

Unit Costs - not exactly child's play

A guide to estimating unit costs for children's social care

PSSRU

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Unit Costs - Not Exactly Child's Play

A guide to estimating unit costs for children's social care

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Foreword

If we are to discover whether we are getting the best value for money from social services, we have to know their true cost. Expenditure needs to be connected directly to the needs of children and families, and the services they receive. The help they receive is usually a mixture of services varying in both amount and costs. The only way to find out the real cost is to build it up from the unit costs of the component services.

There is no escaping that finding out how much services really cost at the point of delivery is not a simple business. But I hope this guide shows that it need not be dull. It sets out to make the subject of calculating unit costs accessible by means of striking graphic design and a light touch, without losing the necessary rigour and attention to detail.

The book is intended to help managers of children's services, particularly non-financial managers, get to grips with how unit cost are calculated. It is intended to be helpful in the final stages of this year's Children in Need Data Collection when unit costs are applied to activity measures. In addition it is meant to be a launch pad for improvements to unit cost methodology aimed at achieving greater accuracy, consistency and comprehensiveness in future years as part of the general drive for performance measurement and best value. Although they are applied here to the way children's services are delivered, the theory and general application will be useful in the field of adult social care also.

I hope that this handbook will prove to be accessible, instructive and a convenient source of reference for busy managers.

A handwritten signature in black ink, reading "John Hutton". The signature is written in a cursive, flowing style.

John Hutton M.P.
Minister of State for Social Services

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Introduction

Remote as the world of financial accounting may seem from the difficulties faced by many families, the way money flows through organisations and feeds into services needs to be more widely understood if the quality of child social care across the country is to be consistently high.

This short guide tries to make a complicated, some would say alien, accounting procedure accessible and comprehensible to a wide readership of local authority staff, researchers and trainers. The main aim has been to produce a tool kit versatile enough to cater for the multiplicity of local authority arrangements and cost demands. It should put into the hands of finance managers and policy makers a coherent method for calculating unit costs that is convincing in its relationship with the work of social services departments and the realities of children's needs.

There are a number of good reasons for the attempt. For example, unit costs are a necessary aspect of the Government's performance assessment framework for public sector services and a prerequisite of best value initiatives. At a local level, they are part of the commissioning process for health and social care services.

Unit cost estimation is therefore becoming quite an industry, particularly as different groups of professionals are likely to need the information it generates for different purposes. The figures may be wanted for a year or a week; perhaps only staff costs are to be examined, or the costs that fall to just one agency. Whatever the calculation, the necessary data must be carefully specified and the method for deriving a figure from it clearly understood. We need to know what staff, buildings and equipment are used to produce a service, what is spent in the process, what the service does, and how it is used. A generic model for estimating unit costs, versatile enough to meet most requirements is described in Part 2 (pp 42-61).

In the light of so many varying demands, how to ensure costs can be sensibly compared for example between services, provider sectors, or local authorities becomes a key issue. No doubt with the best intentions, performance indicators are being devised for a range of circumstances, but whatever the professional context - school, hospital or residential home - their usefulness will depend on how confidently it is possible to make comparisons. It means little to know that service *a* is cheaper than service *b* if they are essentially different, or to know that one works more efficiently in one authority than another if they are resourced differently. The need for consistency in measurement has given this guide its shape.

More specifically, the guide will help to meet the demands for cost information set out in two recent Department of Health initiatives:

- the Children in Need (CiN) Data Collection
- a research programme on the Costs and Effectiveness of Services for Children in Need.

Notes in the margin provide a glossary to some of the more technical terms presented in the text. They are also listed inside the back cover.

Thus, a UNIT COST may be said to be the value of resources (input) used to produce a service, divided by the level of activity (output) it generates. For more about input and output, see page 31.

The concept of BEST VALUE refers to the duty placed on local authorities as the principal means of improving services and increasing the efficiency and economy with which they are delivered.

The PERFORMANCE ASSESSMENT framework builds on the wider best value arrangements by providing information on all service objectives, the people receiving support, the types of support they receive and aspects of their delivery. Fifty such performance indicators are in place.

The CHILDREN IN NEED DATA COLLECTION is a statistical return required by the Department of Health. It provides information on the activities undertaken by social services departments to support children and on the expenditure associated with their work.

The Children in Need (CiN) Data Collection

Expenditure on social services provision for children is currently around £2.2 billion per year, of which an estimated £900m is spent on children in need not formally looked after. There is a wealth of data about children who are looked after but much less on children in need who are not looked after in the formal sense. The CiN database will fill the gap and open connections between information about the characteristics and needs of children, the service response and the associated costs of children's social services. The aim is to collect information at a local level that assists local authorities to manage services and to compare their performance. The data will then be aggregated to provide national figures which the Department of Health can use for monitoring and policy purposes. It is important to stress that CiN includes all children seen by social services, not only those formally looked after. This definition is broader than that used by the Chartered Institute of Public Finance and Accountancy (CIPFA) in their latest accounting guidance.

Two sections of the guide throw light on the CiN Data Collection. Part 2 shows how relevant expenditure in social services departments can be apportioned and allocated to service settings to provide unit costs. A framework of levels is described that will help finance personnel and service managers work together to arrive at estimations that accurately reflect the way social services resources are used by children and family services. However, where approaches to costing are concerned, levels of sophistication vary between local authorities, so for the first year of the Collection, a simplified version of the guidelines has been published. It is described in Part 3 (pp 63-77).

The Costs and Effectiveness of Services for Children in Need

The programme aims over three years to explore and explain variation in the use of resources by authorities and to develop a better understanding of the comparative costs and effectiveness of different interventions. The findings will contribute to the evidence base in child care. An economic perspective is clearly wanted in this context: not only is there a need for information about costs, reliable information needs to be combined with insights into outcomes. Parts 1 and 2 will help researchers estimate accurate unit costs and pp 29-39 relate specifically to the research process. The explanations include a framework in which information requirements can be identified, data systematically collected, costs estimated, and costs and outcomes data linked, analysed and sensibly interpreted. The care career of one young person is used as an illustration. Two recent economic evaluations in children's services are summarised and the section ends with a list of references.

The guide focuses on children's services, but the methods given here should be capable of adaptation in other health and social care contexts (for example, services for adults and the elderly) where there are similar

More information about the CHILDREN IN NEED DATA COLLECTION can be found on the Department of Health web page <http://www.doh.gov.uk/cin/cin.htm>.

The REFERRAL AND ASSESSMENT AND PACKAGES OF CARE PROJECT (RAP) aims to provide a coherent set of national statistics on adult community care. Work on a data collection framework began in 1996. See <http://www.doh.gov.uk/rap.htm> for more information.

concerns about the need for more robust cost information. The model presented in the first section is useful when estimating costs for all client groups and forms the basis of the calculations in the annual publication of Unit Costs of Health and Social Care. The application described in Part 2 might as usefully be applied to adult services in calculations relating to referrals, assessments and packages of care. Similarly, the section on economic evaluation (pp 29-39) can inform research in a wide range of contexts. We would hope, therefore, that ideas expressed here will be useful to a much wider audience.

Why unit costs?

One important use for unit costs data is to reflect the child's perspective, allowing us to see how children are supported by social services departments and at what cost. The CiN collection typifies this perspective. Local authorities help children in a variety of ways through the work of social workers, clerical staff, foster carers and so on. In order to discover how much is spent on meeting the needs of an individual child, we need to measure how much of each service he or she receives, then work out the cost of each amount before adding everything together.

If we know how much an hour of social worker time costs (let's call it x) and we know that during a given week a child receives six and a quarter hours of social work attention, then the costs of the social work contribution to meeting the child's needs during that week will be:

x times $6\frac{1}{4}$

If, in addition, the child is looked after by a foster carer for four days, and the cost per day of the foster care is y , the cost of foster care during the census week is:

y times 4

x and y are unit costs expressed in terms of service per hour or day. If the child receives no other service then the total weekly cost of social care for that child will be:

$(x \text{ times } 6\frac{1}{4}) \text{ plus } (y \text{ times } 4)$.

The importance of being consistent

The algebra is rather crude but it nevertheless helps to describe the relationship between children's needs, services and costs. The harder part is calculating accurate values for x and y . The real cost associated with a social worker visiting a child is much more than a proportion of an individual salary or a salary plus essential 'on-costs' such as national insurance and superannuation. It must include the cost of clerical support, a share of maintaining an office and managing a department and so on. When comparing costs and services, it would not be sensible to argue that one social work team was cheaper than another despite having the same number of social workers, if the costs of one but not the other included an allocation for administrative staff, training, travel and so on.

Linking real costs to children

The secret of accurate cost calculation is knowing how to take account of the various components of an hour of social work time or a day of residential care. It is always likely to be an imperfect science, but the more accurately all the expenditure categories that contribute to a service are acknowledged the closer we will get to understanding real costs and so perhaps to a fully rounded knowledge of all that providing for children and families in need entails.

Piecing together the bigger picture

Since 1975 the Personal Social Services Research Unit has undertaken policy research and analysis on efficiency and equity in community and long-term care. A core activity has been to estimate and analyse variations in social care costs. In 1992, PSSRU produced the first of a series of compendiums containing the best evidence available about unit costs of community care services. The reports are in the form of 'schema', one for each type of service where sufficient research or other data could be traced. Each lists the unit cost elements (for example, staff costs, equipment, overheads) and alongside each element sets out the best available cost information and a short description of the data source. The main purpose of the exercise has been to provide central and local government, health authorities and those involved in research with a comprehensive and flexible source of unit cost information. The reports, which by now include nationally-applicable unit costs for about 70 health and social care services, also arm organisations with the wherewithal to estimate their own unit costs using local data. An example of one of the schemata, Social work for children, is given on page 12.

The first report in 1992/3 highlighted a persistent difficulty. Local authority-provided services incur a number of overheads: for example, direct management, departmental support and central services from local authority departments. However, it has been impossible to establish exactly what was included in published data or the consistency with which different authorities included different types of overhead. Even in the latest volume, the overheads element of the social worker unit cost have had to be estimated using a percentage of salary costs based on some quite old research figures because accurate nationally-applicable data cannot be generated.

One of the aims of this guide is to improve local and national unit costs data by providing guidelines on how to apportion overhead costs more accurately (see page 58). This perspective is important when a clearer picture is wanted of total expenditure in particular areas – for example, for the CiN data collection. It is also useful when estimating unit cost performance indicators: ensuring the scope of the activities included is the same in all authorities makes it easier to compare them.

Here are three examples where cost comparisons are frequently made. In each case, the same cost elements must be included; otherwise differences may simply be the result of a mistake in the calculation. Such inaccuracies could lead to a misinformed policy or planning decision.

Visit the PSSRU website for more information <http://www.ukc.ac.uk/PSSRU>.

Netten, 1994

- 1 An evaluation may involve comparing service costs between local authorities, perhaps examining the relative costs of social work support for young people. Management costs will be an important element but the variation in the accounting structure of local authorities means that different elements are likely to be included in different localities. Do the social workers operate independently or within a locality based team or as a team of specialists? Are the middle and/or senior management teams based in the department's headquarters? Smaller cost elements might cover mobile telephones or travel: does each team or worker have a cost centre budget that includes these components?
- 2 An evaluation may involve comparing the costs and outcomes of different ways of delivering support to young people, for example through residential services or foster care. It is not sufficient to estimate the costs of foster care purely in terms of the 'boarding out' allowances paid to foster carers. A more appropriate figure would include the following: recruitment, assessment and selection of foster carers; the matching of young people and foster families; support provided during the placement; items of administrative and management 'overhead' costs included for the residential services; and, ideally, the hidden costs of foster care borne by the foster carers but not met by the allowances.
- 3 An evaluation may involve comparing service costs between sectors, for example between those purchased from the independent sector and provided in-house. Where services are contracted from an outside agency the fee or contract price will include items for the provision of the service and its management, and possibly a contribution towards the provider's overheads. Does the provider organisation subsidise the costs of the service from another part of their budget? Does the fee include a component to cover the costs of activities relating to purchasing, such as designing and negotiating the contract? Are in-house cost estimates similarly all-embracing?

A BUDGET is the sum of money allocated to a service or function at the beginning of the year.

A COST CENTRE budget refers to an accounting practice that allows costs to be linked to identifiable managerial units.

Estimating the cost of a child care social worker

Schema 9.3 from the annual PSSRU publication, Unit Costs of Health and Social Care, 1999

Costs and unit estimation 1998/99 value Notes

A Wages/salary £20,140 p.a. Information taken from a survey of 66 authorities.¹ The midpoint between the average minimum and the average maximum in each local authority was inflated by the PSS pay index. The sum includes an element to reflect the proportion of staff who receive a London allowance.

B Salary oncosts £2,416 p.a. Employers' national insurance plus 4.5 per cent of salary for employers contribution to superannuation.

C Qualifications

D Overheads £3,383 p.a. 15 per cent of salary costs for management and administrative overheads.²

E Capital overheads £1,898 p.a. Based on the new build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support.^{3, 4}

F Travel No information is readily available about travel costs for social workers.

Working time 42wks p.a.
37hrs p.w. Includes 20 days annual leave and 10 statutory leave days. Ten days sickness leave and 10 days for study/training have been assumed.

Direct client contact client related work 1hr. p.w.
ratio of direct to indirect time on: client related work 190 mins p.w.
1:0.3 Beecham and Knapp⁵ Beecham and Knapp Tibbitt and Martin⁶ found that 77 per cent of a social worker's time was spent in direct time on client-related activities, allowing an hour spent on client-related activities to be costed. This is not the same as the cost per hour spent with a client.

London multiplier 1.13 x (A to D);
1.25 x E Relative London costs are drawn from the same source as the base data for each cost element.

Non-London multiplier 0.93 x (A to D);
0.99 x E Allows for the lower costs associated with working outside London compared to the national average cost. Building Cost Information Service and Department of the Environment, Transport and the Regions.

Units costs available 1998/99

£18 per hour; £23 per hour of client-related work; £74 per child per week (includes A to E).

1 Local Government Management Board & Association of Directors of Social Service (1994) *Social Services Workforce Analysis, 1993*, LGMB & ADSS, London

2 Knapp, M., Bryson, D. & Lewis, J. (1984) *The comprehensive costing of child care: the Suffolk cohort study*, Discussion Paper 355, Personal Social Services Research Unit, University of Kent at Canterbury

3 Building Cost Information Service (1999) *Surveys of Tender Prices*, February, BCIS, London

4 Department of the Environment, Transport and the Regions (1999) *Housing and Construction Statistics 1987-97*, The Stationery Office, London. The appropriate inflator is provided by the DETR on request

5 Beecham, J. & Knapp, M. (1995) The costs of child care assessment, in R. Sinclair, L. Garnett & D. Berridge (eds) *Social Work Assessment with Adolescents*, National Children's Bureau, London

6 Tibbitt, J. & Martin, P. (1991) *The Allocation of 'Administration and Casework' Between Client Groups in Scottish Departments of Social Work*, CRU Papers, Scottish Office

Some general principles for estimating unit costs

Unit cost estimations can be made for many purposes, but certain principles will apply whatever the context.

