RESEARCH

Valuing Changes in Welfare to Individuals and Society Resulting from the Government's Provision of Children's Social Services in England

Final Report

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Research Report RW104

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1. INTRODUCTION

Aims of study

1.1 Measurement for National Accounts purposes of the output attributable to government-provided services requires a different approach from that used for private sector goods and services. Public services, including Children's Social Services (CSS), are mostly supplied free of charge and therefore there are no market prices by which their value can be measured. To advance the methodologies used in the measurement of government output, an independent review led by Professor Sir Tony Atkinson was set up. Its recommendations for the measurement of government output, productivity and associated price indices are set out in the Atkinson Review: Final Report (2005). Overall the Review's recommended approach is to directly measure output using indicators that capture the full range of public services provided. In addition, ideally, these indicators should measure the incremental impact of these services on client outcomes.

1.2 As part of a move towards implementing this approach for CSS output, the Department for Education and Skills (DfES) commissioned this study to explore how one might measure the contribution that CSS activities make to the welfare of service users and society more generally. The study's remit was to advise on how the recommendations of the Atkinson review might be implemented, and on any improvements to data collections that might be required. Indicators to represent

the various categories of CSS interventions were to be identified and combined into a single annual index. The study's aim was therefore highly challenging: to recommend a methodology for producing a robust annual output measure that fully reflects the change in welfare to individuals and society from CSS provision. This final report presents the overall findings of the study. It sets out principles to be followed in the measurement of CSS output and specific recommendations for changes. The conclusions from the first stage of this study, which are reported in detail in the Interim Report, are summarised in paragraphs 1.8 to 1.12 below.

Current measure of CSS output and the Atkinson recommendations

1.3 The measurement of public sector output is complex. Previous convention therefore assumed public sector output to be equal to inputs. In more recent years however, there has been a move to measure output directly; a change advocated by the Atkinson Review.

1.4 Prior to 2005, the Children's Social Services output index included only one direct measure of output, the number of looked after children, but following the Atkinson review some improvements were made. In particular, the measure of CSS output used in the National Accounts since 2005 is a cost weighted composite index of inputs and selected activity indicators. The index comprises:

- The number of days of residential accommodation provided to looked after children (LAC) by four categories of residential placement: foster; secure accommodation; children's homes; and all other placements; and
- Total CSS expenditure net of expenditure on the residential accommodation activities for LAC listed above.

1.5 The current measure incorporates improvements made following the Atkinson Review that were first included in Blue Book 2005. LAC have always formed the basis of the CSS output measure and this is appropriate since they account for more than half of total CSS expenditure. However, the activity indicator previously used measured the number of LAC on a specific date, while what is now used is the aggregate number of child-days of accommodation for each of the four categories of residential setting. The current activity volume measure is preferable

to the one used previously because it groups LAC placements into broad categories and there are extensive variations in cost between different types of care. The indicator now also captures changes in the length of time spent in placements and thus measures two aspects of the volume of activity: the number of children, and the number of days that each spends in care. Furthermore, the CSS output measure used since 2005 takes account of interventions provided to children supported in their families and independently (CSFI). These children were not previously included in the output indicator, although they comprise the majority of children who receive a service from CSS departments. The measure used for CSFI, however, is not an activity indicator because there is difficulty in obtaining appropriate data. Instead, an inputs measure is used as a proxy, based on deflated expenditure for all CSS activities other than LAC placements.

1.6 The improvements that were made to the CSS output indictor in 2005 partially implemented the specific recommendations for CSS made by the Atkinson review (paragraphs 11.67 – 11.69). These recommendations were:

- the inclusion in the index of services provided to CSFI;
- the development of improved activity volume measures using a more detailed breakdown of CSS activities related to a framework of welfare outcomes; and
- the construction of possible quality adjustment measures.

How this study addresses the Atkinson recommendations

1.7 The focus of this study was to build on the improvements already achieved by investigating alternative activity indicators, seeking measures that would represent the full range of CSS activities, relating the activity indicators to the Every Child Matters (ECM) outcomes framework[1] and exploring the use of Performance Assessment Framework (PAF) indicators for quality adjustment.

Research methodology and conclusions of the interim report

1.8 This study has been conducted in two phases: the first focused on research and consultation with Local Authorities; and the second on constructing a new

[1] The ECM outcomes framework is set out in the display box adjacent to paragraph 1.10

index of output. Two main research methods were used in the first phase of this study: a mapping exercise and a literature analysis, the results of which are reported in the Interim Report (Soper et al, 2006)[2] .

1.9 The mapping exercise was used to describe the range of interventions that CSS provide with their objectives, the corresponding outcomes that the interventions are designed to improve, and potential indicators for their measurement. It showed that in addition to the two main categories of children for whom targeted CSS interventions are provided (LAC and CSFI), CSS also contribute to open access services that are available for all vulnerable children. Many of these services are delivered on a multi-agency basis and CSS do not always take a lead role in providing them.

1.10 The overarching aim of CSS interventions is to support vulnerable children, help them fulfil their potential and enable them to live independent adult lives. CSS activities therefore focus on helping disadvantaged children with all aspects of their development. The mapping exercise revealed, unsurprisingly then, that many CSS interventions relate to all five of the ECM outcomes, which are set out in the adjacent display box. It also demonstrated a fourth type of CSS activity: services provided to both CSFI and LAC to meet specific support needs such as disabilities, offending or mental health needs. These interventions and also safeguarding (which is a CSFI service) do focus on particular ECM outcomes. There is nothing in the current CSS indicator to represent these specific types of CSS activity. The interim report therefore set out a recommendation that is now identified as **Principle A: There should be separate indicators for different services since they are provided in different circumstances, meet different needs, incur different costs and are subject to different forces for change.**

[2] Available at http://www.dfes.gov.uk/rsgateway/DB/RRP/u015088/index.shtml

The Every Child Matters Outcomes

In 2003, the Government published a green paper called Every Child Matters (ECM), looking at services for children, young people and families. The Every Child Matters green paper identified five outcomes that are most important to children and young people:

- Be healthy
- Stay safe
- Enjoy and achieve
- Make a positive contribution
- Achieve economic well-being

The five outcomes are universal ambitions for every child and young person, whatever their background or circumstances. The outcomes are interdependent and show the important relationship between educational attainment and well-being: for example, children and young people learn and thrive when they are healthy, safe and engaged.

Following consultation on the green paper, Every Child Matters: Change for Children (ECM: CfC) was published in November 2004. This set out a new approach to the delivery of services for children and young people from birth to age 19, with the five outcomes at the centre of the programme. ECM:CfC is focused on improving the way in which services are brought together around the child, young person or family, and promotes more integrated ways of working, including sharing information and multi-disciplinary working.

1.11 The literature analysis explored existing academic studies both in the UK and internationally. It investigated the theoretical issues in measuring public sector output and the empirical evidence on the services that CSS provide, their objectives, their impact on users' outcomes and the measuring instruments used to gather data. The conclusion of the interim report as regards outcomes measurement was that there is not at present a suitable infrastructure in the UK to collect data on CSS users' outcomes on a regular basis.

1.12 The overall conclusion of the interim report therefore, is that because of the challenges identified in the first phase of the study, it is not feasible at present to measure CSS output by the incremental contribution that it make to users' outcomes. Instead, the interim report proposed a range of activity indicators representing each of the categories of CSS interventions and the various services provided to meet additional needs.

Research methodology in the second phase of the study

1.13 These indicators, and how they might be used together with expenditure or unit cost data in constructing an index, formed the second phase of this study. Trial indices have been constructed using different combinations of indicators, including the use of a quality adjustment index, and the indices have been compared with the existing CSS indicator. The need for compatible data series measuring activity, expenditure and quality for the construction of the indices led to a review of existing data collections.

1.14 Throughout the study expert opinion has been sought from the Department for Education and Skills (DfES), the Office for National Statistics (ONS), members of the project Steering Group, Local Authority managers and other researchers. Discussions have taken place with three Local Authorities with regard to the data available from their management information systems (MIS) and the ease with which the type of information that we require for measuring CSS output can be collected on an annual basis.

Structure of the report

1.15 Section 2 of this report outlines the methodological and practical difficulties in measuring CSS output that were described in detail in the interim report. This section sets out the key service domains for which CSS indicators should be sought, and discusses the data problems that prevent outcomes indicators being used at present except for quality adjustment. Further principles for CSS output

measurement are set out, and specific recommendations are made about activity indicators that should be included in the index, with justifications for these choices.

1.16 Sections 3 to 5 describe the construction of the index. The use of weights in forming the index is explained in section 3 with a description of how the expenditure weights have been chosen and how they are used in constructing the index. The methodology of using quality indicators to adjust the index is set out in section 4 and the proposed quality indicators are described. Estimates of the new index are given in section 5 and comparisons are made with the existing index. The implications of the proposed new index for trends in output are discussed.

1.17 Section 6 presents the principles drawn up by the study and specific recommendations, grouped according to the time period in which it is suggested they should be implemented. It is proposed that some new activity indicators should be added immediately to the index. Over the next three years, new data gathering mechanisms are being implemented, including the replacement Children in Need (CiN) Census, and ways of processing data are being significantly developed. These should provide improved direct output measures, more accurate measures of related unit costs and linked pupil-level data. In the medium term at least one further indicator should be included in the index and other indicators using unit cost weights should also be considered. The emergence of policy measures such as those set out in the recent Department for Communities and Local Government (DCLG) White Paper impact on data availability, as do local authority initiatives such as outcomes based commissioning. In the longer term, it might be possible to measure Children's Social Services' output using outcomes indicators which reflect both the quantity and quality of services provided to individuals. The Children's Social Services output measure should therefore be reviewed again once this new data becomes available.

2. MEASURING OUTPUT FROM CHILDREN'S SOCIAL SERVICES

Atkinson recommendations for measuring output

2.1 The Atkinson review final report sets out general principles that should be applied in measuring government output and productivity for the National Accounts, which are a record of economic activity in the United Kingdom. The principles most relevant to this study of CSS output are: that the measurement of non-market output should, as far as possible, follow a procedure parallel to that adopted for market output; and that the output of the government sector should be measured in a way that is adjusted for quality.

2.2 Atkinson advocated (paragraph 2.16) a move to direct measurement of government output (instead of the common input=output convention), with the direct measures being in the form of changes in output since a reference year (paragraph 2.20). The report emphasises (paragraphs 4.21 - 4.22) that ideally it is the incremental impact on outcomes arising from the activities of the public sector that should be measured, but it accepts that a volume measure of activities may be the only available indicator of output and that therefore this may have to be used. Atkinson also recognised (paragraph 11.51) that the nature of CSS interventions and the breadth of their impact make the measurement of CSS output particularly difficult. Several specific problems as regards CSS are noted (paragraphs 11.61 – 11.63), namely conceptual difficulties in identifying outputs and measuring their value, poor availability of quantitative data and data collection taking place less frequently than at annual intervals.

2.3 The National Accounts are intended to indicate broad trends in the volume of output over time, so they need to capture changes in government output in a consistent way. The output measures included in the National Accounts are only indicators of total output rather than accurate measures of it. For the CSS output measure to be reliable it needs to include as comprehensive a range of activities as possible and be representative of all the activities generated by this government expenditure.

CSS interventions and their outcomes

2.4 The mapping exercise undertaken in the first phase of this study and reported in the interim report (Soper et al., 2006) distinguished thirty three different types of service delivered by CSS. Table 1 lists these services, the client groups targeted and the ECM outcomes that they are designed to improve (see paragraph 1.10). This table provides a basis for developing improved activity volume measures related to a framework of welfare outcomes as Atkinson recommended, and it represents a big step forwards in identifying CSS outputs. The services listed, however, differ greatly in the amounts of resources they use, whether measured in terms of expenditure or in terms of the number of hours of CSS personnel time that they involve. A more detailed mapping would distinguish different activities within some of these service categories, especially for numbers 13 and 14, *CSFI services* and *Support child/placement for LAC*.

