inspection	Semi - Fixed	Indirect
- RAC Costs	Semi - Fixed	Indirect
- Tail - Lift Maintenance	Semi - Fixed	Indirect
- Petrol Licences	Semi - Fixed	Indirect

DESCRIPTION**CLASSIFICATION****ANALYSIS****Premises & Fixed Plant**

- Fuel Oil	Semi - Fixed	Overhead
- Electricity	Semi - Fixed	Overhead
- Gas	Fixed	Overhead
- Water & Sewerage	Fixed	Overhead
- Refuse Collection	Fixed	Overhead
- Cleaning Materials	Semi - Fixed	Indirect
- Cleaning Contracts	Fixed	Overhead
- Furniture & Fittings	Fixed	Indirect
- Office Equipment	Fixed	Indirect
- Photocopier Rentals / Copies	Fixed	Overhead
- Computer Hardware & Software	Semi - Fixed	Indirect
- Air Conditioning	Fixed	Overhead
- Computer Licence Fees	Semi - Fixed	Indirect
- Radio Licence Fees	Semi - Fixed	Indirect
- Control Equipment & Consumables	Semi - Fixed	Indirect
- Rates	Fixed	Overhead
- Rents	Fixed	Overhead
- Building & 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	Overhead
- 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
- Depreciation on Donated Assets	Fixed	Overhead

ANNEX II : SUBJECTIVE ANALYSIS & COST CLASSIFICATION : FOR AMBULANCE NHS TRUSTS ONLY

<u>DESCRIPTION</u>	<u>ALLOCATED TO</u>	<u>BY WORK MEASURE</u>
<u>OVERHEAD DEPARTMENTS</u>		
Chairman & 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 [WTEs]
Finance	SS or D	Gross Cost of Services Provided
Catering	SS	No. of Meals Provided
Estates	SS or D	Building Volume
Linen	D	Weighted No. of Vehicles
Laundry	D	Weighted Staff Numbers [WTEs]
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 & 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	Weighted Time Spent
Workshops	D	Weighted No. of Vehicles
Non-Patient Transport	D	Weighted Time Spent
District Managers	D	Weighted Time Spent
Information Department	D	Weighted Time Spent
Computers & Communications	D	Weighted Time Spent
Customer Care	D	Weighted Time Spent
Medical Equipment	D	Weighted No. of Vehicles
Capital Charges; Vehicles	D	Actuals

DIRECT SERVICES

A & E Service
PTS Service

Glossary of Terms

Costing Blocks	Basic key cost elements which, when aggregated together, can be used to describe the overall costs of a service or activity e.g. cost per bed day, cost per theatre minute, cost per outpatient consultation, District Nursing visit, speech therapy appointment.
Service/ Programme/ Treatment function	These terms tend to be used interchangeably. In costing, they are a separately identifiable group of patient related activities that can be quantified. These may be a treatment function, sub treatment function, department or function depending on local management arrangements and styles of service delivery.
Direct	Costs related directly to a service e.g. salaries, drugs incurred in the provision of the paediatric service as identified by the pharmacy system.
Indirect	Costs related to more than one service but which can be allocated to those services on the basis of reliable activity-related statistics e.g. Pharmacists costs allocated to services on the basis of the number of items dispensed.
Overhead	Costs relating to more than one service, typically not involved in face-to-face patient contact, whose costs are apportioned on a 'fair share' basis not related to an activity statistic e.g. building maintenance apportioned on the basis of building volumes.
Costing Pool	Aggregation of costs from more than one cost centre separately identified in the general ledger e.g. employee services costing pool may aggregate the costs of personnel, crèche, staff restaurant, welfare services etc.
Cost Driver	Basic key activity which influences the cost of a service or condition e.g. length of stay, time in theatre, prosthesis usage, high cost drugs etc.
Truncation	This process removes the days beyond the national upper trimpoint to leave a truncated episode.
Excess Bed Days	These are the days that are beyond the upper trimpoint.

Other standard definitions can be found in the Data Dictionary produced by NHS CfH.

Contact Information

Useful websites / contact addresses :

<http://www.dh.gov.uk/en/Policyandguidance/Organisationpolicy/Financeandplanning/NHSreferencecosts/index.htm> - Published data from previous Reference Costs collections : 1997/98 – 2005/06 inclusive.

<http://194.200.241.107/fd/refcostsdisc.nsf/main?readform> - Reference Costs discussion forum

<http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/FinanceAndPlanning/NHSCostingManual/fs/en> - Costing Manual

For SHAs & FTs only: pbrdatacollection@dh.gsi.gov.uk – mailbox for Reference Costs queries about and during the current reference cost collection exercise

For SHAs & FTs only: pbrcomms@dh.gsi.gov.uk – mailbox for any other Reference Costs queries e.g. is cost XYZ included within tariff ABC

For non SHAs/FTs then please contact your local SHA lead contact which can be found in the discussion forum.

<http://www.mhcombinedmap.org/Support.aspx> - Mental Health Service mapping exercise definitions.

<http://www.nhsia.nhs.uk/dscn/pages/default.asp> - Data Set Change Notices (DSCNs)

http://www.nhsia.nhs.uk/datastandards/pages/dd_m.asp - NHS Data Dictionary

www.ic.nhs.uk - NHS CfH website

<http://www.dh.gov.uk/en/Policyandguidance/Organisationpolicy/Financeandplanning/NHSFinancialReforms/index.htm> - Payment by Results website