- They should be inclusive
- They should tally with service use but be capable of aggregation
- They should reflect long-run marginal opportunity costs
- The data should be up-to-date.

Unit cost calculations should be inclusive

Unit cost calculations should include the financial implications of all the components of a service such as staffing, power and maintenance. There is also likely to be some support from the organisation providing it, such as management, payroll or administration. This is the gross total cost to the agency. Contributions from other agencies or budgets require attention too; a service may be jointly-funded by a health trust and a social services department or the user's family may pay a fee or charge.

Unit costs should tally with the way services are used ...

One child is unlikely to use the whole of a social work team for a whole week. A team will provide support for a group of children and each child may see one social worker for only an hour or two. Similarly, a young person will be one of several in a residential home or one of a group using a day nursery facility. So unit costs need to be sensitive to how people use services and specific to the activities each entails. Just as in-patient hospital care is measured in bed-days, so residential or foster care can be measured in resident-days (overnight stay) or resident-weeks. However, this so-called intensity measure is not appropriate for social work support; one hour or one contact between social worker and client is more sensible.

... but be capable of aggregation

For many purposes - particularly for an economic evaluation or for the children in need activity and expenditure collection - the estimation of unit costs is only a first step. While it is intuitively right to measure service use and costs for individual children, for of course this is how children are cared for by social services, the data often needs to be added together to make it easier to understand or to inform decision-making.

For example, for practice purposes, a series of case studies describing young people's care situation and the costs associated with the support they receive over time and from different services or agencies can highlight important issues. If data can be collected for a large enough group of young people (perhaps using Looking After Children materials or information collected on research questionnaires), it should be possible to explore the variation in their 'care package costs' and to examine the relationship between needs, activity in response to needs, costs and outcomes.

The **MARGINAL COST** is the addition to the total cost of a service needed to take account of each extra client.

An **OPPORTUNITY COST** is the value of the alternative use of the assets that have been tied up in the production of a service.

GROSS TOTAL COST includes all expenditure relating to a service activity, including employee costs and expenditure relating to premises, transport, supplies and services, third party payments, transfer payments, support services, overheads and capital charges (CIPFA, 2000 p6).

Netten et al., 1999, pg

One of the purposes of the CiN Data Collection is to shed light on how social services spend their money on all children they support, but aggregate costs data can as easily be constructed for particular groups of children and young people (by age, gender, need categories and the like). It may also be useful to examine the way funding is distributed by aggregating costs for each service-providing organisation, each 'mixed economy' sector, or for each locality.

Long-run 'marginal opportunity cost' principles should be considered

Deciding whether to take a short-term or long-term view is a crucial step when estimating costs. A 'marginal cost' is the cost of supporting one extra client and may be calculated from either perspective, but in health or social care contexts short-run estimations are rarely appropriate because they carry with them the implication that more people could always be supported using existing resources. In other words, a policy based on short-run costs would give the impression that however many extra children require support, the current set of services had the capacity to support them. Short-run marginal costs estimated for a day nursery would show the extra costs per child - perhaps only another bean bag, coat hook, proportionately more fruit juice and so on. But suppose the nursery is already nearly full; there must be a limit to how many 'extra' children can be squeezed in. An extra five or six would seriously compromise the quality of care and do lasting psychological harm to the staff.

Long-run marginal cost estimation recognises the financial implications of necessary expansion. Since we know more about the present than we do about the future, the convention is to approximate long-run marginal costs using short-run average costs that include all revenue elements as well as the costs of building and equipment (capital) and overheads such as management, personnel or administration.

Why add to the complications by considering 'opportunity costs'? Our need for cost information stems from the imperative to choose between alternatives. Resources are scarce: should we provide a new family centre or an enhanced support service for care leavers? Either way, we will have forgone the benefits (lost the opportunity) of the next best alternative. Choosing to have a new family centre will mean that younger children are better served, but also that there will be no improvement in care leavers' abilities to cope with their independence.

Thus, the opportunity cost will reflect the resource implications of opportunities forgone rather than of amounts spent. Estimating a unit cost for volunteers provides another good example. The costs to social services departments of using volunteer labour might include recruitment and training and on-going travel expenses. However, these payments do not recompense volunteers for the time they spend on care tasks, perhaps driving a mini-bus or escorting young people. The volunteers might also have given

MIXED ECONOMY refers to the balance between the public and independent sectors in service provision.

For further reading see Knapp, 1993 and Drummond, 1997.

up other activities such as paid employment or leisure - the benefits foregone by using their time as a volunteer. So the amount of money volunteers receive in expenses does not indicate the full, or social, value of their input.

For more discussion about VOLUNTEER COSTS, see Bebbington, 1993, p134).

Costs data should be as up-to-date as possible

Unit costs information should apply to the period in which the policy is to be implemented or the service used. Too much delay and services may change making the cost data less relevant.

INFLATION INDICES are a means of reflecting changes in prices over time.

Inflation indices are useful if the original information on which unit costs are based is only a year or so old but the correct index must be chosen, because service costs often rise at different rates. In 1997-98, for example, the annual increase for pay and prices in the hospital and community health services was 2.5 per cent, but at 1.7 per cent it was significantly lower for the personal social services.

See Netten et al., 1999, p137.

Top-down or bottom-up

There are two approaches to estimating unit costs: one known as top-down, the other as bottom-up. The top-down approach assembles all relevant expenditure and divides it by units of activity. The bottom-up approach identifies the different resources tied up in the delivery of the service and assigns a value to each. The sum of these values, linked appropriately to the unit of activity, is the unit cost of the service.

The top-down approach has the virtue of being relatively simple to apply, and has been adopted by the Audit Commission in the joint reviews with SSI as a useful starting point in discussions about the costs incurred by local authorities in the provision of services. It can be very helpful where units of activity can be consistently measured and allocated to expenditure, because changes in estimated costs can provide a helpful management tool in monitoring changes in performance or efficiency. However, particularly when making comparisons across different organisations, it may be difficult to ensure consistency of definitions or that all relevant expenditure is identified.

The value of the bottom-up approach lies in the fact that those applying it must grapple with the detail of every element of a service. Consequently, it encourages a good understanding of the services being costed and careful consideration of the relationship between patterns of work in an organisation and the way services are delivered. Bottom-up estimates are far less straightforward to produce than top-down costs, but once assembled are more versatile. They can be used to show where variations in cost are occurring and they can be adjusted to reflect planned or hypothesised change. Thus for most purposes a bottom-up approach to unit cost estimation is better.

The changing background

Most local authorities will be aware of the CIPFA 1983 accounting guidance in 'Accounting for Social Services'. New guidance has appeared only very recently in 'Best Value Accounting - Code of Practice' which applies to English and Welsh authorities from 1 April 2001, although its use is recommended from 1st April 2000. This book incorporates our best understanding of any changes arising between the two sets of guidance

Adapted from the editorial in Netten et al, 1998.

The costing model



Our costing model uses a building block approach of four stages:

- 1 **Describe** the ingredients of the service
- 2 **Identify** the activities and a unit of measurement
- 3 **Estimate** the cost implications of the service elements
- 4 **Calculate** the unit cost

See Allen and
Beecham, 1993.

In this section, each of the four stages is described and illustrated with examples based on the workings of a social services department family centre. More detailed information about how to estimate the cost implications is given in Part 2.

The model is not as easily applied as its simplicity on the page may suggest, particularly if it is to be used to estimate unit costs for the range of services used by children and young people or provided by a social services department.



DESCRIBE



IDENTIFY



ESTIMATE



CALCULATE

DESCRIBE

First, describe all the components of the service

IDENTIFY

Next, list everything the service does and identify a unit for measuring each activity

ESTIMATE

Next, work out how much has been spent on each service component

This is the difficult part. It is explained in Part 2 pp41-61

CALCULATE

Now, work out the total and the unit cost!



Clear description is an important starting point because it will help to ensure that a cost is included for every aspect of a service. You should list items such as the building used, the number, grade and working hours of staff in different professions and roles, as well as office services and food and travel arrangements. In the process, it should also be possible to identify what might be called hidden costs. Perhaps a minibus is shared by several facilities, or some expenses are paid directly by the social services department.

Expenditure accounts are an ideal basis for service cost estimations, but the variation between the organisation and accounting practices of local authorities or other providers means that different elements will be included under, or excluded from, 'cost centre' headings. It is therefore doubly important to describe the service in detail, so that the completeness of the financial data can be assessed. Have staffing costs been included for all of the care staff or management, clerical and domestic personnel who were working during the period under study? If a building is used, have all the relevant costs (revenue and capital) been included? Are mobile telephones used?

How to deal with the complexities surrounding the costs of management, administration and the like is explained in the next section.

Accurate description has the further advantage of bringing to light aspects of a service that appear to have no cost. Examples might be a psychiatrist attached to the service but paid for by the local NHS Trust, or the provision of a building rent-free to a voluntary sector organisation. Volunteers often appear to be a free resource, but over and above the costs of their training and expenses, there is an opportunity cost to the volunteer.

How you might DESCRIBE a family centre

The family centre occupies a purpose-designed two-storey building in Main Street, Turnhill, a county town in south-west England. Nine full-time care staff work on-site, plus a manager, two deputy managers, a cook, a cleaner and a caretaker. Clerical work is done on-site and a single computer is linked to and supported by the Social Services Department information technology section. Most maintenance and gardening are provided under contract through the department. A mini-bus and driver are shared about equally between the three social services facilities in the area. The department also pays telephone, gas and electricity bills and local rates but food is purchased through the centre's budget and cooked on the premises. Management support is provided from social services headquarters, as are recruitment, other personnel functions, and payroll. The education department provides a tutor and crèche workers for the adult education class. The local NHS Trust contributes one three hour session each month of psychiatrist and psychologist time; in the main it is devoted to assessing children but it also supports some staff training.

IDENTIFY



The aim here is to list everything that a service does and to decide upon a unit of measurement that will make it possible to calculate unit costs.

For some services, identifying a unit of measurement is a relatively simple matter. For example, young people usually stay in residential or foster care homes for a certain number of weeks and children usually attend day nurseries for a specific number of weekly sessions. Each will have a set number of places and there will often be a capacity indicator (100% capacity indicates there are no spare places). These are obvious examples of service outputs and provide a logical unit of measurement.

In other cases, facilities that appear to be one thing may actually be responsible for a range of activities: for example, a residential home may also undertake outreach work or provide day care for non-residents. Unless these other activities are carefully described and joint costs allocated to them, the 'per bed' cost of the residential home will look far more expensive than is actually the case.

For some facility-based services separating the strands will be more complicated still. For example, a recent study found that although some family centres provided only day care for children, others took referrals from social services and ran a number of open door activities. Their services included mother and child sessions, activity groups and vocational courses for adults, parenting support, child protection work, counselling, crèches, drop-in advice sessions and after-school activities. Session periods varied and involved a different staffing mix. Taking proper account of the range of work done by Family Centres may require a number of different units of measurement, one for each element.

See Hallam and Knapp, 1997.

How you might IDENTIFY the activities in a family centre

Turnhill family centre is open every weekday between 8am and 5pm, closing only on Bank Holidays and for statutory holidays such as Christmas or Easter. Health education and adult education classes are held once a week in the evening. Around 130 families are registered to use the service. The main activity is providing full-time day care (nine hours) for children under five. This aspect of the work runs at full capacity almost all the time, providing 36 places, five days a week. There is also an after-school club each weekday of school term, a young mothers' group and a parent and toddlers group (each for two sessions a week). A discussion group meets once a week, and a crèche is available four times a week; between five and ten parents/children attend each of these sessions. Altogether non-day care activities absorb just under a fifth of the available care-staff hours. In addition, there are three small sitting areas where parents can meet and chat together.

A similar challenge may be posed by peripatetic services, defined as those usually delivered by a single member of staff (who will often work as part of a team) to individual young people or groups of clients. Clients may be seen at an office or clinic but peripatetic staff will also travel to their homes or to other locations. Social workers are the most common example in child social care services and the most obvious unit of measurement is an hour of social work time. However, many other types of activity apart from face-to-face contact with clients contribute to their workload, for example contact with other professionals, the writing up of case notes, reviews and planning meetings, or travelling to appointments. Researchers Tibbitt and Martin (1991) found that 77 per cent of social workers' time was spent on these client-related activities but team meetings, training, or supervision and other indirect care activities must also be taken into account. Thus, productive work hours (that is, the hours that a member of staff is contracted to work) will often be a less appropriate measure than a unit - often called a contact or visit - adjusted to reflect time spent on all activities that support face-to-face contact.

It is as important to establish an accurate activity measure as it is to get the total cost figure right: they are the numerator and denominator of the unit cost calculation. Consistency is obviously vital if unit costs indicators are to be compared between local authorities, but the same applies to studies where support costs are to be calculated for individual children. It ought to be possible to assemble a picture of how much of which services each child uses over a given period, to calculate the unit costs and then to extrapolate the result to find the total cost of support.



This stage, described in detail on pp 52-61, is likely to be time-consuming, not least because of the common difficulty of obtaining service-specific financial information. Providers may be reluctant to explain how their budgets are spent: perhaps the child social care market is well developed and they have concerns about the commercial sensitivity of costs data, or questions of confidentiality may crop up in an evaluation of an innovative service or of one that has a high policy profile. In dealings of this sort, the value of talking things through with service managers and relevant finance officers at the outset cannot be overstressed; the more closely providing agencies are involved in the estimations, the more accurate will be the result.

In the illustration on the right, the asterisks* point to a common occurrence in bottom-up estimations. The costs associated with the psychiatrist and psychologist sessions were not included in the expenditure accounts for the centre, nor were the data available from the NHS Trust. A correction has been made by drawing in an estimate from another source; in this case figures have been taken from the annual compendium of nationally applicable unit costs data Unit Costs of Health and Social Care.

The table also illustrates how a service description provides an inventory for checking the completeness of the cost data. Similarly, if no service-specific financial data can be obtained, the description creates a framework on to which cost data from other sources can be attached, so building up a cost profile for the service. Other sources might include salary scales and National Insurance or Superannuation rates and new purchase information for capital goods.

The possibility that a local authority's financial systems may not be set up in a way that readily meets the needs of the exercise and may not be able to generate the data required gives a second reason for allowing plenty of time for this stage in the proceedings. In preparing this guide, personnel

ESTIMATE

See Netten et al., 1999.

How you might ESTIMATE the cost of running Turnhill family centre

<i>Service components</i>	<i>Information and source</i>	<i>Illustrative costs p.a.</i>
Building: location, size, equipment, furniture, fittings	Capital valuation (£350,000)	£23,000
Building-related expenses: power, rates	'Cost centre' or expenditure accounts	} £45,500
Maintenance, gardening		
Other service-related expenses: food, stationery, telephone	'Cost centre' or expenditure accounts	£17,000
Full staff complement: fte professions, grades, etc.	Salaries and on-costs Often available from 'cost centre' or expenditure accounts	} £288,000
Transport: minibus/driver		
		£3,500 £1,700
Ex-budget services: 12 psychiatry and psychology sessions	Information from NHS Trust	*£1,500, *£1,000
45 sessions for tutor and crèche workers	Information from LEA	£6,500
SSD 'overheads' such as finance and personnel, management, etc.	Obtain relevant figure from SSD finance department	£16,000

were consulted from the service development, management, information sections and, of course, the finance departments in six local authorities to ensure that the methodology could be used in all local authorities and would be understood by finance and non-finance personnel. The aim was to get a better idea of how to use the data generated by a range of finance and accounting systems so that indirect and overhead costs can be allocated or apportioned to service settings. The approach is explained on pages 56 and 57.