Table 1 Mapping of services provided by CSS

Service	Target group	ECM outcomes
1. Strategic management	All	All outcomes
2. Early years support	All (open access)	All outcomes
3. Parenting programmes	All (open access)	All outcomes
4. Teenage pregnancy services	All (open access)	Be healthy
5. Child health promotion programmes	All (open access)	Be healthy
6. Counselling/Mental health support	All (open access)	Be healthy
7. Drug and alcohol services	All (open access)	Stay safe
8. Supervised family contact services	All (open access)	Stay safe
9. Truancy and school exclusion services	All (open access)	Enjoy and achieve
10. Behavioural programmes in schools	All (open access)	Enjoy and achieve
11. Careers services	All (open access)	Enjoy and achieve
12. Services for young people not in education, employment or training	All (open access)	Economic well-being
13. CSFI services	CSFI	All outcomes
14. Support child/placement for LAC	LAC	All outcomes
15. Secure accommodation for LAC	LAC	All outcomes
16. Other services for LAC	LAC	All outcomes

17. Adoption services	LAC	All outcomes
18. Services for children with disabilities	(All referral only)	All outcomes
19. Respite care	(All referral only)	All outcomes
20. Leaving care services	LAC	All outcomes
21. Independent visitors	LAC	All outcomes
22. Direct payments for CSFI	CSFI	All outcomes
23. Counselling/mental health for LAC/CSFI	LAC and CSFI	Be healthy
24. Treatment foster care	LAC	Be healthy
25. Health assessments for LAC	LAC	Be healthy
26. Local safeguarding children boards	(All referral only)	Stay safe
27. Child protection	(All referral only)	Stay safe
28. Learning support for children with disabilities	(All referral only)	Enjoy and achieve
29. Special schools	(All referral only)	Enjoy and achieve
30. Education services for LAC (e.g. PEP)	LAC	Enjoy and achieve
31. Services for Young Offenders	(All referral only)	Positive contribution
32. Placements for young offenders	(All referral only)	Positive contribution
33. Support for care leavers	LAC	Economic well-being

2.5 Strategic management relates to all the other services in table 1. There are eleven open access interventions, most of which are provided on a multi-agency basis with CSS not necessarily taking the lead role. The remaining twenty one services are targeted at children in need as defined in the Children Act 1989 (section 17). Interventions that support a family in bringing up their child (CSFI services) and those that provide care and accommodation for LAC aim to impact on the overall development of the children supported. Such interventions are largely delivered by CSS, with some being bought in. These interventions are intended to help children achieve all five ECM outcomes: being healthy, staying safe, enjoying and achieving, making a positive contribution and achieving economic wellbeing. Since many LAC have additional health and education needs, two additional services, health assessments and Personal Education Plans (PEP), are provided (at least in theory) to all LAC. These focus on helping LAC to achieve the specific ECM outcomes of being healthy and enjoying and achieving.

2.6 Other targeted services address children's additional support needs. These services, which may be for CSFI, LAC or both these categories of children, are

additional to the basic support or care services, but are only provided to those children for whom they are appropriate. Each of the 'support needs' services focuses on a particular ECM outcome and is typically provided on a multi-agency basis.

2.7 Interventions by CSS have an immediate effect on the lives of the children and young people who are assisted, but their overall impact is much greater than this. Poor socio-economic circumstances have been shown by Kuh and Ben-Schlomo (1997), Gray (2003), Statham and Holterman (2004) and many others to have a wide impact on children's development and their future careers. Assisting vulnerable children generates improvements in their health, education and emotional well-being. These changes affect their careers, their achievements and their ability to develop relationships with others and so continue throughout their whole lives. The outcomes to which CSS interventions contribute are therefore widely dispersed in time. They are also affected by teachers, education workers, health professionals and youth justice workers who work with the same disadvantaged children.

Methodological issues in measuring CSS output

2.8 The literature review identified a number of methodological issues in measuring CSS output, in particular around applying measurement procedures similar to those for market output, and in attributing changes in client's outcomes to CSS interventions.

<u>Difficulties in using measurement procedures similar to those for market output</u>

2.9 CSS activities accord with the usual pattern of government output in that they are usually supplied free of charge. This means that there are no market prices by which their value can be measured. The National Accounts record changes in the value of output over time. This is straightforward for private sector output, which has a market value reflected in the price of that output, but in the absence of a price there is no market value for publicly-provided CSS. Moreover, seeking to identify the contribution that CSS interventions make to outcomes is an attempt to

capture more complete information about improvements generated than market prices provide. If all contributions to outcomes for each individual could be measured, the total value of the benefits would be captured including consumer surplus. Market prices, however, measure marginal utility.

2.10 While it is very difficult to value the benefit of providing CSS interventions, the costs of withholding them are well attested. Page (2002) points out that childhood disadvantages lead to poor health, poor employment prospects, social exclusion and increased dependence on statutory services at key stages in the life cycle. Knapp (1997), Tudor-Edwards and Thalanany (2001), Scott et al (2001) and many others have demonstrated that if no interventions are provided to children with mental health needs, there are both immediate and long term economic consequences not only for the children but also for the various publicly-funded services that have to support them throughout their adult lives. Many CSS activities are aimed at promoting children's well-being by trying to deflect them from these costly and disadvantageous life pathways, largely by removing the various risk factors. One indicator of the value of social services might therefore be compiled by examining the costs of not intervening.

2.11 The concept of added-value is fundamental to National Accounts methodology. It implies measuring the growth in output that occurs as a direct result of CSS activity. Ideally it is the incremental contribution to clients' outcomes resulting from CSS interventions that should be recorded since it is the ultimate outcomes that are government objectives. Optimally one would like baseline measures for categories related to the child's physical, mental, emotional state and level of educational attainment on first receiving CSS support, and similarly on an annual basis until case closure. The use of baseline data is particularly important since those children who receive support from CSS have a wide range of different needs and the use of standard outcome indicators is therefore inappropriate. For example, GCSE results may not be an appropriate indicator of education or academic achievement for children with disabilities.

2.12 The timescale over which service users' outcomes are measured would ideally be a very long one. Paragraph 2.7 explains that the impact of CSS interventions

extends over many years. For practical purposes a cut-off is necessary, but ideally outcomes would continue to be measured for some years after a child has left care, for example.

2.13 For services which are bought in a market (such as insurance and train travel), consumers choose whether or not to purchase them. Economic analysis shows that the principle of consumer sovereignty therefore ensures that the price of a service reflects its value to the marginal service user. With CSS, however, local authorities make the decision about who receives services, and large differences between authorities have been reported in the thresholds at which children come into care (Carr-Hill et al, 1999 and forthcoming) or access services for CSFI (Aldgate and Tunstill, 1995). This is supported by government returns on the proportion of children looked after by different local authorities (DfES, 2006). The marginal valuations of service users are therefore likely to differ between local authorities, whereas in a market they would be equalised by price. This leads to difficulties in measuring welfare.

2.14 If thresholds in different local authorities were equalised by expanding CSS provision in the authorities where marginal returns are highest, it seems likely that the additional children helped would have lower additional needs than the children typically helped at present. If so, there would be diminishing marginal returns to extending CSS activities. Atkinson notes that the existence of diminishing returns does not mean that service expansion is unjustified, since the value of the additional output may still exceed the cost of the inputs.

2.15 The absence of a market, and the removal of decision-making powers about who receives services to a government agency has further implications for the measurement of CSS output. For example, in the case of safeguarding services, some of the parents to whom these interventions are provided would prefer not to receive them. Therefore despite the positive benefits to the children themselves and to society of safeguarding children, some service recipients do not value these interventions. Such services, of which the government provides more than people would buy for themselves, are termed ‘merit goods’ by economists (Sloman, 2006, pages 306-7).

2.16 Economic theory also shows that given the vulnerability and dependency of the children who receive CSS interventions it is possible that the decisions made are not actually in the child's best interests. While judgements made by CSS professionals are very likely to be in the child's best interests, even if they are not the child has no choice but to accept them. This is called a principal - agent situation, where the agent (CSS) has control over the outcome gained by the principal (the child). It is theoretically possible, for example, that the social worker could choose to handle a situation in the way that is easiest for them, rather than doing what is best for the child. Such an event is described as the occurrence of X-inefficiency (Sloman, 2006, pages 207-8). Incentives or monitoring (such as that provided by the Commission for Social Care Inspection) are needed to minimise the risk of such principal-agent problems arising.

Attributing changes in user's outcomes to CSS interventions

2.17 Social services interventions are intended to improve children's lives. Indicators to measure their impact should therefore show whether a change has occurred and, if so, the size of the change and its direction.

2.18 The difficulties in attributing outcomes to specific CSS interventions are discussed by Parker et al. (1991) and Jones (1991). An outcome is the result of something, which in the CSS context implies the difference between the condition or situation of a family that received a service, compared to their situation had they not received it. The counterfactual here is unknowable, since the same family cannot both receive and not receive a service. This makes it difficult to obtain empirical proof of the outcomes of CSS interventions. Factors other than the CSS-provided services also contribute to observed outcomes, since a package of multi-agency interventions is often provided, and most child care is provided by families themselves.

2.19 Other measurement problems relate to the nature of the outcomes. Open access and CSFI services such as safeguarding are preventative, and it is very difficult to measure something that does not occur as a result of services provided.

2.20 It can also be unclear whether an observed change in an outcome should be interpreted as an improvement or as a worsening of the situation, and this often involves making subjective judgements. For example, LAC services have often been deemed successful if a child returns home. Minty (1999), however, suggests that this is not always an appropriate criterion since studies such as that by Farmer and Parker (1991) have found that returning to live at home 'on trial' can be an unstable and even harmful placement. A further problem in using the child living at home as an outcome is that this is the event which would have occurred if CSS had never got involved in the first place.

2.21 Even once a change in child welfare is measured, there is then a difficulty in attributing credit for it amongst the various agencies involved with the child since these include education, health, mental health and youth justice services, as well as CSS and the families themselves. This is an intrinsic problem for CSS, since one of the main roles of a social worker is to relate to external agencies (Frost, Robinson and Anning, 2005).

2.22 The literature analysis (Soper et al, 2006) provides evidence that the recent policy initiatives promoting multi-agency working have generated benefits for the children served, especially as regards the services that address particular support needs. Local authorities are extending the use of this approach. They are developing children and young people's strategic partnerships and setting up commissioning strategies that bring together all the funding streams and resources within new Children's Services Directorates and partner agencies. However, the multi-agency approach introduces further complexity for national income accounting where there are international guidelines on how to measure the volume and growth in output (Pritchard, 2004). Given that the trend to multi-agency working is likely to continue, a clear methodology is needed for allocating expenditure and outcomes of multi-agency interventions where the roles of the different professionals have considerable overlap. This, then, forms **Principle B: Consideration should be given as to how to attribute changes in output to different agencies when interventions are provided on a multi-agency basis. Clear guidelines for attribution should be developed.**

Practical issues in measuring CSS output

2.23 Evidence of the extent to which it is currently possible in the UK to measure the incremental contribution to outcomes of CSS interventions is assessed in section 5 of the interim report (Soper et al, 2006). One approach to gathering outcomes information is to ask a sample of clients to complete a questionnaire. Instruments are available to assess health and well-being, e.g. the Strengths and Difficulties Questionnaire. In the UK, however, there is no infrastructure for administering such a questionnaire at regular intervals. Although children's views on the quality of the care services provided for them are now recognised as important, Sinclair, Wilson and Gibbs (2001) report various difficulties with the quality of data obtained by interviewing children in care. The overall conclusion is that the questionnaire or interview type approach will not at present generate sufficiently robust data for national accounts purposes. Ongoing work on developing outcomes based contracts for social work services may lead to improvements in data quality, including client satisfaction measures.

2.24 The Integrated Children's System (ICS) (Department for Education and Skills, 2000-2005) links the Assessment Framework with Looking After Children (Department of Health, 1995, Ward, 1995) – a programme to assess outcomes for children in the care of local authorities. The ICS therefore provides a means of collecting CSS outcomes data in an electronic format as part of the key social work processes that occur for all children in need, namely assessment, planning, intervention and review. However the ICS is not yet fully implemented, and the findings from the pilot indicate that such data is unlikely to be comprehensive.

2.25 Standardised attainment tests at different Key Stages can be used as education outcomes measures. Using the National Pupil Database it is possible to link the attainment of individual pupils at different Key Stages of the National Curriculum and thus measure change at the individual child-level. There is a previously mentioned problem, however, that although CSS contribute to ensuring pupils attend school, children's educational progress depends to a great extent on their teachers and on other factors such as cognitive development, family

circumstances, etc.. Nevertheless, school adjustment and performance is recognised as an indicator of the child's general well-being (Jackson, 2001) and is suggested as a proxy measure of the child's health by Edmunds, Haines and Blair (2005) and by Kurtz (2003).

2.26 Since joint working implies sharing accurate and up-to-date information (Atkinson et al., 2002; Hallett, 1995), the increase in multi-agency working that is taking place seems likely to lead to greater sharing of database information that could provide relevant data for CSS output indicators.

2.27 Measuring the incremental contribution of CSS interventions to children's outcomes is difficult, but might be possible with appropriate measuring instruments. This leads to **Principle C: Consideration should be given to developing an infrastructure to collect data by questionnaires or tests at regular intervals from children receiving interventions from Children's Social Services. Developments of Children's Social Services' systems such as the Integrated Children's System should take into account the need to generate holistic measures of children's outcomes.**

Key service domains for CSS indicators

2.28 The indicators of CSS output should represent each of the four broad categories of service provision:

- open access services for vulnerable children;
- targeted services for children in need living with their families or independently (CSFI);
- targeted services for looked after children (LAC); and
- services to meet children's additional support needs.