There is another reason to be aware of timing at this point. Costs data obtained from a service provider should be up-to-date, but this requirement may not fit well with a financial cycle in which indicative budgets are set for April to March and actual annual expenditure accounts not closed until the end of the financial year, often April or May. In most local authorities, cost centre accounting practices make the research task easier, because service managers are provided with monthly updates of a setting's expenditure against the budget. However, for other expenditure components, particularly those treated as internal recharges, the budget may differ considerably from the figures calculated at the end of the financial year.

Where debits take the form of payments or transfers within the social services department, they are described as INTERNAL RECHARGES.



Once all the financial information has been collected, it has to be adjusted to ensure that all the service elements have been included and that each component is treated appropriately. For example, the running costs associated with a setting (such as staff costs or utilities) are recurrent expenditure and are usually presented annually, but a building in which a service is located is usually intended to last longer than a year and so represents a long-term investment. However, the calculation of unit costs will be easier if long-term investments can be represented in a form commensurate with revenue costs, so allowing total costs to be described as a single amount. The convention for calculating the opportunity costs of capital provides one such solution. It assumes that the best alternative use of the capital in a building would be to invest it to earn interest over an equivalent lifetime, commonly 60 years. The opportunity cost of capital is therefore often calculated as the constant stream of cash payments, or annuity, that will deplete the lump sum over the lifetime of the building.

Suppose the land and the building under consideration was valued at £1million. Standard interest rate tables give the annuity generated by an investment of £1million at a 6 per cent rate of return to be £61,900. If an 8 per cent rate of return is used, the annuity is £80,800. In the illustration on page 25 the capital valuation for the property and equipment is estimated at £350,000, and the replacement cost of the mini-bus at about £30,000. The mini-bus is expected to last seven years. The figures in the third column represent the annual opportunity cost of these capital investments.

Like much else, information on capital costs may be presented in different ways by local authorities. For example, asset rentals are important in

Careful attention must be paid to the figures estimated by the local authority to ensure they adequately reflect opportunity costs.

An ANNUITY is the amount that a sum of money would earn each year if invested at a particular rate of interest.

CALCULATE

How you might CALCULATE total costs and unit costs for Turnhill family centre

It should be possible to allocate staff time accurately to each service component. Information is also available for the number of parents/children attending each session. Staff estimate that the day care service absorbs about 75% of all other resources, although only children in day care receive meals on-site. The crèche is available during parents' sessions but can be used by other registered families.

Total annual cost	£403,700
Cost allocated to day care services	£328,000
Cost allocated to other service components	£75,700
Day care	£37 per child per day (9 hours)
After-school club	£11 per child per session (1.5 hours)
Young mother's group	£8 per mother per session (2.5 hours)
Discussion group	£12 per attendance (2 hours)
Parent and toddler group	£6 per parent/child per session (1.5 hours)
Crèche	£4 per child per hour
Health education class	£6 per attendance (2 hours)
Adult education	£18 per attendance (2 hours)

ascertaining the total cost of services, such as residential provision, and so some estimate for internal local authority purposes is very desirable. But the reporting of this information on central returns varies according to context. Thus, the most recent CIPFA guidance on Best Value Accounting states that cost indicators for 1999-2000 will exclude capital charges, but that from 2000-2001 they will be included in the total cost calculation and the calculation of performance indicators. Asset rental charges are often estimated within local authorities and used to represent the annual cost of using a building. Loan charges show the cost of borrowing money that is invested, say, in a building. Depreciation figures are often given for items that diminish in value over their lifetime - for example furniture or computer equipment. Be careful to employ the most appropriate figure.

The final task is to make a careful amalgamation of the information from the two previous stages. The aim is to calculate a relevant unit cost for each service or activity within the service as the best estimation of the long-run marginal cost. This can be achieved by adjusting the total cost of the service to reflect the unit(s) of measurement identified (see pages 22 and 23). In the example, full-time day care is the main activity for which a per diem cost has been calculated. For other service components, unit costs are given for each session and the length of session is specified.

It is to be expected that children and young people supported by social services will use more than one service. To be able to assemble a total cost of support for each resident, their use of different services needs to be recorded, then a unit cost estimated for each service and the figure adjusted to reflect the frequency and duration of use by each young person. An illustration from an evaluation of assessment services is given below.

A 14-year-old was considered for admission to local authority care. She spent nine weeks in an assessment foster home followed by a placement in an SSD residential facility. She was pregnant and had not attended school for a year. During the subsequent three months she saw two successive social workers for an average of 40 minutes each week and also attended an Intermediate Treatment Centre. She saw a general practitioner and attended the hospital outpatient clinic.

A planning meeting was attended by the social worker, team leader, link officer for the assessment foster placement and the staff of the residential facility. The foster carers had prepared a report.

Using information on the frequency and duration with which these support services were used it was possible to estimate the total costs of care for this young person to be £696 (1990-91 prices) over the three month period. Fifty-seven per cent of these costs were absorbed by the accommodation placements. The local authority social services department funded 75% of the total amount.

Adapted from Beecham and Knapp (1995) The costs of child care assessment, in R. Sinclair, L. Garnett and D. Berridge, Social Work and Assessment with Adolescents, National Children's Bureau, London.

Some help from research

Two sizeable obstacles will always tend to work against the principles underpinning the cost estimation model - the scarcity of research resources, including researcher time, and the lack or inaccessibility of information. The desire to present results quickly within a limited budget can counteract efforts to achieve a 'perfect' unit cost and some compromises may be unavoidable. A few practical guidelines may make such difficulties easier to overcome.

The purpose of the research will determine the level of detail sought for each unit cost.

It would be impossible to compare the costs and outcomes of different family centres without considering what each centre provides and the use made of each component. From the data on total costs, a number of unit costs could be calculated and outcome information examined. However, suppose the research had a national policy perspective, perhaps comparing trends in social services expenditure on family centres. In those circumstances, a time-consuming detailed approach to cost estimation would be unnecessary.

The effort put into identifying cost differences within service types should depend on the estimated scale of those differences.

Another practical example will serve to illustrate the point. In the PSSRU Unit Costs of Health and Social Care Costs volumes where the aim is to estimate nationally-applicable unit costs, ten days sickness leave have been included in the calculations for social workers (see page 12). At such a broad level, these average data are sufficient and, unless an authority has an extraordinarily high rate of long-term sick leave among its social workers, any variations will have little impact on the final unit cost calculation.

By way of contrast, consider the salaries paid to qualified social workers. Data used in the unit cost estimation showed the average minimum salary to be only 60% of the average maximum paid in each authority. Differences in salary costs will have a big impact on social workers' unit costs.

Linked to this point,

the degree of effort expended in pursuing costs data should be in rough proportion to the contribution the data will make to meeting the objectives of the study.

Few providing or commissioning organisations will be enthusiastic about disclosing sensitive information of the kind required to estimate a unit cost. Moreover, collating financial and activity data can be time-consuming both for researchers and the relevant finance personnel.

It is a good idea, therefore, to decide at the outset whether such and such a component of the costs or a particular service is likely to make up a significant proportion of the total. The greater the likely proportion the greater should be the effort to achieve accuracy and vice versa. In child care

When estimating unit costs, the aim is for a truthful or valid representation, which is reliable in the sense that the measure used yields the same result wherever it is applied to similar data (Kirk and Miller, 1986, p.19).

research, placement costs warrant special attention since they are likely to account for a high proportion of the total ‘care package’ cost. Similarly, in an evaluation of an innovative or specialised service, such as foster care for troubled adolescents, particular attention should be paid to estimating foster care costs accurately, because they are a fundamental aspect of the research question.

Costs and economic evaluation

So far we have considered aspects of the methodology that underlies the estimation of unit costs. The model has proved useful in many health and social care contexts and has already informed the derivation of unit costs for at least three child care research projects. This section takes the analysis to a deeper level and suggests ways of measuring what at first glance might be thought unmeasurable.

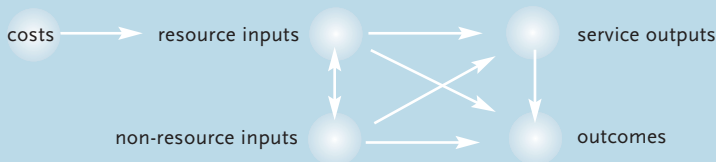
Beecham and Knapp, 1995; Beck, Beecham et al., 1999; Knapp et al., 1993.

As they have been described thus far, we might represent the cost linkages like this:



But we are not only interested in the service activity our money generates; we want it to have an impact also on the lives of children, young people and families. The aim is to improve their welfare - perhaps by raising the level of their educational achievement, reducing the impact of certain behaviour, bettering their health or the relationships between children and their parents. Diagrammatically we could represent that rather more human picture like this:

INPUTS are the resources (eg staff and capital) that provide children and families with services and support.
OUTCOMES are changes in health and welfare that occur as a result of or in the absence of services.
OUTPUTS refer to the level of activity generated by a service.



Such a representation is known as the production of welfare model and can be summarised this way. The resource inputs are the labour and buildings and equipment (capital) which comprise a child care service and can be summarised in monetary terms as costs. The intermediate outcomes or outputs can be measured as the level of provision, turnover, or volume of services produced. Non-resource inputs are less easy to measure but can help explain vital differences between ostensibly similar services. They may include the social features of the care environments and the characteristics, experiences, personalities and attitudes of the main players in the system - staff and users alike. The outcomes of the system are changes in the health and welfare of young people and their families. Maintaining a focus on individuals means we are less likely to forget that different young people will respond differently, even if they receive similar combinations of resource inputs.

Knapp, 1984, 1997

The production of a welfare model underpins much economic evaluative research. It can provide a structure, explain, justify and clarify why certain data are collected and certain analyses undertaken and it can help workers

to interpret results more sensibly. As the components are well defined, the links that can sensibly be made between them can also be indicated. For example, there is an obvious causal link between resource inputs (summarised by costs) and the final outcomes (or product) of the care system, but this relationship will be mediated by the intermediate outcomes and the different combinations of non-resource inputs.

The next diagram puts some flesh on the conceptual bones of the model. It depicts a young woman's care career and is taken from a recent evaluation of the Caldecott Community. Over a period of about 20 years, Siobhan Kelly and her family had help from a number of social care, health and education professionals. The living, family relationships, health and education notes on the diagram show that as well as receiving support from her family, she spent time away from her home, attended mainstream and special schools, was admitted to hospital and received support from social workers and psychiatric staff. The resource inputs of this support package can all be summarised in terms of costs, but each element under the 'living' dimension, for example - children's home, therapeutic community or foster home - will represent a different combination of staff and capital (buildings and equipment). Moreover, the blend of staff skills, the range of their experience and the policies and practices within establishments will also vary, not only between different types of service (children's home or therapeutic community, for example) but also within types. Three recent research studies have developed methods for assessing the structural and cultural aspects of residential homes (Berridge and Brodie, 1998; Brown et al., 1998; Sinclair and Gibbs, 1998).

Other non-resource inputs relate to the young people themselves - to their own characteristics, skills and needs. We know from the diagram that Siobhan is able to maintain some family and peer relationships and her story gives clear insight into her thoughts and actions over a four-year period. An equivalent standardised method for recording information on a young person's characteristics is provided by the Looking After Children materials and by the Strengths and Difficulties Questionnaire (Goodman, 1997).

Finally, one might consider the outcomes of Siobhan's care career, which are briefly noted as an improvement in behaviour and success in obtaining a place at University. These outcomes are in part attributable to the combination of support she received which in turn can be summarised as a cost. Repeated use of, say, the Looking After Children assessments would give standardised measures of outcome across a number of domains.

Combining cost and outcome information is a fiendishly complicated business even so. Economics brings to the rescue a choice of five modes of analysis and evaluation. They are described on page 34.

In a research context, information about an individual's service use might be captured on a schedule such as the Client Service Receipt Inventory (Beecham and Knapp, 1992) which allows standardised measures to be recorded for easier conversion to costs.

See Department of Health Social Care Group (1999) for a useful list of assessment schedules and their purposes.

Siobhan Kelly spent more of her early years in residential care than most young people. But, important as it may have been, it took up a small proportion of her life: she slept for fewer than a quarter of her nights up to the age of 20 in a residential bed and much of what contributed to a successful care career outcome (her behaviour improved and she eventually gained a place at university) was attributable to other agencies, such as education and health, and to other placements, including foster care.

Little, M. and Kelly, S. (1995), *A Life Without Problems? The achievements of a therapeutic community*, Arena, Aldershot.

age	living	family relationship	social behaviour	health	education
	hospital with mum and dad residence				
5	with dad and stepmum with mum and stepdad residence	contact with dad and oldest brother ceases	friends mainly from home area		primary school special education support
10	with mum foster home with mum and stepdad children's home	social work and psychiatric support for mother and brother separated from younger brother	friends mainly from residence		secondary school
15	therapeutic community foster home foster home foster home	intermittent contact with home regular contact with home	friends mainly from school	hospital overdoses hospital	educated in therapeutic community mainstream school
20	own home and foster home		friends mainly from university		university

Five ways to measure outcomes

Source: Drummond et al, 1997; Knapp and Lowin, 1998.

COST MINIMISATION	No measurement of outcomes as such: the consequences of an intervention or service are assumed or shown to be equivalent so the focus is on relative costs.
COST EFFECTIVENESS	Outcomes are measured in natural units. One outcome is considered dominant (life-years gained would be a health care example) and cost ratios or a cost per outcome, can be estimated.
COST CONSEQUENCES	Outcomes are measured in natural units but the multi-dimensional outcomes that are often the product of child care services can be retained, for example the LAC dimensions. Analysis often takes a multivariate form.
COST UTILITY	Outcomes are assessed as personal preferences for different health states (utility). Quality-adjusted life-years (QALYs) are the best known. A cost per QALY can be calculated as the cost of consuming health care resources to improve utility. This field is not well developed in social care (see Chisholm and Healey, 1999 for a discussion of cost-utility analysis in relation to mental health care.)
COST BENEFIT	Both costs and benefits (outcomes) are valued in the same unit so they can be compared. Commonly a monetary unit is chosen. Monetary and non-monetary benefits are often identified to get around the difficulties of trying to put a monetary value on, say, reduction in truancy or improvements in behaviour bringing the evaluation closer to a cost-consequences analysis.

The Quality Adjusted Life Year (QALY) combines data on the total life years gained from a treatment or other intervention with data on the utility (or value) of health states for those life years, to give a single measure of achievement or output.

In each type of approach, costs should be measured comprehensively to include all components of support. The example of Siobhan's care career shows how important it is to work across conventional provider boundaries and include public sector health, education and social care services as well as services provided by the independent and informal sectors. The five approaches are distinguished from one another by their treatment of outcome measures. Most cost-related evaluations in the child care field are

likely to be of the cost-consequences type so that a wide range of child and family outcomes can be included in the findings.