These categories correspond to the different ways in which children have contact with CSS and also to an important factor in the cost of service provision, the additional support needs of the child. Research by Ward et al., (2004) has shown that a key influence on the cost of looking after a child is the extent of the child's additional support needs. These needs are intrinsic to the child, rather than the categories of need collected for the annual SSDA 903 statistical returns to DfES.

The latter relate to the family circumstances that cause the child to be taken into care, but research has shown they do not influence care costs.

2.29 The support needs that do impact on costs include safeguarding, disabilities, emotional and behavioural difficulties, offending, health problems and educational difficulties. Services to meet these needs are additional to basic family support (CSFI) or care and accommodation (LAC) services. Support needs services focus on specific ECM outcomes as appropriate, whereas many CSFI and LAC interventions address all of the ECM outcomes. Support services are generally accessed via CSS but may be provided by a wide range of agencies in the public, private and voluntary sectors. The volume of support services provided depends on the number of children with particular support needs and this is likely to change over time.

2.30 In short, the different types of CSS interventions arise for different reasons, incur different costs and are subject to different forces of change, hence they require separate indicators, as proposed in Principle A. Analysis of the types of services that CSS provide shows that the key domains for indicators are:

I. open access services
II. family support (CSFI) services
III. accommodation and care (LAC) services
IV. specialist support services

Reference to the mapping of 33 services in table 1, however, shows it would preferable to have greater disaggregation than this, with separate representation in the index of each type of CSS activity. Setting out this requirement gives **Principle D: Separate indicators should be used for each service domain, or ideally for each of the thirty three service types identified in the mapping exercise, and indeed for separate activities within major service types.**

Availability of outcome indicators for key service domains

2.31 Although the importance of CSS outcomes is generally recognised and set out in ECM:CfC (see paragraph 1.10), there are many challenges in measuring them. In the UK at present there is very little outcomes data that can be related to

specific interventions, but more may become available in future. What data there is at present is most suitable for use as a quality measure (see section 4). Given the possible uses of outcomes data, it seems useful to set out **Principle E: Outcomes or quality measures should be based around the Every Child Matters framework.**

Open access services

2.32 An open access approach to service provision implies minimal client records. The only way, therefore, that the impact on client outcomes for this category of CSS activities could be measured is through questionnaires or interviews with a sample of clients. Sufficiently robust outcomes data is therefore not available at present.

Family support (CSFI) services

2.33 At present the only possible approach to gathering outcomes data for users of CSFI services is via questionnaires or interviews with the children or their parents. If data on domains such as child well-being, child development and parental goals could be gathered by regular completion of questionnaires, it might be sufficiently robust. At present, however, there is no infrastructure to do this in the UK, although there is some experience of such systems in the USA (Kiresuk et al., 1994; Beinecke et al., 1997 and Reed-Ashcraft et al., 2001). In future some CSFI outcomes data may be available through the ICS.

Accommodation and care (LAC) services

2.34 The methods described for collecting outcomes data for CSFI are also applicable to LAC, and similar conclusions apply. A problem in attributing outcomes is that children move between CSFI and LAC status in both directions, and the aggregate numbers that do so and the length of time children receive services as CSFI are not at present available. Data collection at regular intervals in the USA using structured interviews with the child and carer is described by

Beck et al. (1998), and it is possible that in future the ICS may perform some of the same functions in the UK.

2.35 The information at present recorded for LAC yields a number of outcomes indicators. Measures of placement stability can be obtained from the dates of placements. Although some exceptions were demonstrated by Minty (1999), placement stability generally has a positive impact on outcomes in that LAC who have stable placements reach higher levels of attainment and are better able to form social relationships (Biehal et al., 1995). Indicators relating to immunisations, dental checks and health assessments are available, but these do not represent the overall health status of LAC. Education outcomes for LAC are presently available at the aggregate level but not the individual-level. Such data will be available in the very near future, however, when the SSDA 903 data (the main data collection for LAC) and the National Pupil Database are linked. The problem of attributing changes in educational outcomes between the agencies that contribute to its achievement (see paragraph 2.25) will, however, remain. Other LAC outcomes data currently recorded includes cautions and convictions, although this may sometimes be a cause of a child becoming looked after rather than an outcome. Employment status at end of school Year 11 is also available, providing a useful measure of achievement at age 16. The data available for LAC therefore depicts certain aspects of children's development, but it does not capture overall changes in well-being, and it cannot be linked to specific interventions.

Safeguarding services

2.36 Outcomes for safeguarding services are intrinsically difficult to measure since the intervention is preventative and there is no way of measuring what has not occurred due to the intervention. Data is available, however, on the number of referrals, assessments and children and young people on the child protection register. Of the information available, the project Steering Group advise that the best outcomes proxy is the number of re-registrations on the child protection register, a decrease in which is an indicator of improvement in safeguarding. One of the local authority advisers, however, preferred the number of re-referrals since

they relate to the last twelve months only and therefore are more likely to be due to the same cause as the original referral.

Support needs services

2.37 The means of measuring the outcomes of support needs service users are again interviews and questionnaires, with the possibility of using purpose-designed questionnaires appropriate to the child's particular needs. Different outcomes objectives may be appropriate, as Rabiee et al. (2005) suggest is the case for children with disabilities. The conclusion, however, is as before. The questionnaire approach will not yield sufficiently robust data at present, and in future some outcomes data may be available through the ICS.

Availability of activity indicators for key service domains

2.38 Given the difficulties involved in assessing the contribution of CSS interventions to clients' outcomes, another approach to measuring CSS output is needed. Volume indicators can be obtained by measuring CSS activities. This method is advocated by Parker et al (1991) and Yates (1996). Friedman, Garnett and Pinnock (2005) argue that long term outcomes may be predicted by measuring interim outcomes or even processes as surrogates for long term outcomes. In addition, they point out that process data show whether things that are expected to contribute to better outcomes are actually happening. The way forward, then, for measuring CSS output is enunciated in **Principle F: Ideally the impact of Children's Social Services' interventions on outcomes should be isolated using individual child-level data. As this is unavailable, a simpler approach must be taken using aggregate volume measures adjusted by aggregate quality, but without controlling for external factors such the impact of other agencies. Although second best, this approach improves on the current measure which combines a smaller number of unadjusted volume measures with indicators of input.**

2.39 The choice of activity indicators has implications for associated measures of productivity. Detailed discussion of these is outside the scope of the present

study, but productivity measurement is mentioned briefly with respect to the recommended activity indicators. Comparison of the indicators already used for LAC (see paragraph 1.5) shows that both the quantity of interventions supplied and the number of children that receive them need to be captured in an indicator if the associated measure of productivity is to be meaningful. This is set out in **Principle G: Measures of activity should take account both of the hours of service provided and the numbers of children that receive them.**

2.40 The availability of activity data for each of the key service domains has been investigated and details of what currently exists are set out below, together with specific recommendations about what indicators should be included in the index. There are still challenges in obtaining information about processes, partly because it may not be appropriate to keep computerised records about every individual who has some contact with social services (as a request for information, or at a drop-in centre), nor of the minutiae of what social workers do. Where CSS facilitate access to specialist services, often only the number of referrals is recorded in local authorities and the national returns do not include relevant activity information. An approach to data collection that would yield individual-level data is the loyalty card system that is now used throughout the retailing sector. It could be introduced on a similar voluntary basis with parents being able to collect points by presenting their card when participating in a CSS-provided service. This is potentially a cheap and accurate way of collecting data about service usage and the positive incentives it would provide might improve client attendance.

Open access services

2.41 Many open access services previously took place in family centres, which have now been replaced by children's centres. At present, little data is collected about service usage at such centres. A further problem is that although CSS contributes to the provision of these services, other agencies do too so that it is very difficult to separate the 'value added' contribution of CSS. Moreover, open access services form a relatively small proportion of CSS expenditure (see section 3). Recognition of these measurement issues leads to **Recommendation 1: There should not be a separate activity indicator for open access services at this stage, but**

consideration should be given to the exploration of a loyalty card system that would generate service usage information in the future.

Family support (CSFI) services and assessment

2.42 Services targeted to children supported in their families and independently (CSFI) are provided to children who have been referred to CSS, and therefore activity indicators based on the numbers of children provided with services are potentially available. The research carried out in this study leads to **Recommendation 2: The total number of hours of service provided to CSFI provides a measure of CSFI activity, and it should be included in the index when data is available.** This activity data was previously collected from local authorities by the DfES in a biennial census titled the Children in Need census. This data collection has been discontinued but is currently being redeveloped with the intention of launching a new census in 2008-09. It is recommended that a similar measure to the 'number of hours of service' should be included in the CiN census replacement, which should be collected at annual intervals. A disadvantage of this indicator is that it fails to capture the number of children receiving services, which may need to be included as an additional indicator. Unlike the LAC indicators (see paragraph 2.44) where the number of days in a year puts a ceiling on service provision per child, there is no sensible upper limit to the number of hours of service that each CSFI may receive. The proposed indicator therefore provides no way of distinguishing between an increase in services to children who are currently supported by CSS and the supply of services to additional children, which is likely to be more expensive to provide. Ideally there should be separate indicators for different groups of CSFI, e.g. children who have been newly referred, children who have been CSFI for some time and are currently receiving services, and children who are not currently receiving services, although they retain their CSFI status.

2.43 Another available activity measure is the number of core assessments completed. The children assessed may be offered either CSFI or LAC services, so the indicator jointly covers these two categories. Assessment is concerned with making a decision about which, if any, services should be offered to children.

Since it is separate from the actual provision of these services it provides a different perspective on CSS output. This leads to **Recommendation 3: The 'number of core assessments completed' should be included in the index.**

Accommodation and care (LAC) services

2.44 Each LAC should have health assessments, a Personal Education Plan, and contact with an independent visitor. Assuming these services are actually provided to all LAC, measuring the 'number of child-days for which children are accommodated' gives a proxy indicator for these activities, as well as a direct activity indicator for the provision of the placement itself. It is appropriate to include different versions of the indicator (as at present) to represent various types of accommodation, since these incur different costs and may be provided to meet particular needs. These arguments support **Recommendation 4: The separate LAC activity indicators for foster care, residential placements, secure accommodation and other types of placement should continue to be used.**

2.45 Before LAC can be placed for adoption, adoptive parents must be recruited for them, and thereafter they have to be supported. An indicator of the volume of CSS activity that takes place with adopters and potential adopters is the number of children who become adopted in a particular time period. The measure is slightly lagged, since preparatory activity occurs before adoption takes place. This activity does not overlap with the number of child days in adoptive placements, which are already included as LAC placements, since the adoption process is concerned with the recruitment and support of parents, while the number of days in the placement relates to looking after the child pre-adoption. Inclusion of the indicator is therefore proposed as **Recommendation 5: The 'number of children adopted' should be added to the index as a new indicator.** Appropriate expenditure data is available (see paragraph 3.10).

2.46 It is appropriate to include this additional activity measure, since recruiting adoptive parents costs much more than finding an ordinary LAC placement: Selwyn et al. (2006) estimate an average basic cost of £9,346 per child, rising to £29,293 for a child who is difficult to place. However, given that an aim of the

Adoption and Children Act 2002 is to increase the number of children leaving care for adoption, with the Government's target for adoptions in the Priorities and Planning Framework 2003-06 being a 40% increase by 2004-05 and a 50% increase by 2006 as compared with 1999-00, it is likely that more placements for children who are difficult to place are now being sought. The implication is that the average cost of finding an adoptive placement is likely to be rising, making CSS productivity appear to fall because the changing difficulty of placement has not been accounted for. Ideally, therefore, there should be separate indicators for children who are difficult to place and those who are not, or a weighting which is applied to the basic adoption series reflecting the difficulty of placement. Factors that make a child difficult to place have been identified for LAC by Ward et al (2004), but further research is needed as to whether the same factors apply for adoption and how they might be used to produce a weighting applied to the single adoption indicator recommended here.

2.47 A separate, additional service for LAC is the provision of support to young people as they leave care. This is not covered by the current measure of output. Ideally, an activity indicator should measure both the volume of interventions and the number of care leavers, but only the latter is currently available. Using this gives **Recommendation 6: The 'number of children aged 16 and over who have ceased to be looked after and who meet the definition of care leavers under the Children (Leaving Care) Act 2000' should be added to the index as a new indicator.** This measure has the disadvantage that it does not capture changes in the quantity of support provided per child, so it will not change in response to an increase in expenditure that provides additional services for each care leaver. Ideally, therefore, information is needed on the volume of services provided to care leavers to provide an improved indicator. The data could be collected either in the replacement CiN census or by a loyalty card system.