However, as one commentator has pointed out (Yates, 1994), researchers need to go beyond a tabular comparison of costs and outcomes to the point where it becomes possible to measure, discover and quantify the strength of the relationships among resources consumed, treatment procedures funded, psychological and biological processes engendered by those procedures, and interim and long-term outcomes produced.

The skill to bring these complex analyses together is not quite to hand, but there is already a small body of research that begins to show the way. The costs and cost-effectiveness component of two such studies is summarised below and a review of evaluations in children's mental health care is outlined.

Three useful research studies

Cost-effectiveness analysis of a home-based social work intervention for children and adolescents who have deliberately poisoned themselves

Byford, S., Harrington, R., Torgeson, R., Kerfoot, M., Dyer, E., Harrington, V., Woodham, A., Gill, J. and McNiven, F. (1999) *British Journal of Psychiatry*, 174, 56-62.

This study included children aged 16 or under who had been referred to child mental health teams with a diagnosis of self-poisoning. Each was randomly allocated to receive either routine care (n=75) or routine care plus a social work intervention (n=74). Two psychiatric social workers provided the home-based intervention which comprised an assessment and four intensive family-centred sessions. Clinical and resource use data were collected over the six months from the date of entry. Cost measures included hospital services, specialist mental health services, primary and community health services, social work, residential or foster care services, and school-based services. Services provided by voluntary organisations were listed but costs were not estimated.

No difference between the control and intervention groups could be found on the primary outcome measures (Suicide Ideation Questionnaire, Hopelessness Scale, and Family Assessment Device) but parents of those receiving the additional social work support were more satisfied than the control group. To overcome the common problems of non-normal distribution, natural logarithmic transformations of total costs were used. (Statistical estimation procedures such as boot-straping are currently recommended.) Across all services except the social work intervention, costs were 25 per cent lower for the intervention group (means, £1177 and £1751, $p=0.044$). This suggests that the social work intervention reduced the demand for, or supply of, other available resources. Indeed, relative to the intervention group, those in the control group attended approximately 50 per cent more out-patient appointments, spent more than double the time in local authority care and made much more use of school nurses, educational welfare officers,

BOOT-STRAPPING is a statistical technique for comparing mean costs or checking comparative cost analyses, without making any assumptions about the cost distribution.

A statistical expression of the probability of a certain outcome arising by chance: a p value of less than 1 in 20 ($p<0.05$) is said to be statistically significant.

NATURAL LOGARITHMIC TRANSFORMATIONS refer to another statistical technique that corrects skewness in the distribution of a variable.

social workers and voluntary services. When the costs of the intervention were included, the difference became insignificant. As neither the total costs nor outcomes were markedly different, the intervention was found to be as cost-effective as routine care alone. However, since greater parental satisfaction resulted from routine care plus the social work intervention at no extra cost, it could be considered more cost-effective than routine care.

The costs of child care assessment

Beecham, J. and Knapp, M. (1995) in *Social Work Assessments with Adolescents*, R. Sinclair, L. Garnett and D. Berridge, National Children's Bureau, London.

This research was conducted between 1991 and 1994 alongside a prospective study of the roles played by different models of assessment in social work decision-making with young people and their families. It was based in one London local authority social services department where, in addition to routine social work assessments, a specialist assessment service had been developed.

Participants were 12 or older and followed-up a year after entry to the study. Information was collected on the young person's characteristics, the assessment process, social worker views, the implementation of plans and changes in circumstances (such as family contact, health, social skills, and behaviour). Data were also collected on the services received during the assessment period and one year later, and the associated costs estimated.

Total costs over the assessment period were found to vary by a factor of 23. The location of assessment accounted for about two-thirds of the costs, so long stays in specialist residential homes pushed up total costs considerably. Needless to say, it tended to be the more complex cases who received the more expensive forms of support. Multivariate analyses confirmed associations between the costs of assessment and the needs and characteristics of young people. Behaviour problems, suicide or self injury attempts, the presence of stress factors in the home environment and whether the young person had offended were all associated with higher assessment costs.

As a result of a good assessment, a package of care should be put in place that will improve a young person's welfare. To test this assumption a further set of multivariate analyses was undertaken using data from the follow-up interviews. Higher assessment costs were found to be associated with deteriorating behaviour but also with meeting young people's needs and an improvement in their emotional state during the post-assessment period. The sample sizes are small for this type of analysis (75 young people during the assessment period and 53 at the follow-up interviews) but the findings indicated that assessment packages were being individually tailored and that higher initial investment was contributing to positive outcomes.

Economic evaluations and interventions for children and adolescents with mental health problems

Knapp, M. (1997) *Journal of Clinical Psychology and Psychiatry*, 38, 1, 3-15.

Economic evaluations of interventions for children and adolescents with mental health problems are comparatively rare, although the growing need for them is now quite widely recognised. Economic evaluations can help to inform the difficult decisions about allocation of scarce treatment services and other resources between competing needs or uses. Moreover, the economic consequences of childhood and adolescent mental disorders are many and often long-term - 'not only their and their families' continued suffering but also a continuing spiral of child abuse, juvenile crime, family breakdown and adult mental illness, all of which can lead to more child and adolescent mental health problems'.

Health Advisory
Service, 1995

In describing the underlying needs for economic evaluations, the review identifies latent and expressed demand for such work. Latent demands include the growing prevalence of childhood mental health problems, wider economic pressures, and social and family expectations. More overt demands come from concerns about user and purchaser value for money, policy development and monitoring, service delivery and practice, and the need for public sector accountability.

The available evidence is summarised under five broad questions: What treatment should be provided? When should treatment be provided? Where, to whom, and how should treatment be provided? In each of these areas the supply of economic evaluations is found to fall some distance short of demand so this review also considers how to take forward economic evaluations with reference to some of the particular issues that childhood mental health problems raise: the multi-agency nature of many intervention packages; the persistence of many disorders over long periods; and the importance of effects on parents, later generations, and wider society. But it is not just the breadth of topics that requires attention. As a discipline or a set of techniques, economic evaluation must also develop to be able to address these concerns. Developments must include refinements to service use instrumentation and improved techniques for valuing and extrapolating costs and outcomes over time. More and better collection and analysis of data on the indirect costs of treatment and support, such as lost employment and family burden, are required and a better understanding of the impacts of services on individual health and quality of life and the links between costs, needs and outcomes.

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A general application for estimating unit costs

This part of the guide provides practical guidance on completing the ESTIMATING stage in the general model described in the previous section. The aim, remember, is to assess the cost to social services departments of a particular service setting. As described here, the approach is more complicated than the version to be found in the closing part of the guide, which has been designed rather as a halfway house to generate comparable data in year 1 of the CiN Collection in 2000. Depending on whether the reader is more used to the language of accounting or service management, one or other aspect of the guidelines may seem glaringly obvious. Nevertheless, used in combination they have the unusual potential to enable all local authorities to disburse expenditure and estimate unit costs using the same methods. This should mean that over the next year or two a national picture can be assembled that permits meaningful comparisons between local authorities. It is also possible that in the process the work will create a new area of common ground between professional groups.

The guidelines are not prescriptive and they cannot be finely detailed because it is still rare to find two social services departments that are organised in quite the same way or whose in-house finance systems can be analysed using exactly the same criteria. Some have externalised all their children's services, acting almost solely as a commissioning agency; others retain responsibility in-house for most services. In some authorities, payroll support is provided centrally for all; in others it is devolved to individual departments.

Similar complexities can be found in finance and accounting systems. Guidelines published by the Chartered Institute of Public Finance and Accountancy (CIPFA) in 1983 and 2000 and the RO3 requirements dominate accounting frameworks but they permit considerable flexibility in implementation. Some authorities already have fully devolved financial management systems in which all costs are allocated or apportioned to the point of care delivery. Others operate Service Level Agreements or Recharges at different levels of the organisation and some keep only basic information sufficient to satisfy CIPFA or RO3 reporting requirements.

Such diversity has been one of the main influences on the design of this general application. Organisational factors and the structure of an accounting system can have a big impact on the way unit costs are estimated and therefore, on the final result, but if sensible questions are to be raised about the variation in expenditure on children, local inconsistencies must be resolved. Unit costs for services lie at the heart of the many recent child care policy initiatives, just as they do in other areas, such as the Referrals, Assessments and Packages of Care, (the RAP project), in adult services and the unit cost indicators in the Performance Assessment Framework.

RO3 refers to a set of activity and finance data required from local authorities by the Department of the Environment, Transport and the Regions.

A SERVICE LEVEL AGREEMENT is a formal agreement that one part of an authority will supply certain services to another (or with another agency), usually underpinned by a transfer of resources.

A RECHARGE is a mechanism by which payments or transfers are made between different parts of a local authority to cover for activities undertaken under contract or service level agreements.

A second influence is the belief that both service managers and finance personnel should have a hand in estimating unit costs. Managers know about services; finance personnel know how the finance system operates and how money flows inside an organisation. The results will be much more accurate and informative if the two sets of knowledge can be combined. So these guidelines first describe a framework of levels in which the various functions of the organisation can be located. This naming of parts will help managers understand the relationship between the services for which they are responsible and other functions of the local authority. The framework is also tied into the categories of expenditure defined by CIPFA so should enable finance personnel to superimpose a picture of the way money flows between various sections of the local authority and how expenditure is devolved.

The steps are illustrated with the 'service-and-finance' profile of an imaginary, but reasonably typical local authority Children and Families section.

Once the functions and the associated expenditure at each level have been identified, it ought to be easier to apportion and allocate them to the appropriate service settings. A template is provided for the purpose on page 58. Most local authorities have some form of cost centre accounting at the base of their finance systems - albeit that its scope may vary slightly. To the full direct costs (Level 1) can then be added expenditure at other levels.

The term **DIRECT COSTS** refers to expenditure on resources directly associated with service delivery.

At the outset, three key issues to do with the scale and purpose of the work ought to be resolved.

1 Which items of expenditure are to be included?

This refers to the scope of the cost estimate and is important for comparisons nationally. All local authorities must include the same items of expenditure for each service setting.

2 Which mechanisms are to be used to allocate or apportion expenditure?

This relates to the accuracy of the estimation of the share of local authority resources attributable to each service setting. Mechanisms that allow more accuracy may be important within local authorities - for example, the way findings from the CiN Collection are used to inform local service planning.

3 What measure of activity (output) will be used for each type of service?

Using the most appropriate activity measure for each service is as important as obtaining an accurate cost figure. Examples are given below and in the CiN Collection guidance set out in Part 3.

Describing the shape of your local authority: the five levels

Whether from the perspective of those who manage care delivery services or who work with accounting data, it is sometimes difficult to understand how different parts of a social services department and a local authority fit together or to grasp the relevance of support they offer one another. Because local authorities differ, unit costs work starts with an examination of the organisational structure and of how various necessary functions are carried out.

In all local and unitary authorities the range of Level 1 settings is likely to be similar, but the balance between them will vary, as will the balance between in-house and commissioned provision.

At Level 2 the profile will be slightly different for each local or unitary authority: similar functions will be found but with different names or differing responsibilities.

Beyond Level 3, there could be considerable variation between authorities in how functions are organised and where they are located. Where information about their contribution to the Children and Families division is not routinely available, a description based on the five levels is an important starting point for unravelling the scope and division of functions and their associated costs.

The broad outline of five levels of functions used here has been derived from discussions with personnel in seven local authorities participating in the 1998 CiN Collection pilot.

The five levels

How one local authority children and families' section separated the strands

Level 1 Service settings

This level concerns the resources required at the point of service delivery and the expenditure most obviously associated with it. Examples would be the staff working in a particular service setting (facility or team), office expenditure or capital and revenue property expenses. They are often called direct costs and some or all are contained within a cost centre accounting framework. Under this heading, certain grants, allowances or costs may be identifiable for individual children and young people, such as foster care allowances, external service contracts or S.17 payments.

Level 1 service settings are in-house residential and foster homes, externally provided (commissioned) residential and foster placements, family support teams, day nurseries, family centres, the hospital-based child care team, and the children with disabilities team. The care managers and social work teams (including intake and assessment) are divided into the East and West districts. During the Children in Need pilot, activity data were collected from all these service settings and so a unit cost was required for each.

Level 2 Management and specialist support within the children and families division

Identification of support at this level depends crucially on how the local authority is organised. It is likely to include items of expenditure that are associated with providing management and support for children's services but have a separate accounting identity from the service settings and often a separate office location. Examples might be area or group managers/teams, or Assistant Directors for (sections of) children and family services. Some local authorities have developed Commissioning Teams for children and family services. Specialist support should also be considered at this level. Specialist teams may provide support for all or some service settings. Examples given by the local authorities participating in the Children in Need pilot were the GALRO Service, Child Protection Teams, and the Emergency Duty Team which provides an assessment and referral service for all children and family services.

Level 2 support is provided in a number of ways.

- The Family Conference Team supports all Level 1 services.
- The Child Protection Team provides support for the district care managers and social work teams.
- The Foster Care Team provides support to foster carers and is also responsible for finding placements and for recruiting and training new foster carers.
- There are two Principal Officers based at the headquarters. They are responsible either for the assessment services (district teams and out-of-borough placements) or the provider units (residential homes, foster placements, nurseries, other teams, and family centres).
- One Assistant Director provides support for all Level 1 and Level 2 settings and services.

Level 3 Social services department

The functions of a social services department extend beyond providing child care services. Commonly, and at the most basic level, children's and adult services are separately identifiable divisions. Other sections may support all assessment/referral and provision activities – perhaps a service development team or a dedicated finances team or the Director of Social Services' office.

At Level 3, the personnel and finance departments each have a social services base. Staff are located in the head office and support both adult and children's sections.

Level 4 The local authority

A local authority comprises a number of departments (Education, Leisure, Social Services, etc.) for which the overarching organisation provides some support services. Expenditure on these services is often devolved by 'recharges' that are cascaded through one or more levels. Examples of such expenditure heads might be insurance (employee's liability and buildings), IT support, the Borough Treasurer and Finance Department, and the Chief Executive's Office (policy and planning).

All other functions are located at Level 4, serving several departments. They are grouped into Building Resources, Building Services and Administrative Support. The Borough Treasurer sets Service Level Agreements (SLAs) for each group in order to identify activities and to devolve costs to the various departments.

Level 5 Democracy costs

The costs of democracy can be identified. They include expenditure associated with council meetings, salaries of mayors, certain overarching accounting functions, local elections and the like. In CIPFA terminology, they are corporate costs and cover activities local authorities engage in specifically because they are elected and often multi-purpose authorities. These costs are not usually devolved to LA departments or to individual services.

Many Strategic Management Services are included within Service Level Agreements. They include complaints, publicity and the social services directorate. In this authority costs are devolved to the social services department (Level 3).

REVENUE SPEND is usually an annual figure representing the year-on-year costs of providing a service.
CAPITAL SPEND refers to expenditure on items that are likely to last more than a year, such as buildings, furniture or equipment.
SECTION 17 payments are made under certain conditions set out in the Children Act, 1989, to support children coming to the attention of social services departments.