<u>Safeguarding services</u>

2.48 While safeguarding activity could be measured as the number of referrals or number of children on the Child Protection Register and a decrease in the number of re-registrations represents an improvement in safeguarding (see paragraph

2.36), there is no suitable data at present for weighting a safeguarding indicator (see section 3). This leads to **Recommendation 7: Suitable activity indicators are available for safeguarding but cannot at present be included in the index because there is no separate expenditure or average cost data available with which to weight them.** The Cost Calculator for Children's Services (Soper et al., 2006) is a software application that uses a unit cost approach to calculate the cost of children's services. At present only LAC services are included, but a study is underway to extend the Cost Calculator to cover other aspects of children's services, including those for CSFI. As part of this work, unit costs for safeguarding processes will be developed. From this stems **Recommendation 8: The inclusion of safeguarding indicators should be reconsidered once average cost data from the Cost Calculator study is available for weights.**

Support needs services

2.49 Services to meet support needs include those for children with disabilities, children with emotional and behavioural difficulties, and young offenders. Potential measures of these activities include the number of children to whom each service is made available, and the number of child-days for which a special placement such as respite care or treatment foster care is provided. Unfortunately, however, none of this activity data is currently collected in national returns, and indeed not all of it is collected at local authority level. Advisers in local authorities say that most local authorities do not separately record each overnight respite stay, and the current MIS system from one major supplier has no field for recording whether or not a child has disabilities. This leads to **Recommendation 9: Consideration should be given to improving data collection procedures so that indicators for services to support children's additional needs can in future be included in the index.**

Other services

2.50 Given current data availability it has not been possible to propose indicators that cover the full range of CSS activities. From this stems **Recommendation 10: The deflated expenditure approach at present used to represent all other**

CSS activities (see paragraphs 1.4 – 1.5) should continue to be used, taking into account the new activity indicators that have been separately identified.

The way forward

2.51 The review of available activity data for each of the key service domains, and indeed each of the thirty three CSS activities, revealed only a small number of indicators which can feasibly be used to improve the current CSS output measure. One criteria for the review was data quality. The National Accounts are compiled by the Office for National Statistics (ONS) in line with United Nations guidelines so the data and methodology used are subject to a rigorous quality assurance process. The advice given by the project Steering Group is that the three guidelines listed below should be followed in selecting data to recommend for inclusion in the accounts:

- Guideline 1: Only include indicators constructed from published data, or that form a component of a published aggregate series, as a guarantee of data quality.
- Guideline 2: Only include activity indicators for which expenditure data is available, either in the form of administrative data from the PSS EX1 for example, or as inferred unit costs. A quality indicator that spans a small group of related expenditure lines may also be acceptable.
- Guideline 3: Only include quality indicators where changes are wholly or mostly attributable to CSS activities.

All of the recommendations made above accord with these guidelines.

2.52 On the basis then of the review and the required data quality, the additional indicators which are recommended for inclusion to represent different aspects of CSS activity are:

- The total number of hours of service provided to CSFI;
- The number of core assessments completed;
- The number of children adopted; and
- The number of children aged 16 and over who have ceased to be looked after.

Web links to sources for this data are given in table A1 in the Annex, with specific tables for the variables being listed in table A2. As the data required to include the first indicator for CSFI has been discontinued until 2008-09 at the earliest, it is not

recommended for inclusion immediately but only once the new data becomes available.

2.53 It is also recommended that the following four activity indicators continue to be used in the index:

- Number of child days in Children's Homes (including residential schools);
- Number of child days in Secure Accommodation (welfare);
- Number of child days in Foster Placements; and
- Number of child days in Other LAC Placements.

The next section now sets out the methodology for weighting together the new set of eight activity indicators, along with the ninth indirect input measure.

3. WEIGHTING

3.1 The indicators that measure different types of CSS activity have to be weighted before they are combined into a composite index. Weights should denote the relative importance of the different activities so that the combined overall output measure appropriately represents CSS activity as a whole. The type of index currently used for CSS output in the National Accounts is an annually chained, base year weighted (Laspeyres) index: the algebraic construction of which is set out by UK Centre for Measurement of Government Activity (2005).

Atkinson recommendation for weights

3.2 Atkinson (paragraph 6.17) reiterated the System of National Accounts requirement that in constructing an aggregate output indicator the growth of its different components 'must be weighted by their economic importance as measured by their values'. In the case of private sector output, its value is taken to be the price at which it is sold since this represents the value that the buyer expects to gain from the purchase. The market price is equivalent under certain assumptions, notably competitive supply, to the marginal cost of the output. For non-marketed output, however, the output valuation cannot be observed and there is no reason why it should coincide with the marginal cost. Indeed, Atkinson showed it is possible for there to be a negative relationship between marginal valuation and marginal cost.

3.3 While Atkinson (paragraph 6.25) recommended using indicators of the values of the different types of output or their marginal costs as weights, he recognised that in practice average costs may be the only information available.

Measuring the value of CSS output

3.4 For marketed output, the price at which it is sold is assumed to be equivalent to the utility of the marginal consumer, but the utility that is expected when the purchase decision is made may differ from what is actually experienced. Marketers use the term 'cognitive dissonance' to describe dissatisfaction that is

often felt once an item is actually owned, whereas other purchases may surpass expectations. For CSS, the only practicable approach to measuring marginal utility is to use average costs, which are less likely than market prices to coincide with actual values of marginal utility.

Availability of data for calculating weights in the CSS output index

3.5 Total expenditure on an activity divided by the volume of activity that takes place gives the average expenditure on, or average cost of, that type of activity. Expenditure weights therefore correspond to average cost weights and all the weights used in the current CSS output index are of this type. They are derived from the PSS EX1 data return. This return records all expenditure by local authorities on children's social services, split into seventeen categories of activity. The categories and the percentage of total CSS expenditure in each of them in 2004-5 are shown in table A3 in the annex. The four key service domains which are defined and identified by Roman numerals in paragraph 2.30 are listed alongside the various expenditure categories to which they relate.

3.6 Total expenditure on each of the four activities that are currently included in the CSS output index is directly identifiable from the PSS EX1 data return, as expenditure on each category is listed separately. However, in extending the coverage of the index to better represent the range of CSS activities, there is an issue in finding appropriate data to use as weights. This is almost as great a challenge as measuring the volume of output. Moreover, expenditure or average cost data is just as essential as activity data since an indicator can only be included in the overall index if a corresponding weight is available.

<u>Availability of expenditure data for weighting LAC services (domain III)</u>

3.7 The only direct output indicators that are included in the current, post-2005 CSS index measure placement provision for LAC. They are:

- Number of child days in Children's Homes (including residential schools)
- Number of child days in Secure Accommodation (welfare)
- Number of child days in Foster Placements

- Number of child days in Other LAC Placements, including Adoption Placements.

These activity indicators correspond closely to the four expenditure categories in the *Children Looked After* sub-set of table A3. The matching of fostering services expenditure and activity could, however, be improved since the expenditure data defines *Fostering Services* as including children placed pending adoption, while the activity indicator currently in use groups adoption placements in the fourth of the above indicators, 'Other LAC Placements'. This leads to **Recommendation 11: The 'Number of child days in Adoption Placements' should be counted in the 'Foster Placements' category instead of with 'Other LAC Placements'.**

3.8 Expenditure on the four LAC placements activities is all incurred to provide care and accommodation for LAC, and so it primarily relates to key domain III. Some placements, however, provide additional facilities to meet children's support needs, for example residential schools and treatment foster care. Provision of such placements therefore also addresses domain IV, as indicated in the key service domains column of table A3.

3.9 The provision of a placement is central to a local authority looking after a child, but it is not the only activity that takes place. The other processes include making a decision to look after the child, finding a placement, care planning and reviews for example. All these other LAC activities form part of the PSS EX1 category *Commissioning and Social Work* and so domain III is listed as one of the key domains in this row of table A3.

3.10 Expenditure on social workers seeking new parents and supporting existing adoptive parents is included in the expenditure category *Adoption Services,* which corresponds to output domain III. This expenditure category is an appropriate weight for the additional activity indicator recommended in paragraph 2.45, so this forms **Recommendation 12: *Adoption Service*s expenditure should be used as the weight for the 'number of children adopted'.**

3.11 Leaving care services are provided to children who have formerly been looked after to help them adjust to adult life. Expenditure on *Leaving Care Services* is

therefore also linked to LAC and its key domain is therefore shown as III in table A3. A new indicator for which this expenditure is an appropriate weight is proposed in paragraph 2.47, which implies **Recommendation 13: Expenditure on *Leaving Care Services* should be used as the weight for the 'number of children aged 16 and over who have ceased to be looked after'.**

3.12 The expenditure sub-set *Children Looked After* in table A3 represents the major part of LAC expenditure and forms 44% of total CSS expenditure. There are, however, various LAC services that are not included in this sub-set. Adding expenditure on *Adoption* and on *Leaving Care Services* brings the LAC proportion of total CSS expenditure to 52%. In addition, some part of the expenditure on *Commissioning and Social Work* and *Other Other Children's and Families Services* is attributable to LAC (see paragraph 3.9), making the total spent on LAC around 60% of CSS expenditure. Part of this expenditure is incurred to meet the additional support needs of LAC and ideally there would be separate support needs indicators to represent it, but at present there is no suitable activity data.

Availability of expenditure data for weighting CSFI services (domain II)

3.13 The current CSS index includes an input measure that is loosely described as an indicator of services for CSFI. This measure is derived from deflated expenditure for all categories in table A3 except those in the *Children Looked After* sub-set. The key service domains listed in table A3 show, however, that this is not strictly an indicator of CSFI output. It includes some open access services, some services to LAC (listed in paragraphs 3.9 - 3.11) and also one additional support need that is separately distinguished, offending behaviour (children in receipt of Youth Justice services may be either LAC or CSFI). The current indicator therefore represents a miscellaneous group of CSS activities; one of the aims of this study was to disaggregate it and replace as many elements as possible by direct output indicators.

3.14 A CSFI activity indicator that is recommended for inclusion (paragraph 2.42) is

- 'total number of hours of service provided to CSFI'

This represents activities carried out by social workers with the children and their families, often in family centres (now children's centres) or with children under the age of eight. From consideration of the *Family Support Services* sub-set of PSS EX1 categories, the two that it is recommended should be combined to derive a weight for this activity are *Family Centres* and *Services for the Under 8s* (although both of these include some expenditure on open access (domain I) services). The categories of *Direct Payments* and *Equipment and Adaptations* do not relate to the volume of CSFI support activities, nor does *Home Care* which provides home care assistants, sometimes through voluntary organisations. The last category in the PSS EX1 sub-set is *Other Family Support services*. Whilst this covers some direct activities with children and families it also covers other activities so it is suggested that, on balance, this category should not be included in the weight for this new activity. This argument leads to the proposal of **Recommendation 14: Expenditure on *Family Centres* and *Services for the Under 8s* should be used as the weight for the 'total number of hours of service provided to CSFI'.**

3.15 There is no separate PSS EX1 expenditure category for the 'number of core assessments completed' which is also recommended for inclusion as an activity indicator (paragraph 2.43). Spending on this activity, which relates both to LAC and to CSFI, is included in the general *Commissioning and Social Work* category. An alternative method of obtaining a weight for this indicator is suggested below.

Availability of expenditure data for domains I and IV

3.16 Separate expenditure data is not available for open access services which form domain I. They are combined with CSFI services in the expenditure categories *Family Centres, Services for Under 8s* and *Home Care*. The total expenditure in these three categories forms only 8% of total CSS expenditure, so open access services almost certainly account for less than 5% of total CSS expenditure. This was taken into account in making the recommendation in paragraph 2.41 that there should not be a separate indicator for open access services at this stage.

3.17 There is separate expenditure data for interventions relating to one of the children's needs included in domain IV, namely offending. As reported in paragraph 2.49, however, there is no suitable activity data available. For safeguarding services the situation is reversed: activity data is available, but expenditure cannot be disaggregated from the general *Commissioning and Social Work* category. As regards services to meet the other support needs in domain IV such as disabilities or emotional and behavioural difficulties, there is at present neither activity nor separate expenditure data available, although one of the CSFI categories, Equipment and Adaptations, covers capital expenditure for children with disabilities.

Alternative average cost weights

3.18 Calculating average cost weights using data from the PSS EX1 return is a top down approach: the average cost of an activity is derived by dividing the total expenditure on the activity by the number of times it occurs. An alternative method is to use unit cost estimates to represent average costs. This approach is recommended for one of the proposed additional indicators, the 'number of core assessments completed', in the absence of data from the PSS EX1 return. Since expenditure and average cost weights are calculated in quite different ways, if both methods are used for the same indicator they are likely to yield different results. From this springs **Principle H: It is preferable to use just one method of calculating weights in an index, however, if some weights can be calculated only by the expenditure method and others only by the unit cost method, then using both methods is the only way forwards in broadening the representation of the index.**

3.19 The average unit cost of a core assessment has been estimated by Meadows (2004) as £853 in 2001-2. Although this value is based on information from a sample of only 17 social workers in four local authorities it provides information that is immediately available and which can be updated as improved information becomes available (see paragraph 6.15). It is therefore recommended that a weight for core assessment activity be derived using this estimate.

3.20 Table 2 shows how estimates of expenditure on core assessments in the years 2001-2 to 2005-6 have been derived. The average unit cost figure for 2001-2 is inflated in subsequent years using the appropriate pay inflator (Curtis and Netten, 2006). The unit cost for each year is then multiplied by the number of core assessments to estimate total expenditure.

Table 2. Estimated expenditure on Core Assessments

	2001/02	2002/03	2003/04	2004/05	2005/06
Unit cost	853	894	928	970	1004
Number of assessments	56,100	55,700	63,600	74,100	85,500
Expenditure £'000	47,853	49,793	59,015	71,853	85,809

This leads to **Recommendation 15: The estimated average cost of a core assessment should be used to provide a weight for the 'number of core assessments completed'.**

The way forward

3.21 In line with the weights currently used for the CSS output index, it is recommended that expenditure data from the PSS EX1 returns should be used, where appropriate information is available, to derive the weights for the recommended additional activity indictors. This approach yields weights for three new activity indicators relating to adoption, leaving care services and hours of services provided to CSFI.

3.22 For the fourth new activity indicator denoting the number of core assessments it is recommended that the estimated average unit cost should be used to provide a weight.

3.23 The percentage shares of total CSS expenditure accounted for by each of the indicators are shown in table A7. The current direct output indicators in the first four rows together account for 44% of total CSS expenditure. When the recommended four new indicators are introduced, the proportion of total

expenditure accounted for by LAC indicators is 52% and by CSFI indicators is 8% so that the overall proportion for direct activity indicators rises to 60%.

3.24 It is recommended that the deflated expenditure approach used at present to represent services for which no direct output indicators are available should be continued, but it will now represent 40% of expenditure rather than the current 56%. The activities included in this residual measure will include youth justice and payments to CSFI for particular purposes, but mainly they will include commissioning placements and the work done by social workers to support LAC in placements and CSFI with their families. Specific activities, which in principle it would be possible to measure and cost, include the number of placements found for LAC, the number of reviews and the number of care plans that are updated.

Implementing weights

3.25 In the construction of the index, as described in section 5, each activity volume indicator is weighted by the proportion of CSS expenditure that is accounted for by that particular activity. The rationale for this methodology is that, in general, the cost of a service is assumed to be positively related to its value. Hence, by weighting according to expenditure shares, the more valuable services have a greater impact on the index. The index that is formed can be described as a cost-weighted activity index (CWAI).

4. QUALITY ADJUSTMENT

Atkinson recommendations on quality adjustment

4.1 Atkinson (2005, paragraph 4.24) recommends that measures of output growth should in principle take account of quality change. The review recognises that quality has many dimensions, some of which will prove elusive, but it states that quality changes, whether positive or negative, should in principle be taken into account. This recommendation is seen as implicit in following a parallel measurement procedure to that used in the market economy, but it is also formally set out as a principle to be followed.

4.2 Atkinson suggests there are three ways in which the measurement of quality in the National Accounts can be approached: firstly by differentiating services, secondly by defining the volume measure in terms of the degree of success, and thirdly, when the volume measure is based on the level of activity, by using a quality adjustment to indicate contribution to outcomes. Given the difficulties of measuring CSS output, in particular multi-agency provision and the complex needs of children, capturing quality changes through the measurement of outcome is likely to be the best way forward.

4.3 Atkinson recognises that quality adjustment is a challenging area and that measures will be approximate. It will be necessary to make do with partial information, applying quality adjustments from one part of the service to others for which information is not available. The review also notes that there is a greater degree of subjectivity in making quality adjustments as compared with volume measures.

Measuring the quality of CSS output

4.4 The consensus view of researchers (reported in Soper et al., 2006) is that measuring the quality of services provided by CSS is both very important and very difficult. For example, better information from electronic record systems may improve decision making so that the intervention chosen is more closely aligned to

the child's needs, and the ultimate outcome for the child is better. There are, however, many challenges in trying to measure such improvements (see section 2). Improvements in the efficiency of service provision may generate better service quality without an increase in cost (Donabedian, 1986). The absence of a market for CSS interventions removes the quality protection that is generated when consumers choose whether or not they make purchases. Instead, users of public services do not always have a choice (Small, 1995). This implies that quality assurance processes such as the targets that Performance Assessment Framework (PAF) indicators provide are needed for public services. LAC services are regulated under the Care Standards Act 2000, but there is nothing equivalent for CSFI services. The value of consumer satisfaction surveys is also increasingly being recognised (Felton, 2005).

4.5 Measures of quality must also have regard to the changing numbers of children in need of services. If there is a greater prevalence of disability in a cohort of children than in the cohort that preceded it, more services will need to be provided to maintain the same quality of service per child. At present there is no activity data available relating to children's support needs (see paragraph 2.49)

Availability of data for quality measurement

4.6 The aim of quality adjustment is to take account of changes in the value of CSS output that are attributable, not to differences in the volume of services supplied (which are captured by the activity indicators), but to the quality of those services. For example, the needs of a LAC may be better met if a placement includes educational support, and the outcomes may include better school attendance and educational achievement. Whether the placement includes such extra support cannot be measured by the activity data that is currently available, although in principle it could be in future if there is better clarification of the codes used in the SSDA 903 data return for LAC so that placements that include additional educational support can be separated from those that do not.

4.7 Ideally, each of the activity categories in the CWAI would be individually adjusted for quality changes. The discussion of CSS interventions and their

impact on users' outcomes in section 2 shows, however, that a single CSS activity often contributes to various outcomes and that the achievement of particular outcomes often requires multi-agency interventions.

4.8 Data is available on a range of outcomes for some groups of children who receive LAC services and this might be used to represent the quality component of that sector of CSS output. Therefore, combining the outcomes indicators for LAC into a single composite quality measure is recommended as the best way to proxy the change in the quality of CSS output. The LAC activity indicators currently in use or recommended (see paragraphs 2.52 to 2.53) measure solely the quantity of care provided for children eligible to receive it. There is therefore no double counting in introducing a measure of quality to represent whether services are better matched to children's needs, resulting in improved outcomes.

The way forward

4.9 The mapping exercise, set out in the interim report (Soper et al., 2006), identified possible outcome measures for many of the thirty three types of CSS activity. After further consideration, and with the guidance of experts at the ONS, six indicators of quality improvement were selected. In accordance with Principle E, the ECM outcome to which each relates is shown in parentheses after the indicator in the following list. This forms **Recommendation 17: Appropriate quality indicators are:**

1. **Percentage of LAC who did not miss 25 or more days at school (Enjoy and achieve);**
2. **Percentage of LAC in year 11 who obtained at least one GCSE or equivalent qualification (Enjoy and achieve);**
3. **Percentage of care leavers at age 19 who are in education training or employment, who were looked after on the 1st April at age 16 (Achieve economic well-being);**
4. **Percentage of LAC age ten years or older who are not convicted or subject to a final warning or reprimand during the year (Make a positive contribution);**

5. **Proportion of children aged under 16 who have been looked after continually for at least two and a half years, who have been in the same placement for at least two years or placed for adoption (all ECM outcomes); and**
6. **Percentage of LAC adopted, who were placed within 12 months of a best interest decision (all ECM outcomes).**

Sources for these quality improvement indicators are given in table A2 in the annex.

4.10 All these quality indicators relate to LAC services. They represent better development in childhood leading to better life chances. There may be some time lag between the provision of the intervention and the achievement of the outcome, but the best that can be done at present is to match the data for the same year. There are no specific indicators for two of the ECM outcomes: 'Be healthy' and 'Stay safe'. The available indicators that relate to the provision of health care for LAC are: number who had their teeth checked by a dentist and number who had their annual health assessment, both of which are affected by the child's right to refuse the service, together with number whose immunisations are up to date, which is affected by the child's immunisation status on entering care. Furthermore, none of these three indicators measure children's general health, which the literature suggests is more appropriately measured by proxies such as school attendance and numbers on the child protection register (Kurtz 2003, Edmunds et al., 2005). As regards 'Stay safe', a specific indicator is inappropriate for LAC. It is CSFI for whom CSS provide safeguarding services, and although 12% of children on the Child Protection Register are LAC, this is presumably due to concerns for their safety before they became LAC. This study is breaking new ground in choosing quality indicators. There is limited data available at present, but it is hoped that the approach provides a way forwards for the future.

4.11 There is a two-fold justification for including the first two indicators which relate to school attendance and attainment. While these outcomes could appear to be the product of the education sector, in the case of LAC the input of social workers is crucial in ensuring that children have a school place and appropriate support to enable them to study. The first argument, then, is that in the case of LAC, credit

for facilitating school achievement should be shared between teachers and social workers. The second reason for including these indicators is that they are a proxy for the unmeasurable. Children are taken into care to provide them with better life chances and help them fulfil their potential. There are no direct objective measures of how much better off children are as a result, but research has shown that education outcome measures form good proxies (see paragraph 2.25).

4.12 The third indicator represents longer term outcomes after children have left care. It stands for the lifetime opportunities that are available to young people as a result of LAC services.

4.13 The fourth indicator identifies LAC who are not offenders and thus measures the effectiveness of CSS interventions.

4.14 The last two indicators denote the achievement of permanence for LAC. Various researchers including Biehal et al. (1995), Leathers (2002) and Ward (2004) have shown that this is needed for children to have better access to health care, better education and better life chances. Children with stable placements are better able to develop social relationships and achieve better attainment outcomes. The final indicator is included on the basis that its occurrence is likely to generate better outcomes for LAC, but it can also be viewed as a measure of administrative efficiency.

4.15 The inclusion of a composite measure of administrative efficiency was also considered, but of the various components that were proposed the only ones that it proved possible to obtain were:

- Percentage of reviews completed on time
- Percentage of assessments completed within 35 days.

The first of these, a PAF indicator, reached 99% in 2004-5. There is therefore little potential for further improvement in this indicator: it is reaching a ceiling. It was decided, therefore, not to propose the inclusion of these variables but to recommend instead that a quality indicator for LAC services should be formed from the six variables listed above.

Calculating a single measure of quality

4.16 In order to quality adjust the output volume measure, the six quality indicators have to be combined into a single index. Table 3 shows the percentage growth rate of each quality indicator for the years in which data on all of the variables is available. Since there is no evidence on which to devise a weighting strategy for the indicators, a simple average of the growth rates in each year was calculated. The average percentage growth rate, shown in the last row of Table 3, represents the average quality improvement over the year in LAC services.

Table 3 Annual percentage growth in indicators of quality improvement

	2002/2003	2003/2004	2004/2005
1. % of LAC who did not miss 25 or more days at school	-0.5%	0.1%	-0.3%
2. % of LAC in year 11 who obtained at least one GCSE or equivalent qualification	-0.6%	6.0%	7.3%
3. % of care leavers at age 19 who are in education training or employment, who were looked after on the 1st April at age 16	6.5%	12.2%	7.3%
4. % of LAC age ten years or older who are not convicted or subject to a final warning or reprimand during the year	0.2%	0.2%	0.0%
5. Proportion of children aged under 16 who have been looked after continually for at least two and a half years, who have been in the same placement for at least two years or placed for adoption'	1.6%	1.6%	-1.5%
6. % of LAC adopted, who were placed within 12 months of a best interest decision	1.3%	-2.5%	2.5%
Quality index, average % growth	1.4%	3.0%	2.5%

4.17 Some of the indicators in table 3 show considerable variation from year to year. There are two reasons for this, the first being that the percentage changes are calculated from published data which has been rounded, often to two significant figures. The percentage changes, then can only take on certain discrete values e.g. 1.6% is the minimum increase that can be observed for indicator 5. The second reason for the volatility is that the numbers of children to which some of the indicators relate are small, and therefore a small absolute change in numbers appears as quite a large percentage change e.g. in indicator 2. As more data becomes available it may be appropriate to look at the pattern of average quality

change over time, for example by using the average value over a three year period.

Applying the quality adjustment

4.18 Quality adjustment is an important concept that is currently being introduced in the National Accounts. The appropriate technique for the interaction of a CWAI with a quality index is still under discussion. If the two represent different aspects of the same service it may be that they combine in a multiplicative way. However, the quality index that has been produced for CSS is simply thought to represent the typical change in the quality of LAC services and it may be that it is more appropriate to add this to the CWAI. The issues relating to the appropriate model are complex. In this report both alternatives are presented; a decision as to which is appropriate should take into account similar decisions for other public sector activities. Out of this discussion arises **Recommendation 17: The LAC services in the CWAI should be adjusted for quality, however further investigation is required to determine whether an additive or a multiplicative method should be used.** The impact of the quality adjustment on the CWAI is demonstrated in section 5.