The five levels



CIPFA accounting guidelines

Once the shape of the local authority has been broadly identified, financial information can be superimposed to produce accurate service-specific unit costs. The methodology and the application described here build on a framework based on CIPFA guidelines used widely by local authorities, which has recently been updated (see pp 16 and 43). The framework suggests the following broad categorisation of costs for social services. The colours give a rough indication - only that! - of how the framework and the five Levels described in this part of the guide relate to each other.

Division of service	Sub-division of service	
Allocation of costs mandatory	Allocation of costs recommended	
Children Looked After	Assessment and care management (A&CM), residential, family placements	
Children in Need	A&CM, day centres (drop-in), day nurseries, residential	
Young offenders	A&CM, secure accommodation, youth offender teams, other offender services	
Other Children and Families services	A&CM, adoption services, preventative and support service, support for carers, support for children formerly looked after, services to children under 8, other children's services (such as mother and baby homes and counselling services)	
	Some assessment and care management functions Some management and transport costs	
Support Service and Management Costs (ssmc)	Management Training Personnel Information technology Finance (inc. internal audit) Quality assurance (inc. service complaints system) Central advisory, policy and development units Administration	Transport Catering Legal services Property services
Services Strategy	Director of Social Services' office (inc. strategic liaison with outside bodies, research, development) Inspection and regulation (arm's length and in-house unit) <small>This sub division will be reconsidered in April 2002</small>	
Corporate Democratic Core	Democratic representation and management (inc. statutory committees, local elections, mayoral expenses) Corporate management (inc. strategic budget issues, statutory complaints procedure, activity and staffing reports, external audit and inspections)	

The framework outlined in the new Best Value Accounting Code of Practice is described on the facing page (CIPFA, 2000). It has the effect of further dividing the old children and families service division into the four areas shown in the diagram. The new SSMC category covers a set of activities very similar to those previously encompassed by Social Services Management and Support Services and these costs must now be allocated or apportioned to the four client-related service divisions. The Service Strategy and Regulation category is replaced by Service Strategy and is more narrowly defined to include only two sub divisions, instead of the set previously indicated. Finally, the Corporate Democratic Core category has been broadened and clearer definitions developed to permit greater flexibility of organisational arrangements. They now specifically include external audit and inspection and treasury management. The new code is described as 'dynamic' with the capacity to develop as the impact and demands of best value initiatives become plainer.

The new Code of Practice refers to a similar grouping, SSMC - Support Services and Management Costs.

Matching the service and finance profiles

Frameworks of this kind tend to be designed with formal year end financial reporting in mind. On the positive side, CIPFA recommends charging or apportioning all support services' costs and service strategy costs to the social services department but not the costs of the corporate democratic core or of other unapportionable overheads. So all the costs absorbed by the social services department should be allocated or apportioned at least to departmental level (Level 3).

Where the expenditure debited to a budget heading is based on a factual consideration, such as workload measurement, it is usual to describe it as an ALLOCATION. Where the expenditure is debited to a number of budget heads, but there is no similar factual basis for deciding how the expenditure should be shared, it is usual to speak of APPORTIONMENT, for example in proportion to expenditure on staff.

However, the attempt to improve estimations of service-specific units costs brings other difficulties. First is the need to be specific about the costs of each service. It is not enough to sum the costs of all services that appear to have a similar function or serve the same client group into such broad categories. A much greater degree of disaggregation is needed. Even the 'average' cost of residential care, for example, will hide considerable variation between different facilities and placements.

Second, the costs of Management and Support Services must be allocated or apportioned through the Children and Families section or new service divisions to each service setting. Some local authorities already do this in their routine reporting. Elsewhere work will be needed to ensure that all required components have been included.

The personnel from seven of the social services departments who helped to pilot the CiN Collection in 1999 described how they would use the data from their current accounting system to calculate unit costs. All but one had cost-centre accounting in place through which at least staffing costs could be identified for each service setting at Level 1. Two had fully disaggregated systems in place by which the total expenditure was allocated to sections of the department using continuous or intermittent workload surveys for functions located at Level 3 and 4. Service Level Agreements were

in place in one authority allowing expenditure to be tracked through to the Children and Families section; in another, recharges for different divisions within the social services department could not be separately identified.

Costs at the higher levels need to be added in some way to the direct Level 1 costs of services at the point of their delivery. How this is done requires some method of allocation and apportionment. If it is clear that a known cost can be added to the Level 1 costs then this is a simple process of allocation. If higher level costs have to be divided across several service outlets without there being a precise and direct relationship, then these costs have to be apportioned according to a sensible formula or convention.

It may be most appropriate to divide the costs evenly between Level 1 service settings. It may be more appropriate to divide the cost between the service settings in proportion to the numbers of staff in each setting. In yet a third case it may be best to divide the costs in proportion to the direct costs of the service settings. Without knowing the circumstances, it is not possible to say when one or other of these methods - or yet some other method - should be preferred. The choice has to be determined by the available data and the cost category in question.

CIPFA recognise that the basis of apportionment for any cost element should be selected with reference to the items that drive the costs – and this rule will be useful when considering apportionment of management and support services costs to service settings. For instance, if one looks at the work of a payroll office, more employees will mean more pay packets, and more pay packets will mean more work. It is true to say, therefore, that the proportionate number of staff in each office or department will ‘drive’ the size of its share of the payroll costs.

A template for unit costs

The five levels help to identify the functions undertaken by departments and their organisational links to the service settings. Adding expenditure to each function from the data generated by the accounting system will give a baseline of information required for unit costs. The next table indicates the items to be included to arrive at a total cost per year and per week for any service and how to calculate the unit cost.

	£
Cost estimation activity for each service delivery setting Code and/or address for the service setting	
Describe the inputs (staff etc.) associated with the service setting Estimate the direct costs for Level 1* (staffing + service-related + premises + building)	
Describe Level 2 inputs (time, activities, etc) to the service setting Estimate these indirect costs Specialist support (e.g. placement finding team) General support (e.g. c&f assistant director's office)	
Describe Level 3 inputs to this service setting Estimate the costs of these overheads	
Describe Level 4 inputs to this service setting Estimate the costs of these overheads	
Sum of the above costs = TOTAL SSD COST PER YEAR	
Divide total cost by number of weeks service is available	
Calculate the average TOTAL COST PER WEEK	
Identify the total number of activity units per week	
Divide weekly cost by no. activity units per week to calculate the COST PER ACTIVITY UNIT This is the UNIT COST	

* For externally purchased services or for foster care placements instead of identifying the direct costs, the contract price or allowance is used. Look carefully at what is included in the contract price paid for externally purchased services so that relevant social services expenditure is also included in the unit cost. This will allow appropriate comparisons between provider sectors.

The five levels

Direct costs for Level 1 service delivery settings

Level 1 Service settings

Level 2 Management and specialist support within the children and families division

Level 3 Social services department

Level 4 The local authority

Level 5 Democracy costs

Carefully describing each service setting for which a unit cost is to be estimated should make it easier to identify its component parts; data from the accounting system can then be used to attach a cost to each one. Service settings are often identified as cost centres, but the scope of cost components considered 'controllable' in accountancy terms may vary between local authorities, so take care that all the elements described are included. CIPFA terminology is used throughout the illustrations.

Salary, NI, superan., and allowances for on-site WTE staff complement	On-site service-related expenses
Management	Food
Operational/care	Travel and transport (staff and clients)
Administration/clerical	Expenses (staff and clients)
Catering	Communications/computing
Cleaners	Cleaning, gardening, etc.
Grounds, maintenance, etc.	Miscellaneous
	Printing, stationery, general office expenses
Premises' costs	Building (capital) costs
Energy	Asset rental or capital charges
Rates (eg. water)	(representing the setting's share of the annual value of capital investment)
Maintenance/repairs	

See the discussion of CAPITAL COSTS on pp 26 and 27.

Of course, if they are not used for delivering services some of these elements may be zero: home care workers, for example, rarely have an office or team base so it is unlikely that premises' or building costs will be associated with their service. However, setting out a complete list of possibilities makes it easier to ensure that no component is left out or, for that matter, let in by mistake.

For foster care services, direct costs can be estimated in terms of the total expenditure on allowances paid to foster carers, including items such as special needs or clothing allowances.

For commissioned services, the direct costs are included in the contract price charged by the provider units. However, for independent sector providers this charge is likely also to include the costs of managing the service, payroll and personnel activities.

The five levels

Level 1 Service settings

Level 2 Management and specialist support within the children and families division

Level 3 Social services department

Level 4 The local authority

Level 5 Democracy costs

The costs of Level 2 support for service settings

Having identified the Level 2 (specialist and general) support services in the Children and Families section and, where necessary, described each one, costs can be attached to each component as before. Two new notes of caution must be struck. First, some disaggregation of the Management and Support Services costs may be required. For example, where the specialist team or service management offices are located in the social services headquarters or area offices, expenditure associated with administrative support, premises and buildings may be included in the overarching ssmc (Support Services and Management Costs), previously ssmss category. Second, make sure that the costs at Level 2 are apportioned or allocated only to the service delivery settings that they support.

Level 2 support may be provided in a number of ways. Here are four examples from the demonstration authority.

The Child Protection Team provides input to children supported by all district-based care managers and social work teams.

If the costs of this Child Protection Team cannot be allocated to particular children then they should be allocated only to the district-based care managers and social work teams who support the children in proportion to the number of professionals in each team.

A Foster Care Team provides support to existing foster carers and is also responsible for finding placements and for recruiting and training new foster carers.

Foster care daily allowances and some other expenditure items are usually identifiable for specific placements. Once these client-related costs have been allocated, the remainder should be shared equally between existing foster care places.

The two principal officers supported by a small administration team and based at social services head office are responsible for the assessment services and the provider units.

These principal officer and administration costs should be allocated to the services for which each principal officer is responsible. In this example one principal officer is responsible for the assessment services including care managers, district teams and out-of-borough placements. If no workload or other activity-based measure is available to describe how the principal officer spends his or her time, the costs can be allocated to the service settings in proportion to the annual direct costs for each team (see above) and the total annual expenditure on contracts for all out-of-borough placements (later to be apportioned between all placements).

The second principal officer's responsibilities include residential homes, foster placements, nurseries, other teams, and family centres. Again in the absence of any other workload or activity-based measure, the costs associated with the principal officer should be allocated to the service settings using the following data: direct costs for each residential home; total expenditure on all foster care allowances (to be divided by the number of foster placements); direct costs of teams; direct costs of family centres.

One Assistant Director provides support for all Children and Families settings and services.

The costs associated with this Assistant Director should be shared between all Level 1 and Level 2 services. If no workload or other activity-based measure is available, the costs can be allocated pro rata on the annual direct costs of each element of the Children and Families section.

The five levels

Level 1 Service settings

Level 2 Management and specialist support within the children and families division

Level 3 Social services department

Level 4 The local authority

Level 5 Democracy costs

The costs for activities undertaken at Levels 3 and 4

The diagram on page 48 identifies a number of functions which, albeit at a distance, support service delivery settings. Examples are the finance department (paying salaries or raising invoices) and the personnel department (recruiting staff). These functions can be provided in different ways even within the same local authority. In many cases, some or all will be contracted out.

In the case of the social service departments that took part in the CiN Collection pilot in 1999 some or all of these functions were provided by

- staff dedicated to Children and Families' services (Level 2)
- staff located at social services headquarters who served all social services divisions (Level 3), or
- central, authority-wide units serving all departments within the local authority (Level 4).

The costs associated with these functions will commonly be found at an aggregate level in the Support Services and Management category of costs, as defined by CIPFA and to be used in the statutory RO3 returns. The distinction between Levels 3 and 4 is rather important. For functions located at Level 3, say, finance in our demonstration authority, the ssmc/ssmss allocation is likely to reflect the service provided. For functions located at Level 4, the relationship between the ssmc/ssmss allocation and actual activities may be less clear - perhaps as a recharge of a certain proportion of costs. The reasons for such apportionments need to be understood and agreed by managers and finance people alike. Alas, more complications arise when one considers the extent to which these costs are attributed either to the division of social services or to sub-divisions (see page 48). It is difficult to predict the level to which these costs are already apportioned - or how, but for the sake of consistency any disaggregation to sub-divisions is best disregarded. This is because costs are being sought for individual service settings rather than for any groups of services suggested by the divisions or even the sub-divisions.

Once the allocation to the social services department is understood and agreed, take care that the scope of each cost allocation is in keeping with the functions undertaken for Children and Families. For example, it is likely that fewer services for children and families than for adults will be provided externally so Adult Services ought to bear a greater proportion of the costs of contract negotiation. However, it is also likely that the Children and Families section will receive more support from the Legal Department, particularly if the GALRO service and its associated costs are located there, and so it should bear proportionately more of these costs.

Finance personnel in one department that took part in the Children in Need pilot exercise used the following measures to estimate the share of the ssmc costs to be apportioned to the Children and Families and Adult Services; they were generally regarded as providing a useful starting point given the demands for greater refinement and accuracy:

- employee liability insurance: by relative number of staff
- buildings insurance: number/size of buildings
- property consultancy service and engineering: capital value of buildings
- asset rental: already identified by building so charged directly to cost centres
- provision and maintenance of the central phone service and information technology: relative numbers of phones or computers
- Director of Social Services Department's office: the proportionate value of the budgets of the divisions
- finance: costs of dedicated children and families' accountancy staff
- invoicing: relative number of invoices raised and paid
- payroll office: relative number of staff employed in each division
- legal service: estimated by the service as 2:1 split with the greater part apportioned to children and families
- administration building costs: based on an earlier exercise identifying square footage by section.

The headings used here will not necessarily match the groupings used in every local authority. However, be careful to cover the full range of ssmc/ssmss costs, excluding any components already accounted for by the Level 1 and Level 2 services and functions.

Once allocation to the Children and Families section has been agreed, costs should be allocated or apportioned to service delivery settings, taking care to choose the right destination. For example, a payroll office supports all staff, not just those in delivery settings, and contracts are negotiated for all external services, so, for these purposes, costs should be apportioned to all service settings for which contracts are drawn up.

For some elements the costs will be cascaded through the Level 2 activities. Other items will be allocated or apportioned directly to the Level 1 settings. In the absence of measures in place or routinely applied, such as on-going time-use records, the mechanisms outlined over the page can be used. For those authorities whose accounting practices have yet to be fully devolved, the aim is to ensure that the scope of cost apportionment to Level 1 settings is the same for all and that the degree of accuracy is acceptable.

The five levels



These mechanisms can be used in the absence of more accurate workload indicators.

How to apportion Level 3 and Level 4 costs

Cost category	£PA	Identify relevant measure to apportion to settings
Management		All management costs should be accounted for when describing and attaching costs to Level 1 and 2 services.
Training		Apportion as a flat rate between all staff on whom the training budget could be spent. For example, if the Training Support Grant is used exclusively for training care staff, it should be divided between them alone.
Transport		Where staff specific data are not available, add transport costs evenly to all staff who may be users. Costs of client transport that are not attached to specific settings and cannot be attached to particular children, should be apportioned via relative caseloads of Level 1 settings whose main client group are children with disabilities.
Catering		This figure should already exclude costs incurred by service settings. Costs should be apportioned equally between Level 2 services and from there to Level 1 settings.
Personnel		Apportion as a flat rate between all staff in Children and Families, including those in the service delivery settings. The sum added to Level 2 staff will therefore be distributed among the relevant Level 1 settings.
Finance		The major areas of activity are accountancy, invoicing and payroll. The accountancy and invoicing functions relate to the number of service settings and/or placements. Payroll expenditure can be added as a flat-rate to all staff in the Children and Families department.
Administration		Add in proportion to expenditure on the services/functions which use these services. This may include some service settings as well as Level 2 and 3 support services.
Information technology		I.T. services support all social services activities. Add as a flat rate to all settings.
Legal services (may include GALRO)		Most of the expenditure associated with legal services will relate to looked after children. In the absence of child- or service-specific information, costs should be apportioned equally between services supporting looked after children.
Property services		Apportion according to space used or building value/asset charges. The amount apportioned to Level 2 support is therefore distributed among the relevant Level 1 settings.
Contract negotiation		Apportion equally between service settings for which a contract is drawn up, including externally provided placements. Where this cost category includes contracts or SLAs for other SSMSS activities, these costs will be cascaded to settings.
Quality assurance; central advisory, policy and development units		These services support all settings; add to all as a flat rate.
Total costs		for Children and Families.

Level 5 functions and associated costs

CIPFA and RO3 guidance suggest that the costs of corporate and democratic core services should not be disaggregated to the various departments of the local authority. This position is maintained in the new Best Value Code of Practice, where CIPFA reason that because these costs would not occur if a series of independent single-purpose bodies managed the same services, they ought to remain a separate item of expenditure. To maintain parity with CIPFA accounting procedures, these costs are also excluded from the methodology suggested here.

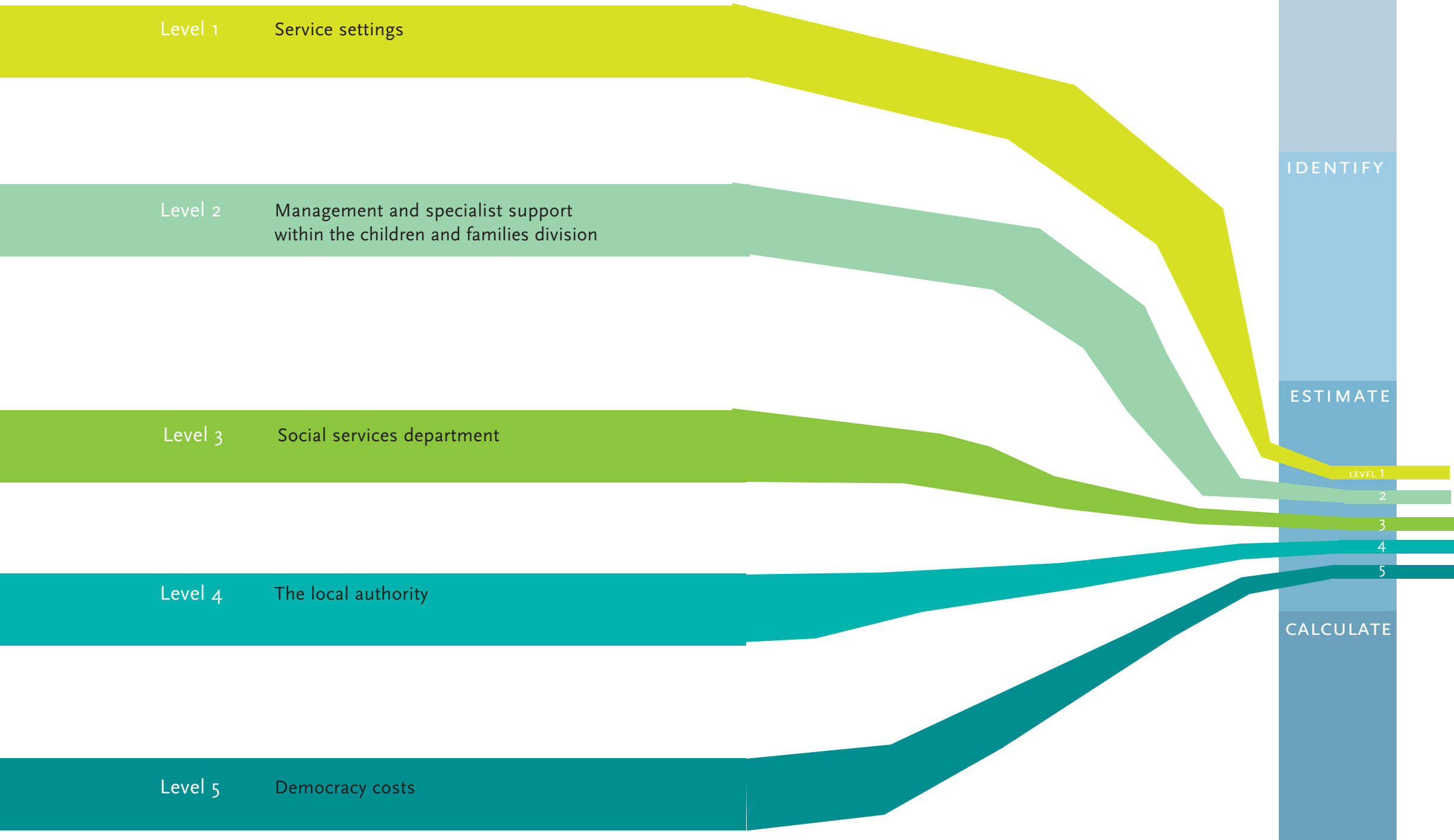
The costs associated with corporate management include:

- corporate policy-making
- representing local interests
- support to elected bodies
- public accountability.

In the case of some costs that relate to overall social services activities, the case for excluding them from the service setting level is rather less clear cut. For example, the Service Strategy and Regulation (SSR) division currently includes regulation and inspection, the complaints procedure and service strategy (see CIPFA 1983, page 8). On the advice of the local authorities that helped develop this approach, we have not specifically included them as an identifiable category in our consideration of cost apportionment. This is both for practical reasons (it is often difficult to make sense of the available information) and because such activities are seen as necessary to maintaining standards in social services and enabling social services to function. The new CIPFA code of practice defines these costs more narrowly, however, including only those of the Director of Social Services' office and registration and inspection (but not complaints). The costs of the Director's office could be apportioned pro rata on direct expenditure and the costs of registration and inspection apportioned as a flat rate to all the settings that use registration and inspection. Arrangements for registration and inspection are likely to change in 2002 and the need for the CIPFA sub division may be reviewed (CIPFA 2000, page 161). It can just as well be argued that Level 5 costs are integral to the way social services departments deliver children's services and seen in this light they should be included in the unit costs of each service setting.

(CIPFA, 1993, p8)

The five levels



Summary of the general application of the unit costs methodology in social services

- DESCRIBE the profile of the Children and Families section and the relevant part of the local or unitary authority within the 'Levels' framework.
- DESCRIBE the elements of the Level 1 settings and ESTIMATE the direct costs.
- DESCRIBE the elements of the Level 2 specialist and generic support, including service management. ESTIMATE costs for each element using data generated by your finance system. IDENTIFY the Level 1 service settings they support.
- DESCRIBE other social services functions as they apply to Children and Families services that might be located at Level 3 or Level 4. ESTIMATE costs using data from the accounting system. Ensure these items and costs are relevant to the Children and Families section. Ensure all costs already apportioned to Level 2 or Level 1 services are excluded.
- Allocate or apportion costs for Level 3 and 4 components to Level 2 or Level 1 components.
- Allocate or apportion costs for Level 2 support services to the appropriate Level 1 service delivery settings.
- CALCULATE a total cost per year for each Level 1 setting which includes items for each function or area of social services expenditure.
- CALCULATE a unit cost for each setting using the most appropriate activity measure: per day, per contact, per hour etc.

Part 3
A step by step guide to the
Children in Need Collection for 2000



What's the use?

Local authority colleagues may be a little dismayed at first by the prospect of another rather complicated Department of Health return. The CiN database is more than just a central data collection, however: it offers local authorities the opportunity to collate information about children in need on a consistent basis and in a way that will enable it to be used both locally for the efficient management of services and nationally for policy and monitoring purposes.

Existing national collations of data suggest that around 40 per cent of social services expenditure goes towards providing support for children who are not formally looked after. But there is no reliable information about these children or the services they receive.

This collection aims to improve our knowledge in two ways. First it should provide information about **all** children who are seen by social services, not just those who are formally looked after. The picture resulting from the one-week census will shed light on the children's needs and characteristics, quantify the support they receive – which might be delivered via a number of services – and identify the way money is spent. It is the potential for linking different kinds of data that makes a second major advance possible: in addition to being able to aggregate the figures and look at, say, total expenditure on certain services, it should become possible for local authorities to look at the costs of supporting particular children or those with similar needs.

Ensuring consistency across local authorities in the way information is defined and recorded continues to present a major challenge. The costs aspect of this collection is no exception, because of the impact on any economic exercise of the enormous variation in organisational and financial structures - to say nothing of their different mixes of commissioning, providing and delivering services. To overcome these obstacles, or at least to mitigate their effects, for the first year of the Collection, the comprehensive method described in the previous sections of this guide has been simplified. It should be seen as a springboard from which local authorities whose systems are less sophisticated could move toward greater accuracy. Authorities are not being asked to account for every penny they spend, but the work they do should still produce robust, comparable costs data.

An important objective has been to try to ensure that all local authorities include the same expenditure elements in their costs and so we have tried to lay down some acceptable ground rules for allocating and apportioning expenditure to service settings. We hope we have explained them clearly.

The interests of the child are paramount in the Children in Need Collection. We want to know the costs associated with each child's use of each service, because we want to know how to enhance the effectiveness of what we do.

Remember that CiN includes all children seen by social services, whether formally looked after or not. This definition is broader than that used by CIPFA in their latest accounting guidance.

More information about the CHILDREN IN NEED DATA COLLECTION can be found on the Department of Health web page <http://www.doh.gov.uk/cin/cin.htm>.

Cost collecting step by step

This part of the guide describes the method that should be used in the first year of the CiN Data Collection. To help the process along, it includes a set of templates to help local authorities calculate costs for particular services. The templates should enable most to build up unit costs for the bulk of what they do and should be photocopied and used as widely as possible. The guidance given in these closing pages also deals with expenditure that can be allocated directly to children, for example payments made to external providers or through Section 17.

Sometimes the costs of a service to a child are made up of an actual payment plus a component of averaged or apportioned costs. This is the case for foster care, where the daily placement cost will consist of the actual (daily) allowances paid to carers plus a share of the family finding team, or similar, who recruited and support the foster carers. Much of what has been written about in the earlier parts of the guide explains how to grapple with the complexities of apportionment. It hints at what may be attempted in future years.

Here the aim is more modest: it is to allocate as much of the total cost of children's social services as possible to service settings (including teams and workers) in order to arrive at a unit cost that is then linked via hours of service to individual children. In order to achieve this a method of deciding what services to include in each costing is needed. The task is made more difficult by current accounting practices, the differences between local authorities and by the fact that different terminology is often used for the same function in different authorities, but if everyone follows these steps, it should be possible to reach a reasonable level of consistency.

It need not be perfect

The aim is to capture all the expenditure incurred during the census week. Some will be paid in the week; some will not. Include it whether or not you have received an invoice or made a payment, but do not include amounts that are invoiced or fall for payment in the survey week but actually cover services provided some other time.

You should include those children for whom your authority has responsibility, irrespective of where they are receiving services. You should exclude children who are the responsibility of another authority - for example children from another authority who are in homes or secure units in yours. They should be included in the Children in Need returns for their sponsoring authorities.

Resist any temptation to say that some elements of the week are not 'typical' or to introduce arbitrary 'adjustments' to 'avoid distortion' or to avoid someone's area of responsibility 'looking bad'!

It cannot be emphasised too strongly that although a degree of accuracy is required (which will benefit both local and national reports) absolute accuracy is not expected nor wanted. Inevitably there will be a degree of arbitrary allocation. The guide is designed to enable accountants and project managers to make reasonable judgements when a cost does not fit exactly. Where an approximate allocation is indicated which amounts to more than 5% of total costs of the relevant service, please let us know in your returns. We will set up a reporting system for dealing with them in due course.

Dos and don'ts

- Do make use of your multi-skilled CiN project group: professional service managers, information specialists and finance personnel should contribute their expertise.
- Do not underestimate the amount of time costing work will take.
- You do not have to change your accounting system: do use the data it generates.
- All expenditure should be measured gross.
- Ensure the cost calculations include all the items outlined in these pages.
- Costs data should be as up-to-date as possible. The timing of the first census means that they should apply to the 1999 - 2000 financial year.
- The unit cost must reflect the way that children and their families use each service - but the data must also be capable of aggregation to show costs for different groups of children or service types.

What the data collection will not do!

There may be a case for bringing the different kinds of statistical returns into line, but for the foreseeable future unit costings in the CIN data collection will not replace CIPFA collections or the RO3 returns; nor will the CIN data account for all local authority spending - certainly not in the first year.

Bear in mind also that the CIPFA and RO3 returns do not connect costs with individual children's needs and do not reflect the combinations of services that children receive in real life. Neither do the returns tell us where the money goes in response to the pressures upon local authorities to spend on children in need.

The collection will not result in expenditure being allocated to the same categories as CIPFA data. However, in theory, the total expenditure accounted for should be the same in both cases. In practice the sums may not be quite the same because of the approximations that will have had to be made. But remember: it is not helpful nor necessary for the success of the exercise to 'cook the books' in order to bring the two totals to the same figure. How close they turn out to be will help to determine what refinements are introduced in later years.

A motto that seemed to help the pilot authorities:

Try to make sure you are counting the same thing as everyone else;
Take care but don't agonise!

DESCRIBE

IDENTIFY

ESTIMATE

LEVEL 1

2

3

4

5

CALCULATE

There is a relationship between the Steps described in this part of the guide and what has gone before, but it will be important to understand the differences too.

Step 1 Determining the proportion of social care expenditure attributable to children and families.

Step 2 Entering payments to children and families or payments on their behalf into the database.

Step 3 Building up the direct costs of services.

There are templates at the back of the guide to help you with steps 3 and 4

Step 4 Apportioning and building up management, indirect and overhead costs.

Step 5 Calculating the remainder.

Step 1

Determining the proportion of social care expenditure attributable to children and families

The first step is to decide what proportion of social services expenditure matches the functions undertaken for Children and Families. Where direct service costs are concerned, the choice of budget items should be quite straightforward. They can be entered into the database using the upper part of the templates at the end of this section. See Step 3 for more information.

Overheads, for example legal costs, which may be recharged to the social services budget, and purchasing and contracting costs are less clearly attributable. Unless your authority is confident that it has more precise information, work on the assumption that 1/3 of the total social services budget for support and overhead costs is attributable to children's services. The 1/3 proportion is based on RO3 returns for the last three years.

The direct cost plus the support and overhead costs identified in this way should be noted and reported with the return.

Overhead costs will be identified separately and apportioned between the different services at the point of delivery in Step 4 and entered into the database via the lower part of the templates.