5. CONSTRUCTING A NEW INDEX

5.1 The calculation of the new index is reported in tables A4 to A13 in the annex. The methodology is based on that currently used by the ONS, who provided the research team with data and information on the current index for comparison purposes.

5.2 The new index is only produced for four years, from 2001-2 to 2004-5, due to limited data availability for some of the indicators. Data on the number of core assessments completed is first available for 2001-2. Moreover, due to methodological differences between the first CiN census in 2000 and the later CiN censuses, the first valid observation of the number of hours of service provided for CSFI is also for 2001-2. It was therefore decided that it would not be appropriate to calculate the new index for years prior to 2001-2. To do so would implicitly be assuming zero growth in these indicators until that year, whereas in fact data on them is simply missing. The earliest year for which estimates of the new index are presented is therefore 2001-2002.

Components of the new index

5.3 The explanation that follows of the data used and the various stages in constructing the index relates to tables A4 to A13 in the annex. The expenditure data is described first, since it is used both to form an input indicator and as weights. It is followed by the activity data, and these components are then combined to form the aggregate cost weighted activity index, CWAI.

<u>Disaggregating total expenditure for different CSS activities</u>

5.4 The first step in calculating the new index is to list the separate activities to be combined in the aggregate CWAI, together with the total annual expenditure on each activity, as shown in table A4. Data in the first six rows of this table matches directly to the similarly-named categories in the PSS EX1 returns (shown in table A3). The expenditure relating to the CSFI indicator in row 7 represents only part of the total annual expenditure on *Family Support Services* activities. The

expenditure shown in this row is the sum of *Family Centres* and *Services for Under 8s*, for the reasons set out in paragraph 3.14. The total annual expenditure on Core assessments is estimated from the average unit cost of an assessment as described in paragraph 3.20. 'Total other children's services', shown in the penultimate row of table A4, is an input measure representing all children's social services other than those that are separately identified. Expenditure on these remaining services is calculated by subtracting the sum of the expenditures in the previous eight rows from the total annual expenditure on children's and families services.

Input indicator based on deflated expenditure

5.5 The 'Total other children's services' indicator is measured by the value of inputs to those services, namely as real expenditure incurred. The expenditure figures set out in table A4 have to be adjusted by the appropriate values of the CSS deflator used in the National Accounts before they can be used as an input indicator. This calculation is shown in table A5.

Activity data

5.6 The activity data reported in the first four rows of table A6 is the 'Number of child days for which children are accommodated' for four different categories of placement. This data is available separately for different types of placement and these have been aggregated to correspond to the available expenditure categories. The first row comprises residential placements, excluding those that provide nursing care. The second row is placements in secure accommodation for welfare reasons. Both of these are the same as in the current indicator. The third row, 'Foster Placements', now also includes children in adoptive placements whereas in the current index they are included as part of 'Other LAC Placements' (table A16). This recommended re-grouping of adoption placements to match the expenditure categories is explained in paragraph 3.7.

5.7 Rows five to eight of table A6 report the four new activity indicators that are recommended for inclusion in the index of CSS output. The final row is the deflated expenditure figures from table A5.

Interpolation of CiN census data

5.8 Data on the total hours of CSFI service provided has been collected at unequal intervals since 2000 by the DfES in their CiN Census. Given methodological differences in the 2000 Census, the dates for which we have valid CiN Census data are: September/October 2001; February 2003; and February 2005. The CiN census, in its historical form, has now been discontinued and is being redesigned by the DfES with a view to recommencing in 2008-9. The purpose of using the data in the new index is therefore to illustrate the effect of including such data, in the expectation that it will be collected again in the future, but preferably on an annual basis (see recommendations in paragraph 6.8). The other indicators used in the new index are measured for the financial year. It was decided, therefore, that as October is mid-way through the financial year it would be appropriate to use the September/October 2001 figure to represent weekly hours of service in 2001-2, and to use linear interpolation to estimate October figures for the years 2002, 2003 and 2004. The calculations are shown in table 4, and the interpolated values obtained reported in the 'Total hours of service provided for CSFI' row of table A6.

Table 4 CiN census data and interpolated values

Year	**2001**	**2003**		**2005**
Month	Oct	Feb		Feb
Total hours of service to CSFI in sample week	367,800	391,600		395,400
Months from last CiN census		16		24
Financial year	**2001/02**	**2002/03**	**2003/04**	**2004/05**
Interpolated values	367,800	385,650	392,867	394,767

Methodology of construction of the index

5.9 To form a single aggregate output measure for CSS, a weighted index of the nine selected volume indicators is needed. The index is constructed as an

annually chained, base year weighted (Laspeyres) index. The UK Centre for the Measurement of Government Activity (2005) shows how the ratio of indices for two successive periods forms a quantity relative which may be expressed as

$$RY_{t-1,t} = \sum_i \frac{E_{t-1,i}}{E_{t-1,Total}} \times \frac{q_{t,i}}{q_{t-1,i}}$$

where

$RY_{t-1,t}$ = quantity relative for the current period, *t*, relative to the previous period

$q_{t,i}$ = current period quantities for the various activities

$E_{t-1,i}$ = previous period expenditure for the various activities

$E_{t-1,Total}$ = total previous period expenditure for all activities

The index at time *t*, I_t, is therefore

$$I_t = RY_{t-1,t} \times I_{t-1}$$

Denoting the rate of growth in the overall index at time *t* as $G_{t,Total}$, this implies that

$$G_{t,Total} = RY_{t-1,t} - 1$$

Substituting the expression for $RY_{t-1,t}$ gives

$$G_{t,Total} = \sum_i \frac{E_{t-1,i}}{E_{t-1,Total}} \times \left(\frac{q_{t,i}}{q_{t-1,i}} - 1 \right)$$

and

$$I_t = (1 + G_{t,Total}) \times I_{t-1}$$

Calculation of the new CWAI without quality adjustment

5.10 The calculations in tables A7 to A9 find the elements of the expression for $G_{t,Total}$. The weights, $\frac{E_{t-1,i}}{E_{t-1,Total}}$, are shown in table A7. These represent the proportion of total CSS expenditure accounted for by the different types of activity. The rates of change for each of the activities, $\frac{q_{t,i}}{q_{t-1,i}} - 1$ are found in table A8. The growth rates for the activities are multiplied by the expenditure weights in table A9, giving the estimated contribution to growth of each activity, $\frac{E_{t-1,i}}{E_{t-1,Total}} \times \left(\frac{q_{t,i}}{q_{t-1,i}} - 1 \right)$.

Summing over the various activities in the different rows gives the rate of growth of the overall index $G_{t,Total}$, shown in the penultimate line of the table. Defining 2001-2 as the base year, its index has the value 100. Each subsequent value of the index is then found by multiplying the previous year's value by $1+G_{t,Total}$. The values calculated in this way, shown in the last row of table A9 are:

2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
100	105.3	109.6	114.7

These figures represent the estimated values of the recommended new index, without any quality adjustment.

Calculation of the new CWAI with quality adjustment

5.11 It is recommended that the average growth in a set of quality indicators for LAC services should be used to derive a quality index for the output of interventions that relate to LAC. Reasons for this and the calculation of the quality index are covered in paragraphs 4.6 and 4.16. The growth attributable to improvement in quality must be separately combined with the growth in volume that relates to each LAC service. The calculations involved are shown in table A10 using the additive method and in table A12 using the multiplicative method. The first rows of these tables hold the values of the quality index. The figures in the subsequent rows of table A10 are derived by adding the quality index for a particular year to the rates of change in the volume of activity for services that relate to LAC activities, while in table A12 the same values are combined using a multiplicative method. The overall quality-adjusted indices are reported in tables A11 and A13. Since only LAC activities are quality adjusted, the rows for the last three activities in these tables are identical to those in table A9. The values of the quality-adjusted index are then found, in the last rows of tables A11 and A13, to be:

Quality adjusted index, additive method

2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
100	106.0	112.0	118.7

Quality adjusted index, multiplicative method

2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
100	106.0	112.0	118.7

In this instance the additive and multiplicative methods give identical results. The reasons for this are that the LAC elements which are quality adjusted comprise only about half the index, and there are both positive and negative activity changes.

New CWAI excluding CSFI services

5.12 Since data on the total hours of CSFI service will now not be available until 2008-9 (paragraph 5.8), the new CWAI has also been calculated with only three additional indicators, excluding 'Total hours of service provided for CSFI'. The values for the CWAI without quality adjustment then are:

2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
100.0	104.8	109.3	114.6

and with quality adjustment they are:

2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
100.0	105.5	111.7	118.6

Current index

5.13 For comparison purposes, the underlying data behind the current index is set out in tables A14 to A18. Taking 2001-2 as the base year, the current index for 2001 to 2005 is:

2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
100	105.5	112.3	117.8

5.14 The current index methodology groups the activity relating to adoptive placements in the category of 'Other LAC Placements', whilst the expenditure that relates to this is counted in the *Fostering Services* category, as explained in

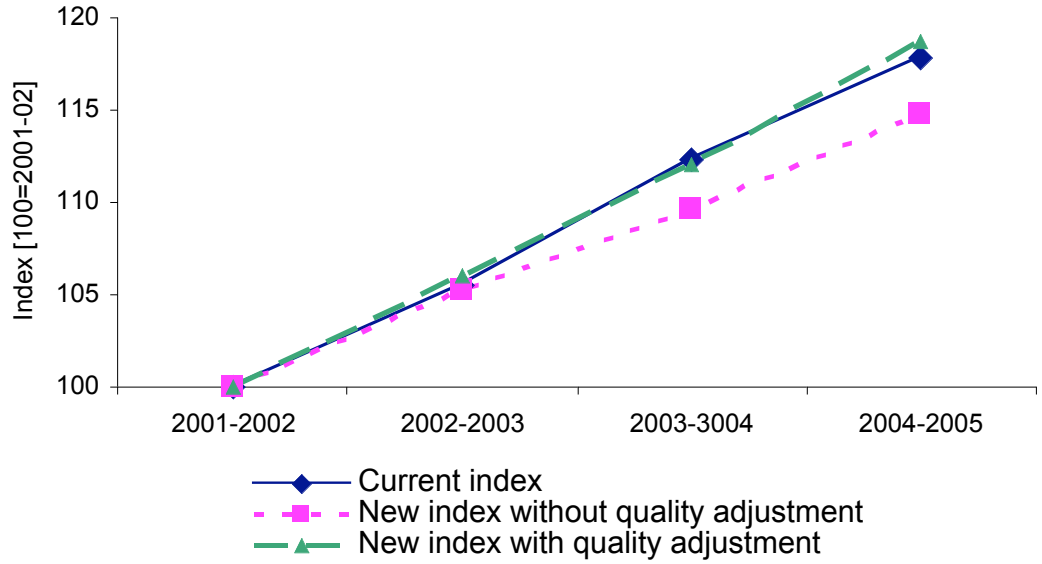
paragraph 3.7. If the activity of adoptive placements is moved to the 'Foster Placements' category to improve consistency, but no other changes are made to the current index, its values are:

2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
100	105.4	112.1	117.6

Comparison of the new and existing indices

5.15 Figure 1 shows that the existing index grew by 17.8 p.p. over the three year period between 2001-2 and 2004-5, while the new index without quality adjustment grew by 14.7 p.p. over the same period, and that with quality adjustment grew by 18.7 p.p.. Growth in the new index is therefore somewhat slower than that of the existing index unless the quality adjustment is included, in which case it grows at a fairly similar rate.

Figure 1. Growth of current and new CSS output indices, 2001-2 = 100



The new index grows very slightly more slowly if it is constructed excluding the hours of CSFI service, namely at 14.6 p.p. without and 18.6 p.p. with quality adjustment. While the effect on the index of excluding this one indicator is small, the direction of the change is important.

5.16 The reasons for the different growth rates of the indices can be seen by examining the separate growth rates for the different components of the new index that are set out in Table A8. Given that the aims of official policy are to reduce the number of LAC, lower the length of time they spend as LAC and improve their well-being (Gibbs, Sinclair and Stein, 2005), it is unsurprising that the four LAC placement indicators sometimes have negative growth rates. The children's homes indicator has decreased slowly but at an increasing rate over the period, falling by more than 3% per year in 2004-5. This fits with local authorities' policies to reduce the use of residential care, influenced by the review carried out by Utting (1997) which identified shortcomings in institutional care. While the number of placement days in foster care initially rose, it was static by 2004-5 and the earlier increase must be partly attributable to more adoption placements, since there was an appreciable growth in the number of children adopted in 2003-4. The number of care leavers aged sixteen or more increased by 10% in 2004-5. This indicator is linked to the age structure of the looked after population, but its increase may also reflect a policy impact.

5.17 In accordance with the *Every Child Matters* (2004) guidelines of improving early support to enable more children to be supported within their families it is the CSFI activities that are generally growing in volume. It is therefore very important that activity indicators for CSFI services should be included in the index, and it is notable that excluding the hours of CSFI service and replacing it with an addition to the deflated expenditure indicator in fact reduces the new index a little. In other words, hours of CSFI service are growing slightly faster than deflated expenditure on them.

5.18 The deflated expenditure indicator which represents all services other than those for which specific activity indicators are included still has a higher weight (40%) than any of the activity indicators in the new index (table A7). It is less dominant, however, than in the current index where its weight is 56% (table A17). In the new index excluding the hours of CSFI service the deflated expenditure indicator has a weight of 47%. Changes in the deflated expenditure indicator therefore have a major impact on the index as a whole, but less so for the new index than for the existing one. Since 2001 there has been strong growth, in real

terms, in CSS expenditure, and hence the deflated expenditure indicators exhibit strong growth over the period. The new index without quality adjustment grows somewhat slower than the existing index because the available indicators that have been added on average have been growing at a slower rate than the expenditure for which they are substituted.

5.19 The new index improves on the existing measure by capturing 60% of the value of CSS output in activity measures, as compared with 44% in the current index. It better represents those CSS activities that are growing in volume by including two direct output measures for CSFI. The inclusion of a quality adjustment index for LAC services is also recommended to capture the change in the quality of outcomes generated for these children.

6. RECOMMENDATIONS AND CONCLUSIONS

6.1 This section brings together the principles and recommendations for CSS output measurement that have been set out earlier in the report. It discusses their implementation and puts forward further principles and recommendations regarding improvements to data collections that are needed to further progress the measurement of output. The proposed changes are set out showing the time span – short, medium or long term – in which they should become operational.

Principles for measuring CSS output

6.2 Eight principles on which the measurement of CSS output should be based have been set out above. They are:

- **Principle A: There should be separate indicators for different services since they are provided in different circumstances, meet different needs, incur different costs and are subject to different forces for change** (paragraph 1.10).
- **Principle B: Consideration should be given as to how to attribute changes in output to different agencies when interventions are provided on a multi-agency basis. Clear guidelines for attribution should be developed** (paragraph 2.22).
- **Principle C: Consideration should be given to developing an infrastructure to collect data by questionnaires or tests at regular intervals from children receiving interventions from Children's Social Services. Developments of Children's Social Services' systems such as the Integrated Children's System should take into account the need to generate holistic measures of children's outcomes** (paragraph 2.27).
- **Principle D: Separate indicators should be used for each service domain, or ideally for each of the thirty three service types identified in the mapping exercise, and indeed for separate activities within major service types** (paragraph 2.30).
- **Principle E: Outcomes or quality measures should be based around the Every Child Matters framework** (paragraph 2.31).

- **Principle F: Ideally the impact of Children's Social Services' interventions on outcomes should be isolated using individual child-level data. As this is unavailable, a simpler approach must be taken using aggregate volume measures adjusted by aggregate quality, but without controlling for external factors such the impact of other agencies. Although second best, this approach improves on the current measure which combines a smaller number of unadjusted volume measures with indicators of input** (paragraph 2.38).
- **Principle G: Measures of activity should take account both of the hours of service provided and the numbers of children that receive them** (paragraph 2.39).
- **Principle H: It is preferable to use just one method of calculating weights in an index, however if some weights can be calculated only by the expenditure method and others only by the unit cost method, then using both methods is the only way forwards in broadening the representation of the index** (paragraph 3.18).

Improving the index in the immediate future

6.3 Almost all of the seventeen recommendations made in the report so far can be implemented in the immediate future to improve the CSS output index. The CSFI indicator, however, that forms the subject of recommendations 2 and 14 cannot be included at present since the data collection which yielded the illustrative data is no longer operational. This indicator should be added as soon as possible once a new data collection starts in 2008-9 (see paragraphs 6.7 - 6.8).

6.4 Eleven specific recommendations activity have been made about changes to the indicators included in the CSS output index, namely:

- **Recommendation 1: There should not be a separate activity indicator for open access services at this stage but consideration should be given to the exploration of a loyalty card system that would generate service usage information in the future** (paragraph 2.41).

- **Recommendation 2: The total number of hours of service provided to CSFI provides a measure of CSFI activity, and it should be included in the index when data is available** (paragraph 2.42).
- **Recommendation 3: The 'number of core assessments completed' should be included in the index** (paragraph 2.43).
- **Recommendation 4: The separate LAC activity indicators for foster care, residential placements, secure accommodation and other types of placement should continue to be used** (paragraph 2.44).
- **Recommendation 5: The 'number of children adopted' should be added to the index as a new indicator** (paragraph 2.45).
- **Recommendation 6: The 'number of children aged 16 and over who have ceased to be looked after and who meet the definition of care leavers under the Children (Leaving Care) Act 2000' should be added to the index as a new indicator** (paragraph 2.47).
- **Recommendation 7: Suitable activity indicators are available for safeguarding but cannot at present be included in the index because there is no separate expenditure or average cost data available with which to weight them** (paragraph 2.48).
- **Recommendation 8: The inclusion of safeguarding indicators should be reconsidered once average cost data from the Cost Calculator study is available for weights** (paragraph 2.48).
- **Recommendation 9: Consideration should be given to improving data collection procedures so that indicators for services to support children's additional needs can in future be included in the index** (paragraph 2.49).
- **Recommendation 10: The deflated expenditure approach at present used to represent all other CSS activities (see paragraphs 1.3 – 1.4) should continue to be used, taking into account the new activity indicators that have been separately identified** (paragraph 2.50).
- **Recommendation 11: The 'Number of child days in Adoption Placements' should be counted in the 'Foster Placements' category instead of with 'Other LAC Placements'** (paragraph 3.7).

6.5 Four recommendations are made about appropriate weights for the new activity indicators:

- **Recommendation 12: *Adoption Service*s expenditure should be used as the weight for the 'number of children adopted'** (paragraph 3.10).
- **Recommendation 13: Expenditure on *Leaving Care Services* should be used as the weight for the 'number of children aged 16 and over who have ceased to be looked after'** (paragraph 3.11).
- **Recommendation 14: Expenditure on *Family Centres* and *Services for the Under 8s* should be used as the weight for the 'total number of hours of service provided to CSFI'** (paragraph 3.14).
- **Recommendation 15: The estimated average cost of a core assessment should be used to provide a weight for the 'number of core assessments completed'** (paragraph 3.20).

6.6 As regards quality adjustment, two recommendations are made:

- **Recommendation 16: Appropriate quality indicators are:**
    1. **Percentage of LAC who did not miss 25 or more days at school (Enjoy and achieve);**
    2. **Percentage of LAC in year 11 who obtained at least one GCSE or equivalent qualification (Enjoy and achieve);**
    3. **Percentage of care leavers at age 19 who are in education training or employment, who were looked after on the 1st April at age 16 (Achieve economic well-being);**
    4. **Percentage of LAC age ten years or older who are not convicted or subject to a final warning or reprimand during the year (Make a positive contribution);**
    5. **Proportion of children aged under 16 who have been looked after continually for at least two and a half years, who have been in the same placement for at least two years or placed for adoption (all ECM outcomes); and**
    6. **Percentage of LAC adopted, who were placed within 12 months of a best interest decision (all ECM outcomes)** (paragraph 4.9).
- **Recommendation 17: The LAC services in the CWAI should be adjusted for quality, however further investigation is required to determine whether an additive or a multiplicative method should be used** (paragraph 4.18).

The medium term: recommendations for planned data collections

6.7 This study has sought data on CSS activity with corresponding information on expenditure and outcomes. It has found that for many types of services delivered by CSS such parallel sets of data do not exist. The activity data recommended for inclusion in the index is collected in the following datasets: the SSDA 903; Child Protection and Referrals, CPR3; and also by the no-longer-operational CiN census. The expenditure data is collected in the PSS EX1 data collection. Many of these data collections are currently being reviewed and the recommendation below is offered for consideration in these reviews, since changes to the data collections could make possible further improvements to the index.

- **Principle I: Joined-up annual data collections are needed that collect information on activity, outcomes and expenditure items under a common framework.**

Recommendations for replacement of the CiN census

6.8 For the SSDA 903 returns local authorities submit process data that is collected on a routine basis and held on their MIS. Local authorities consulted during this study said that they prefer the SSDA 903 approach to that of the CiN census. They said that records of processes such as reviews for CSFI are also held on their MIS, and they suggested that the replacement for the CiN census should ask for the submission of data that is already held electronically. To meet the requirements of the national accounts, activity data needs to be collected annually for the same categories of as those for which expenditure data is available. The CiN census was biennial, but the use of existing electronic records might make an annual collection practicable.

- **Recommendation 18: The replacement CiN census should be collected annually, based on the SSDA 903 approach and developed in consultation with local authorities to ensure its demands are least burdensome.**

- **Recommendation 19: Activity data that should be collected on an individual child basis in the replacement CiN census includes:**
  a) **hours of service to CSFI;**

b) children moving between LAC and CSFI services, in both directions;

c) the volume of work carried out with care leavers;

d) whether the child has additional support needs such as disabilities or emotional and behavioural difficulties.

Recommendations for replacement of the PSS EX1 expenditure return

6.9 Local authority reporting of expenditure on CSS is being combined with that for schools from 2009. As such the content of the PSS EX1 data return is currently under review. PSS EX1 data includes all CSS expenditure and is available annually. It comprises the expenditure return from local authorities to DfES showing all expenditure on children's social services split into seventeen categories. The categories that relate to LAC correspond closely to the SSDA 903 groupings, making it possible to match activity data with expenditure. All the weights used in the current index are expenditure weights obtained from the PSS EX1 returns.

6.10 However, the headings used in the PSS EX1 tables are confusing. Children who are adopted are looked after before they become adopted, and so adoption is usually considered part of LAC services. Leaving care services are only provided to young people who have been LAC, and therefore this item also fits in the same sub-set. The final category at present has a very awkward name: *Other Other Children's and Families Services.*

- **Recommendation 20: In the PSS EX1 expenditure return, *Adoption Services* and *Leaving Care Services* should be moved under the heading *Children Looked After*. The final category should then become *Other Children's and Families Services*.**

6.11 There are also problems with the number of categories into which expenditure is divided in the PSS EX 1 returns. The *Commissioning and Social Work* category is a very general one. It includes assessing children, finding placements for LAC, holding reviews and updating care plans. It also contains all activity undertaken to safeguard children. Although it is appreciated that social workers have mixed case loads, this expenditure category should be disaggregated.

- **Recommendation 21: In the PSS EX1 expenditure return, *Commissioning and Social Work* should be sub-divided to show separate expenditure for different types of activity.**

6.12 In the existing LAC indicators low-cost and high-cost activities are aggregated since, for example, 'other LAC placements' include children placed with their parents and those living independently together with placements that provide nursing care, and mother and baby placements. Activities with different outcome goals are also currently combined, since types of accommodation that provide further facilities such as education and health care to support children's additional needs are included in the same category as those that do not offer such facilities.

- **Recommendation 22: Expenditure data should be collected separately for the same categories of placement as used in the SSDA 903 returns to enable the existing LAC indicators to be replaced by a larger number of indicators, each of which is more homogeneous.**

- **Recommendation 23: The placement codes used in the SSDA 903 data return for LAC should be clarified so that placements that include additional educational support can be separated from those that do not.**

Implications of DCLG's White Paper

6.13 The DCLG's recent White Paper *Strong and Prosperous Communities*, which was published in October 2006 proposes a substantial reduction in the number of indicators on which local authorities have to report, with the indicators being outcome-focused wherever possible and including some user satisfaction measures. Local authorities will have the option to continue to collect other indicators. There will still be mandatory education attainment targets and a set of indicators for safeguarding. In addition, data, including financial data (as opposed to indicators) can still flow between local authorities and the centre.

6.14 Since the proposals are still under discussion, the following recommendation is offered for consideration. From the point of view of representing CSS output in the national accounts, robust data series are required that are nationally available.

Although outcomes indicators which simultaneously reflect volume would theoretically be preferred, the evidence of this study is that it is very difficult to obtain volume outcomes measures linked to particular interventions that could be used for national accounts purposes. Activity indicators are therefore needed to measure the volume of output, with outcomes measures used where available to adjust for change in quality. If suitable measures are not collected along these lines, however, the only recourse is to use input measures to represent the value of CSS output in the national accounts.