In line with CIPFA guidance for reporting 1999-2000 expenditure and costs, the costs of regulation, inspection, complaints and Director's cost are not included. In this first year capital costs will also be excluded. They are very difficult to compare because local authorities have a variety of different arrangements for sharing costs with other departments and agencies. Capital costs could be large in individual cases but we feel it would be difficult to propose formal rules so soon. Any high costs that distort the picture for your authority should be noted and a brief explanation included with the return.

Two points to remember:

- 1 The expenditure data derived at Step 1 are key to the reconciliation of total budgeted costs of Social Services in your authority and the activity and expenditures reported on the Children in Need database. Step 1 data are, in effect, the overall childrens' expenditure which the Children in Need database is trying to analyse and explain. Any difference between the two sets of data will be a measure of the extent to which the financial and activity information in your authority do not match, which will in turn reflect the extent to which you are able to apportion the overhead and indirect costs correctly between different types of children's services.
- 2 We are only accounting for Children and Families Social Services spending in Year One. Expenditure by other departments is excluded. For example, if day care is provided and funded exclusively through Education, then these costs should be excluded. Feel free to report any similar arrangements which may affect the budget significantly or examples of figures for your authority may not be wholly 'typical'.

Step 2

Entering payments to children and families or payments on their behalf directly into the database

The second step is to identify all payments by cash, cheque or credit transfer made to or on behalf of children and their families. These payments are entered directly into the database against individual children (as 'one-off expenditure' for miscellaneous payments or 'ongoing and placement costs' for regular payments). Examples include one-off payments for transport, holidays or equipment and ongoing payments for purchased services including internal foster care. The allowances paid to foster carers can be entered directly against the children; they will vary from child to child and from foster carer to foster carer. In the case of externally purchased residential placements and all foster payments, the actual payment for the census week will be recorded under 'ongoing and placement costs'.

Very occasionally, some one-off payments may be exceptionally large - for example, costs of housing adaptations or one-off payments to adoption agencies paid during the census week. These should be entered directly into the one-off payments in the database but where these significantly distort the expenditure on the child a separate note should be included with your return.

In order to enter ongoing placements or other ongoing purchased services into the database, you will need to identify the daily or hourly cost. This should be straightforward when you are certain about the identities of the children served and the hours of service per day or week purchased. All payments entered through Step 2 will be directly linked to individual children. Once they have been entered, they will be added automatically to the total costs of services for that child. They will also be aggregated in the reports generated by the database to provide, for example, the expenditure on all disabled children.

You will need to include children receiving services under commissioned arrangements, which means that you will have to collect this information from the providers. Organisations may sometimes be unwilling to provide details of named children for reasons of confidentiality, in which case the children may have to be located in an anonymised form by the reporting organisations. If this is not possible, you will have to notify DH of the expenditure concerned - otherwise it will be overlooked.

At minimum, you should have information on the numbers of children served and how much service each receives on average. It should also be possible to state what need or needs the service is intended to meet.

All other expenditure will be linked to the service provided by staff to build up an hourly service cost as described in Steps 3 and 4.

Workers should keep a record of ad hoc and regular payments as well as time spent with or on behalf of children – but care should be taken not to double count !

Step 3

Building up the direct costs of services

The third step is to identify and draw together the component costs of teams, individuals or centres, including residential homes, which deal directly with children and their families.

The aim is to describe the total expenditure at the point of delivery of each direct service whether it is an individual worker or a staff member based in a team or in a centre. It should be possible to find out these direct costs from the local authority accounting system. Service settings are often identified as cost centres by accountants.

It may sometimes be necessary to make an informed guess because the accounting system does not disaggregate points of service delivery. These estimates must reflect the cost of service at the point of delivery and include as much as possible of what goes to keeping the service running. So, for example, you should include building maintenance and premises costs for provider establishments which are stand alone or which provide on site services. But you should not include capital costs or asset rentals.

Be as precise as you can: one of the benefits of an accurate Children In Need database will be to allow you to compare one service setting with another at a local level - something authorities in the pilot study found very useful: accuracy here will pay dividends later.

Step 4

Apportioning and building up management costs and indirect and overhead costs

The next step is to work out what proportion of indirect costs to attribute to each service. Because local authorities are so differently organised, we have decided local authorities must be allowed a degree of discretion about the method they use. The main concern is that the apportionment should reflect as far as possible the real effect the indirect cost is having on the overall cost of the service in question.

In many cases it will be best to:

- 1 add a share of indirect costs to the cost of each team, then
- 2 allocate the team costs to the individual members of the team.

Where it is possible to make an accurate apportionment to particular teams then do so. The default position should be to average indirect costs evenly across all the teams supported.

Here are some examples.

Two Principal Officers based at HQ are each responsible for the assessment services and the provider units.

Divide their costs (including administration costs) evenly between the teams they manage.

One Assistant Director provides support for all C&F settings and services.

Assume that the Assistant Director is involved full time in managing service delivery. Divide the full costs (including administration costs) evenly between all teams and centres for which he or she is responsible and that provide services to children during the census week.

A discrete team of administrators deals with the child protection functions of the Department.

Divide the cost of this administrative team between only those teams or centres that have direct responsibility for children on child protection registers.

Personnel manages the Human Resources function for all teams.

Spread the costs of Personnel evenly between all staff.

A transport service is available for use by children served by a Disabled Children's Team.

Estimate the cost of this service and add it to the team's costs.

The costs of Foster Finding and Adoption Teams should be dealt with slightly differently. They will, of course, have their own direct and indirect costs, but, rather than add them to those of social workers or teams working directly with children, they should be added to the cost of each child's placement (see Step 2 and the appropriate template). For this census, we suggest that it is done in the simplest way possible: the cost of the teams should be divided evenly between all children who received foster care or who were placed for adoption during the census week irrespective of how long they were in the placement.

The costs of some of these functions will be found at an aggregate level within the current Social Services Management and Support Services (SSMSS) category of costs, as defined by CIPFA and used in the statutory R03 returns. It is difficult to predict to which level these costs are already apportioned within each local authority - or how. We expect local authorities to allocate as many of these costs as possible to service settings but we recognise that some accounting systems may not prove very amenable.

The minimum requirements are included in the table at the end of this section. These items of expenditure are comparatively large and it is important that they are added to service setting costs as described.

The new Code of Practice refers to a similar grouping, SSMC - Support Services and Management Costs.

Step 5

Calculating the remainder

All other costs that are met from expenditure on children and families identified in Step 1 may be included as a lump sum which will be called the 'remainder'. Authorities with more developed systems for devolving costs down to the point of service delivery will have a smaller remainder than others. It is very important that the remainder figure is included in the return. In the first year of the census, it will be the only viable way to make the data comparable.

Indirect costs to be added to direct service costs

Cost category	Apportion as follows
Management	All service management costs below director level should be accounted for.
Training	Add a flat rate to all staff on whom training budget could be spent. For example, if the Training Support grant is only used for training care staff, it should be divided between all care staff.
Transport	Add general in-house transport cost evenly to all staff who may use the transport service BUT Direct costs of transporting individual children and families will be recorded against individual children where these are externally purchased. Transport devoted to identifiable provider settings e.g. a minibus belonging to a residential home will be included in direct costs for that home.
Personnel	Add to the costs of staff as a flat rate between all staff in C&F.
Finance	Add to the costs of all staff in C&F. The major areas of activity are accountancy, payroll and invoicing.
Administration	Add to the costs of teams who use administration services - this may include them all.
Information technology	This may be left in the remainder unless it is I.T. within a provider unit and is part of the unit's budget.
Legal services (may include GALRO)	Where these costs cannot be attached to a particular child you may leave in remainder.
Contract negotiation	Add to the costs of teams by pro rata division between teams who use the contracted service e.g. external foster care.



Templates

The templates will help you work out unit costs for specific services. Five key services are given as examples and a sixth generic version, Template F, is included in case your service does not seem to fit in any of the other categories. You can photocopy them easily on to A4 sheets.

- A In-house Residential Care
- B Teams
- C In-house Centres (such as family centres)
- D In-house Foster Care
- E External or Commissioned Services
- F General (use only if A – E do not apply)

A

Calculating a unit cost for a day of in-house residential care

Definition

The local authority provides a facility with overnight beds for more than one child (other than a foster home). Resident children may attend an off-site school but all other normal daily activities (for example, eating, sleeping, leisure activities) are 'supervised' by on-site staff. Within the facility, 24-hour waking staff cover is provided or there are waking day staff and sleeping-in (or on-call) staff at night.

If day care, out-reach, or home-based support is also offered, you must decide if it is integral to its functioning as a residential unit or is an extra function for a separate group of children. If the latter, it may be easier to cost it separately.

Activity measure

For residential facilities, identifying the unit of measurement is a relatively simple exercise. A child is deemed to be resident for a day for each night he or she slept there or had a bed reserved. The unit of activity is, therefore, the number of occupied places each day during the census period. Where a bed is reserved for a named child but the child is placed elsewhere, for example at home, it should be counted and the cost attributed to the child.

A

Build up the unit cost for residential care from the following components

Code and address of the home:

<i>Expenditure type</i>	<i>Cost</i>	<i>£ per year</i>
Direct costs of the service delivery setting (described in Step 3)	Salary costs for on site staff. Include:	
	wte management staff	
	wte operational/care staff	
	wte administration/clerical	
	wte catering staff	
	wte premises related staff (grounds, cleaning, maintenance etc.)	
	Other on-site service related expenses	
	food	
	expenses (clients and staff)	
	printing, stationery, general office	
	cleaning, gardening	
	communications, computing	
	miscellaneous	
	Premises costs	
	energy	
rates		
maintenance repairs		
Share of management costs/indirect and overhead costs (described in Step 4)	Generic management support	
	eg principal officers	
	senior management	
	specialist support	
	training	
	transport	
	personnel	
	finance	
	administration	
	contract negotiation etc.	
TOTAL COST PER YEAR		
TOTAL COST PER WEEK		
divide the total cost by number of weeks service is available		
UNIT COST PER CHILD DAY		
divide the cost per week by the number of child-days of occupation during the census week		

B

Calculating a unit cost for individual workers or teams

Definition

Peripatetic workers, usually working in teams, deliver support usually to individual clients or to groups of clients. A team is recognised by service managers as a financial and managerial entity. Clients may be seen at the team's offices but also in their own homes or at other locations. This definition encompasses both specialist teams (say, child protection or foster care) and generic teams (say, referral and assessment). Teams of workers who provide intermittent or regular support to children living in their parental home are also included; for example, family support workers, family aides.

Activity measure

The standard unit of activity for 'peripatetic workers' is per hour of child work. "Work" includes client contact activities, contact with other professionals, writing up case notes, reviews and planning meetings, travelling to appointments and supervision attributable to one child. Team meetings, training, and other indirect activities that cannot be identified with individual children are recorded as non-child time. On the CiN activity forms, team workers record the number of hours they spend on child/family-related activities as child-time. This figure summed for the whole team, is then divided into the cost of running the team to calculate the unit cost of an hour of a peripatetic worker's service.

In year one it is assumed that the unit costs for all workers in the team employed to work directly with children and families will be the same. Workers in different teams, however, can be expected to have different unit costs.

It is worth noting that work undertaken with groups of children (or their parents or carers) is assumed to be as valuable to the child as work undertaken individually. However, the lower cost of working with children in groups will be reflected in the lower unit cost of the team. For example, an hour's work with ten children will show up as ten child-hours of service.

B

Build up the cost of teams from the following components

Code and address of team:

<i>Expenditure type</i>	<i>Cost</i>	<i>£ per year</i>
Direct costs of the service delivery setting (described in Step 3)	Salary costs for on site staff. Include:*	
	wte management staff	
	wte operational/care staff	
	wte administration/clerical	
	wte catering staff	
	wte premises related staff (grounds, cleaning, maintenance etc.)	
	Other on-site service related expenses	
	food	
	expenses (clients and staff)	
	printing, stationery, general office	
	cleaning, gardening	
	communications, computing	
	miscellaneous	
	Premises costs	
	energy	
rates		
maintenance repairs (include if possible otherwise remainder)		
Share of management costs/indirect and overhead costs (described in Step 4)	Generic management support	
	eg. principal officers	
	senior management	
	specialist support	
	training	
	transport	
	personnel	
	finance	
	administration	
	contract negotiation etc.	
TOTAL COST OF TEAM PER YEAR		
TOTAL COST OF TEAM PER WEEK		
divide the total cost by number of weeks team is available (usually 52)		
UNIT COST OF A CHILD HOUR OF SERVICE		
divide the cost per week by the number of hours of child-time recorded by the team during the census week		

* Salaries and wages, national insurance, superannuation and allowances

C

Calculating a unit cost for in-house centres

Definition

Family centres generally operate during working hours only and do not offer overnight accommodation. They can, however, offer a range of services within the same building such as day care, playgroups, after-school activities, parenting support, counselling, child protection work, or social work. There is usually a set programme for these activities. Referrals are taken but many family centres operate a self-referral and/or 'drop-in' service as well.

Activity measures

It is particularly important to get a good service description for centres that complete the activity census forms. They are likely to be multi-functional; that is the services are likely to be delivered in a number of ways. This variety is too complex to break down into separately costed services at least in year one. Assume that an hour of service from the centre is a single entity irrespective of what activity the child or family is engaged in. The hours of 'centre service' a child receives will be the activity measure. All that needs to be recorded is the number of hours each child receives a service from any of the staff or groups of staff. The total number of child hours of service provided by the centre is the activity measure for calculating the unit cost.

It is worth noting that work undertaken with groups of children (or their parents or carers) is assumed to be as valuable to the child as work undertaken individually. However, the lower cost of working with children in groups will be reflected in the lower unit cost of the centre. For example, an hour's work with ten children will show up as ten child hours of service.

C

Build up the cost of an in-house centre from the following components

Code and address of the centre:

<i>Expenditure type</i>	<i>Cost</i>	<i>£ per year</i>	
Direct costs of the service delivery setting (described in Step 3)	Salary costs for on site staff. Include:*		
	wte management staff		
	wte operational/care staff		
	wte administration/clerical		
	wte catering staff		
	wte premises related staff (grounds, cleaning, maintenance etc.)		
	Other on-site service related expenses		
	food		
	expenses (clients and staff)		
	printing, stationery, general office		
	cleaning, gardening		
	communications, computing		
	miscellaneous		
	Premises costs		
	energy		
rates			
maintenance repairs			
Share of management costs/indirect and overhead costs (described in Step 4)	Generic management support		
	eg. principal officers		
	senior management		
	specialist support		
	training		
	transport		
	personnel		
	finance		
	administration		
	contract negotiation etc.		
	TOTAL COST PER YEAR		
TOTAL COST PER WEEK			
divide the total cost by number of weeks the centre was open			
UNIT COST OF A CENTRE CHILD HOUR			
divide by the number of child hours of service provided during the census week			
* salaries and wages, national insurance, superannuation and allowances			

D

Estimating a daily unit cost for in-house foster care and adoption

Definition

A child or young person moves into an established domestic household and 24-hour family-type support is provided by foster carers/parents. Children may attend a day school but all other normal daily activities (eating, sleeping, leisure, for example) are provided and supervised by the foster carer(s).

Sometimes the costs of foster care have been estimated using only the weekly or fortnightly allowance paid to carers. This is an insufficiently inclusive measure. Any true measure must include the cost of finding, recruiting, training and supporting foster carers.

Activity measure

As with residential homes, identifying the unit of measurement is a relatively simple exercise. Young people will have stayed in the foster homes for a certain number of days over the census period. A day of foster care is the number of nights that a child slept in the foster home during the census week or that had been reserved for them and which were paid for.

For the purposes of this collection the cost of a day of foster care is made up of two components which are derived separately but added together:

- The weekly allowance plus any other payments paid directly to the foster carers and entered.
- A unit cost to cover the recruitment and support of foster carers.

In this collection we are taking the simplest possible approach to adding the unit cost component, by simply dividing this cost evenly between all the children who were accommodated in social services care at any time during the census week.

D

Build up the unit cost of in-house foster care (including children placed for adoption) from the following components

Foster care:

<i>Expenditure type</i>	<i>Cost</i>	<i>£ per year</i>
Direct costs (Family Finding Team)	Salary costs for family finding and foster care support teams. Include:*	
	wte management staff	
	wte operational/care staff	
	wte administration/clerical	
	wte catering staff	
	wte premises related staff (grounds, cleaning, maintenance etc.)	
Family Finding Team	Other related expenses (added to the cost of the Family Finding Team):	
	food	
	expenses (staff)	
	printing, stationery, general office	
	cleaning, gardening	
	communications, computing	
	advertising expenses	
	recruitment expenses	
Share of manage- ment costs/indirect and overhead costs (described in Step 4) Family Finding Team	foster carer training	
	miscellaneous	
	Generic management support	
	eg. principal officers	
	senior management	
	specialist support	
	training	
	transport	
	personnel	
	finance	
administration		
contract negotiation etc.		
TOTAL COST PER YEAR OF RUNNING THE FOSTER CARE RECRUITMENT AND SUPPORT TEAMS		

COST PER WEEK Yearly cost divided by 52

UNIT COST PER CHILD IN FOSTER CARE

Divide by the total number of children who were cared for (slept one night) in in-house foster care at any time during the census week and by 7 to convert to a daily basis (CiN placement costs are daily). This figure is then added to the daily cost of foster care for each child fostered irrespective of the number of days the child was actually fostered during the census week

* salaries and wages, national insurance, superannuation and allowances

E

Calculating a cost for external or commissioned services

Activity measure

The activity measure is the cost per day made up of **1** the cost of the service and **2** the cost of the commissioning team monitoring all such service arrangements. The actual cost of the service is that registered by an accounts department as a cheque or other payment to the organisation concerned. What follows relates only to the commissioning element, **2**. The method for calculating these costs is similar to that for working out fostering costs by including the cost of family finding teams. (In the case of commissioned services, they correspond to commissioning teams.)

E

Calculating a cost for external or commissioned services

Code and address of supplier:

<i>Expenditure type</i>	<i>Cost</i>	<i>£ per year</i>
Direct costs	Commissioning team costs (salaries etc.):	
Additional costs	Other on-site service related expenses (added to the cost of commissioning teams; cf items for Family Finding Teams on Template D)	
Share of management costs/indirect and overhead costs (described in Step 4)	Generic management support eg. principal officers senior management specialist support training transport personnel finance administration contract negotiation etc.	
TOTAL COST PER YEAR		
TOTAL COST PER WEEK divide the total cost by number of weeks service is available		
UNIT COST divide by the number of children for whom contracts are in operation during the week and then by 7 to convert to a daily basis. Enter on CiN database against placement/day service cost relating to the child (not the worker).		

F

A general approach

F

A general approach to estimating the unit cost of a service setting

Code and address for centre:

<i>Expenditure type</i>	<i>Cost</i>	<i>£ per year</i>
Direct costs of the service delivery setting (described in Step 3)	Salary costs for on site staff include:*	
	wte management staff	
	wte operational/care staff	
	wte administration/clerical	
	wte catering staff	
	wte premises related staff (grounds, cleaning, maintenance etc.)	
	Other on-site service related expenses (if relevant)	
	food	
	expenses (clients and staff)	
	printing, stationery, general office	
	cleaning, gardening	
	communications, computing	
	miscellaneous	
	Premises costs (on site costs)	
	energy	
rates		
maintenance repairs		
Share of management costs/indirect and overhead costs (described in Step 4)	Generic management support	
	eg. principal officers	
	senior management	
	specialist support	
	training	
	transport	
	personnel	
	finance	
	administration	
	contract negotiation etc.	
TOTAL COST PER YEAR		
TOTAL COST PER WEEK		
divide the total cost by number of weeks service is available		
UNIT COST PER CHILD DAY		
divide the weekly cost by the number of activity units for the census week to calculate the cost per activity unit. This is the unit cost to be entered on the CiN database		

Troubleshooting

Listed below are some key areas where Local Authorities involved in the pilot exercise for the CiN 200 Collection asked for clarification.

Costs of team/unit managers

The cost of team/unit managers are apportioned to the cost of running their team/unit. Unit managers or team leaders should not fill in census forms unless they do direct work with children and families, in which case this time is costed at the unit cost for the team members of the team they manage.

Managers should only fill in census forms when they are acting as a caseholder or working directly with a child or a family. In all other cases (and this will be the majority) manager costs should be counted as indirect costs and included within team costs. 'All other cases' include case conference, supervision and review work where the manager is not the caseholder or working directly with the child family.

Grant aided/part funded centres

The treatment of drop-in centres where advice is given to young people, and where the children are not necessarily known to the local authority represent acknowledged boundary problems. At minimum social services departments ought to know from grant aided voluntary organisations the numbers of children seen during the census week, the needs being addressed and how much they are paying for the service. If possible, represent this activity child by child; if not, simply give expenditure details separately.

If you can set activity information against individual children but the project is only part funded by SSD then measure the activity of only those staff paid for or measure all the activity but enter the proportion of activity equal to the proportion of the funding. If the project is 1/3 funded then count 1/3 of the activity.

Asylum seekers

For asylum seeking families and unaccompanied children, where a proportion of the expenditure is recoverable from central government, the general principle is to submit gross returns. Do not deduct the recoverable element. However a note with the returns pointing out that part of this expenditure is recoverable would be appreciated.

Staffing costs funded externally

Where costs are jointly funded between SSDs and another organisation, the principle is to include what you actually pay for. If an authority knows that some hospital social workers are charity funded, these should not be included in the census (or indeed the collection at all). This is not a comment on the value of this work. It is simply that we have to draw the line somewhere.

Children receiving services by partly funded voluntary organisations

There is unfortunately no simple answer here. In principle the CiN database ought to include all children who are in receipt of services paid for by social services.

- Where the service is wholly funded by social services, then all children receiving that service ought to be included, whoever provides it.
- Where the service is part funded, only that proportion of activity which is notionally funded by the authority should be included. This rather artless statement means that if the authority funds, say 40%, of the costs of the service, then the provider reports 40% of the activity.

Potential double counting of children

Many voluntary organisations are reluctant to provide information on individual children to a third party; and even if they are willing to do so, they may not have a social services reference number by which to identify a child. The net effect is that voluntary organisations can at best only provide local authorities with a list of children (whether anonymized or not), and that the lists from different voluntary organisations may contain overlaps; this may not be obvious even if names of the children are supplied. It is an unavoidable problem, since there is no way the authority can check that children are being seen by more than one such organisation.

There should be a good reason why names of children and families served should be withheld. There may be scope for persuading some funded projects to complete census forms with identifiable names that can be added to the database after checks to avoid duplication.

We have assumed in the CiN exercise that such overlaps, although they do occur, are minimal. We may need to revisit this point in the light of our experience, but any solution will require children to have an identifier for use in all social services contexts.

If all else fails, such situations should be dealt with outside the database in a separate short report giving:

- a brief description of the facility
- a figure for how much the department spends to keep the facility going for a day (i.e. the annual grant divided by the number of days it is open during the year)
- the total number of hours the facility was open for children and families during the census week
- the number of children attending during the census week
- the needs the project aims to address.

Services provided by charity/voluntary organisations

Where an authority has a block contract for the provision of family intervention services, on a referred basis, the following rules apply:

- 1 If the charity can identify the children worked with individually then the staff involved should be asked to fill in census forms. This will generate

the most accurate information, especially if the staff chosen are paid for by social services.

- 2 You and the charity will need to decide whether to treat the project as a centre (one unit cost and one census covering all services to children) or as individual workers, or a mixture of both, taking care to avoid double counting.
- 3 If there are specific staff funded by the local authority, they should be covered in the census. If a unit is jointly funded, then only that part of the activity notionally funded should be covered. In the latter case some apportionment or estimation will be necessary - that is, if the authority funds 30% of the activity, the charity reports 30% of the activity in the week on the census form. It is a crude measure admittedly, but nothing more sophisticated is available at the moment.
- 4 All local authorities should know at least the numbers of children served, what needs the charity is meant to be meeting and how much money it gets from the local authority. This should enable an authority to assemble data on volume of activity and unit costs against need.

Costing group work

The guiding principle is to capture the total hours of the service each child has received, rather than attempt to reconcile the number of hours of staff time involved.

Total hours of service received by a child will, however, need to be reconciled with the total cost of the services provided. This means that the unit hourly cost for family centres which have a significant amount of group work will be significantly lower than for centres which have most of their contacts with children on a one-to-one basis.

Consider for example the cases of two different centres, both costing £1000 per week to run, over a 40 hour week.

Family Centre A sees 200 children in the week, each for two hours; all are one-to-one sessions. The total number of reported hours of child activity in the centre in the census week is therefore 400 hours and the unit cost £2.50 per hour;

Family Centre B also sees 200 children in the week, but the majority are in group sessions of various sizes. Suppose that each child is seen in a group for at least four hours: the total number of reported child hours in census week cannot be less than 800, so the unit cost must be no more than £1.25 per hour, that is, less than half the unit cost of Family Centre A. [The actual figure for Family Centre B will depend on the reported pattern of attendances in the census week].

This calculation has a number of implications:

- 1 In the case of family centres, enter for each child the number of hours spent in the centre during the week, whether the child attends in a group or not, and irrespective of the number of staff running the group.

Note: These examples are for illustration only - in most centres there will be mixtures of work in one-to-one situations and working in groups with children.

- 2 The total centre hours in the week is then the total number of reported children hours in the week, as just defined.
- 3 The hourly unit cost for the centre is derived as follows:
Take the annual cost of the centre and divide it by the number of weeks in the year the centre is open, to get a weekly cost. Divide that weekly cost by the total number of child hours reported for the census week to arrive at an hourly unit cost for the centre for the census week. [The numbers of staff running the groups will be reflected in the total cost of running the centre].

Implications for social workers working with groups of children

A similar consideration applies to social work teams who do significant amounts of work with groups of children – for example as part of a family case. By analogy with the position for centres, if children are seen in groups by a social worker then the time spent is counted against each child seen. And the total of such time is used to calculate the unit costs over the team as:

total team salary and other cost
divided by
total children hours.

For teams with significant amounts of work with groups of children, this calculation will lead to an hourly rate significantly lower than would otherwise be the case. But this merely reflects the true position of reconciling costs with activity.

Registration and Inspection and Complaints

CIPFA rules require that R&I expenditure is not to be included, because such costs are included in what CIPFA describes as Service Strategy and Regulation expenditure which is not reallocated to client groups. Expenditure and activity on complaints should be excluded from the census for the same reason.

Young Offender Teams

Young Offender teams should be considered in proportion to how much they are funded by social services departments. If there are identifiable staff so funded, then measure their activities and costs. If things are more complicated, it might be easiest to measure all the activity but only count the proportion the social service department funds: eg. 60% funded = 60% activity counted. This is slightly clumsy but the best we can come up with!

Glossary

A list of some of the more picturesque terms to be encountered in this guide. The numbers refer to the pages where they appear.

6 A **UNIT COST** may be said to be the value of resources (input) used to produce a service, divided by the level of activity (output) it generates. For more about input and output see page 31.

6 The concept of **BEST VALUE** refers to the duty placed on local authorities as the principal means of improving services, and increasing the efficiency and economy with which they are delivered.

6 The **PERFORMANCE ASSESSMENT FRAMEWORK** builds on the wider Best Value arrangements by providing information on all services objectives, the people receiving support, the types of support they receive and aspects of their delivery. Fifty such performance indicators are in place.

6 The **CHILDREN IN NEED** data collection is a statistical return required by the Department of Health. It provides information on the activities undertaken by social services departments to support children and on the expenditure associated with their work.

7 The **REFERRAL, ASSESSMENT AND PACKAGES OF CARE PROJECT (RAP)** aims to provide a coherent set of national statistics on adult community care. Work on a data collection framework began in 1996.

11 A **BUDGET** is the sum of money allocated to a service or function at the beginning of the year.

11 A **COST CENTRE BUDGET** refers to an accounting practice that allows costs to be allocated to identifiable managerial units.

13 The **MARGINAL COST** is the addition to the total cost of a service needed to take account of each extra client.

13 **GROSS TOTAL COST** includes all expenditure relating to a service activity, including employee costs and expenditure relating to premises, transport, supplies and services, third party payments, transfer payments, support services, overheads and capital charges.

13 An **OPPORTUNITY COST** is the value of the alternative use of the assets that have been tied up in the production of a service.

14 **MIXED ECONOMY** refers to the balance between the public and independent sectors in service provision.

15 **INFLATION INDICES** are a means of reflecting changes in prices over time.

25 Where debits take the form of payments or transfers within the social services department, they are described as **INTERNAL RECHARGES**.

26 An **ANNUITY** is the amount that a sum of money would earn each year if invested at a particular rate of interest.

31 **INPUTS** are the resources (eg staff and capital) that provide children and families with services and support.

31 **OUTCOMES** are changes in health, development and welfare that occur as a result of or in the absence of services.

31 **OUTPUTS** refer to the level of activity generated by a service.

34 The **Quality Adjusted Life Year (QALY)** combines data on the total life years gained from a treatment or other intervention with data on the utility (or value) of health states for those life years, to give a single measure of achievement or output.

35 **BOOT-STRAPPING** is a statistical technique for comparing mean costs or checking comparative cost analyses, without making any assumptions about the cost distribution.

35 **NATURAL LOGARITHMIC TRANSFORMATION** is a statistical technique that corrects skewness in the frequency of a variable.

42 A **SERVICE LEVEL AGREEMENT** is a formal agreement that one part of an authority will supply certain services to another (also used with outside agencies).

43 **DIRECT COSTS** are expenditure on resources directly associated with service delivery.

47 **REVENUE SPEND** is usually an annual figure representing the year-on-year costs of providing a service.

47 **CAPITAL SPEND** is expenditure on items that are likely to last more than a year, such as buildings, furniture or equipment.

47 **SECTION 17** payments are made under certain conditions set out in the Children Act, 1989, to support children coming to the attention of social services departments.

49 Where the expenditure debited to a budget heading is based on a factual consideration, such as workload measurement, it is usual to describe it as an **ALLOCATION**. Where the expenditure is debited to a number of budget heads, but there is no similar factual basis for deciding how the expenditure should be shared, it is usual to speak of **APPORTIONMENT**, for example in proportion to expenditure on staff.