- **Recommendation 24: National collection of activity data is required for national accounts purposed, together with data on outcomes indicators.**

The medium term: use of unit cost weights

6.15 For the 'Number of core assessments completed' the weight proposed in recommendation 15 is a directly-estimated unit cost, since there is no appropriate expenditure data available. It has to be recognised that the quality of the unit cost estimate at present is not ideal. It has been calculated from a small sample of data in a small number of local authorities and therefore may not accurately represent the average cost of the activity in the country as a whole. There is also a compatibility issue in using one unit cost weight while others are derived from expenditure data, since they are calculated on a different basis. Despite these reservations, unit costs are a potentially useful approach that may provide a way forwards when it is difficult to disaggregate expenditure data, for example with the *Commissioning and Social Work* category where it may not be easy to allocate expenditure into the separate categories recommended in this report because of mixed case loads.

<u>Improving unit cost estimates</u>

6.16 Unit costs for eight LAC processes such as finding placements and carrying out reviews have been estimated by Ward et al. (2004). These estimates are now incorporated in the Cost Calculator for Children's Services (Soper et al., 2006) which uses them in conjunction with the activity data that local authorities are required to collect for the SSDA 903 returns to estimate the cost of LAC

placements over particular time periods. Associated with the Cost Calculator is a Unit Cost database (Gatehouse, forthcoming) which helps users calculate unit costs using the methodology set out in Beecham (2000) and in the Resource Pack (Holmes, 2005). As more local authorities use the Unit Cost database to customise their unit costs and share the results, the average unit cost figures for the various processes will become much more accurate. It will also be possible to carry out some triangulation checks, estimating total expenditure for various processes and comparing the total of these figures with the total expenditure for the PSS EX1 category that includes the processes. The unit cost estimates that become available in this time period are expected to cover adoption and various CSFI activities.

- **Recommendation 25: Once more and better unit cost figures are available from the current phase of the Cost Calculator study, consideration should be given to using these as weights since they will be separately available for clearly defined activities.**

6.17 The unit cost approach may provide a way forward in the inclusion of indicators for safeguarding services in the index. Various activity indicators are available in the Child Protection and Referrals, CPR3, returns, but it was not possible to recommend the inclusion of any of these at present owing to the lack of appropriate data for use as weights. Very large costs are incurred in court services such as getting a care order or an emergency protection order. As part of the ongoing work in developing the Cost Calculator for Children's Services it is planned that unit costs for these services will be estimated. Furthermore, using the disability information which it is planned to collect in the replacement for the CiN census it will be possible to separately measure some of the extra costs incurred for children with disabilities, thus making a further contribution to representing domain IV in the index. Other activities that should be considered for adding to the index using unit cost weights include finding a LAC placement, holding a review and updating a care plan.

The long term: future possibilities for measurement of services' contribution to outcomes

6.18 The difficulties in measuring the incremental contribution of CSS activities to clients' outcomes are outlined in section 2 and discussed in much more detail in the interim report (Soper et al., 2006). It is, however, the improvement of lifetime opportunities for vulnerable children that CSS interventions seek to achieve and so it is outcomes that are the key focus of every practitioner. The Every Child Matters (ECM) outcomes framework identifies five outcomes on which children's services are focused, namely: being healthy, staying safe, enjoying and achieving, making a positive contribution and achieving economic wellbeing. Outcomes frameworks are also being developed in other countries, for example that by Trocmé et al. (1999) in Canada. The use of quality adjustment based on outcomes data is a first step in incorporating outcomes information into the index. It does not, however, measure the output of particular CSS activities as the outcomes generated by those activities. In future, perhaps, there may be the possibility of doing this, given the plethora of initiatives that are under way trialling different measuring instruments for evaluating outcomes.

Integrated Children's System and national returns

6.19 The timing may be fortuitous in that a replacement for the CiN census is under consideration simultaneously with local authorities working towards implementing the Integrated Children's System, ICS. The ICS provides an electronic record keeping system with Assessment and Progress records that give indicators of current status and change across 7 developmental dimensions. These could be used as measures of change, or value added. Although evidence to date suggests that most authorities are not completing the Assessment and Progress records, previous experience shows that if they are required to produce this data for national returns, they will do so.

- **Recommendation 26: Local authorities should be required to submit information from the ICS on developmental progress at an individual child level so that it can be linked with data about the interventions that children have received.**

Education outcomes

6.20 The National Pupil Database contains extensive data on pupils' education outcomes. The two-fold argument as to why education outcomes are relevant to CSS provision is set out in paragraph 4.11, which draws on supporting research evidence in paragraph 2.25. An empirical approach to measuring the change in educational outcomes that CSS services bring about is to compare children who have CSS support with others who have similar needs but do not have CSS support.

- **Recommendation 27: Consideration should be given to using individual attainment data at the national level to compare frequencies of truanting and school exclusion for children in different local authorities, some of whom have received CSS support.**

Outcome-based contracts for LAC

6.21 As part of commissioning of services, local authorities are developing outcomes-based contracts under which the service provider agrees overall outcomes and progress that the placement will achieve. Coventry has a contract used for all residential placements that requires the child to be given support to be able to attend school or other appropriate educational provision. Kent uses contracts for individual placements in children's homes that set targets for improvement in respect to each of the ECM outcomes areas, together with the strategies to be used, persons responsible and expected outcomes.

6.22 The contracts focus on 'value added' rather than on final outcomes, because different overall objectives may be appropriate for children with different needs. For example, if a child is already an offender the required progress might be a reduction in offending, whereas for a child who is not an offender the aim would be that he or she should not become one. Williams and Watts (2006) note, however, that there are practical difficulties. It may be hard to attribute particular outcomes to the activities of any one project. The aim is stated as being able to produce outcomes that are desired, achievable and measurable, but that at the same time

are sufficiently testing to offer real incentives and achievements to the service providers. Agreeing 'hard' measures where there is already existing data may be easy, what may prove more difficult is developing good measures of 'soft' or more subjective data. The Viewpoint service users' satisfaction questionnaire may be useful in this respect.

6.23 As regards foster placements, The Prestcott Russell Children's Aid Society in Canada has developed a system of positive incentives for foster carers. The system provides financial rewards to carers who demonstrate positive parenting skills. In 2005 families were paid extra if the fostered child achieved:

- Placement stability
- No use of respite (family integration)
- Integration into the community

For example, every foster family that did not ask for any respite during the year was given _ of the total money they could have claimed in respite services. Implementation of such systems implies collection of outcomes data, and consideration should be given to how it can be brought together at national level.

- **Recommendation 28: The outcomes data that local authorities are collecting as they implement outcomes-based commissioning should be collected at national level. Foster carer incentive systems also provide an opportunity for gathering outcomes data.**

<u>Measuring outcomes for children with behavioural problems</u>

6.24 Many of the vulnerable children who have contact with CSS have behavioural problems. Research has shown that almost 50% of LAC have a clinically diagnosable mental disorder (Meltzer et al., 2003) and about 70% display emotional or behavioural difficulties which are sufficiently severe to be a source of concern to themselves and carers (Sempik et al., forthcoming). If such children are to fulfil their lifetime potential they need support, and CSS interventions in domain IV are focused on providing this. Behavioural problems are closely linked with offending behaviour, and there is evidence that if children with anti-social behaviour patterns are not supported, they face a lifetime of social exclusion (Scott et al., 2001). For a number of reasons adults who have been LAC tend to be over-

represented in all socially excluded groups e.g. the homeless, mental health patients, prison population. The reasons for this are complex.

6.25 Various measuring instruments such as the Strengths and Difficulties Questionnaire are available for measuring the extent of behavioural problems. Another system which is now computer-based is that used by the Youth Justice Board, called *Asset*.

- **Recommendation 29: Encouragement should be given to the use by appropriate professionals of standardised measuring instruments for behavioural problems at different points in time to enable improvements to be measured.**

6.26 As with education outcomes data, it may be possible to compare outcomes for children with CSS support with those for children who have a similar background but do not have CSS support. The expectation is that children for whom support is provided will be less liable to be involved in criminal activity. The only means of measuring this is the number of convictions and cautions. A caveat to this approach is the research evidence relating to foster children that is reported by Sinclair et al., (2005). This showed a positive correlation between the provision of special help (psychotherapy, contact with psychiatrists etc) and poor outcomes, probably because special help was triggered by a worsening situation rather than because it caused it. Similarly, Darker et al. (forthcoming) found that most children who offend in care have already been involved in criminal activity prior to entry into care. To take this forwards, further information on LAC offending behaviour is needed.

- **Recommendation 30: Data on LAC cautions and convictions, with dates, should be collected as part of the SSDA 903 returns.**

Conclusion

6.27 The vision of this study is that in future, the joined-up approach to data collection recommended in principle I will generate activity, outcome and expenditure indicators for each of the thirty three service types distinguished in the mapping exercise, and ideally for separate activities within major service types as

advocated in principle D. The ultimate aim is to have outcomes data at the individual child level for LAC and for CSFI, linked to specific interventions for which duration and cost data is available, with information on the contributions of different agencies to service delivery.

6.28 As more systems that have the potential to generate outcomes data are implemented, there should be much better direct output measures available than at present, and more accurate measures of related unit costs. In future then, it might be possible to measure CSS output using outcomes indicators which reflect both the quantity and quality of services provided, in place of activity measures which are adjusted for quality separately. The extension of the Cost Calculator for Children's Services to cover education, youth justice, health and CSFI activities, together with the inclusion in it of further outcome indicators will make an important contribution to these improvements. The study's final recommendation then, is that the CSS output index should be reviewed again once the significant data collections that are coming on stream become available, such as the redeveloped CiN census, to fill the data gaps that this study has identified.

- **Recommendation 31: In the long term, the use of outcomes data in the CSS output index should be considered again, taking into account new data collection systems and the availability of unit costs from the Cost Calculator study.**

Annex

Table A1 Sources, Data Collections and Web Links

Source:	SSDA 903
Data collection:	Annual return on Looked After Children from Local Authorities to DfES

http://www.dfes.gov.uk/rsgateway/DB/VOL/v000646/vweb01-2006.pdf

Source:	CiN Census
Data collection:	Biennial survey for DfES of services provided to Children in Need by CSS in census week, and expenditure

2005 tables: http://www.dfes.gov.uk/rsgateway/DB/VOL/v000647/index.shtml

2003 tables: http://www.dfes.gov.uk/rsgateway/DB/VOL/v000451/index.shtml

2001 tables: http://www.dfes.gov.uk/rsgateway/DB/VOL/v000505/cin2001nationaltablesrevised.xls

Source:	Child Protection and Referrals, CPR3
Data collection:	Annual return of referrals, assessment and children who are the subjects of child protection plans to DfES

2005 tables: http://www.dfes.gov.uk/rsgateway/DB/VOL/v000632/VOL01-2006textv1.pdf

2002 tables: http://www.dfes.gov.uk/rsgateway/DB/VOL/v000518/CPR2002.PDF

Source:	OC2
Data collection:	Annual return on outcomes of looked after children from Local Authorities to DfES

2005 tables: http://www.dfes.gov.uk/rsgateway/DB/VOL/v000655/Outcome_final.pdf

2004 tables: http://www.dfes.gov.uk/rsgateway/DB/VOL/v000580/Vol03-2005.pdf

Source:	PSS EX1
Data collection:	Annual return of expenditure on Looked After Children - collected by DH

2005 tables: http://www.dh.gov.uk/en/Publicationsandstatistics/Statistics/StatisticalCollection/DH_4109541

2004 tables: http://www.dh.gov.uk/en/Publicationsandstatistics/Statistics/StatisticalCollection/DH_4082008

2003 tables: http://www.dh.gov.uk/en/PublicationsAndStatistics/Statistics/StatisticalCollection/DH_4054197

2002 tables: http://www.dh.gov.uk/en/Publicationsandstatistics/Statistics/StatisticalCollection/DH_4054239

Table A2 Sources of Indicators of Activity and Quality Improvement

Activity Indicators	**Data Source**
Children's homes (child days) 000's	SSDA 903 Table S
Secure Accommodation (welfare) (child days) 000's	SSDA 903 from ONS
Foster Placements (child days) 000's (including adoption)	SSDA 903 Table S
Other LAC placements (child days) 000's (excluding adoption)	SSDA 903 Table S
Number of children adopted	SSDA 903 Table AM
Number of children aged 16 and over who ceased to be looked after during the year ending 31 March	SSDA 903 Table AP
Total Hours of service provided for CSFI	CIN Table 4
Number of core assessments completed	CPR3 Table 1A
Quality Improvement Indicators	**Data Source**
% of LAC who did not miss 25 or more days at school	OC2 Table A
% of LAC in year 11 who obtained at least one GCSE or equivalent qualification	OC2 Table C
% of care leavers at age 19 who are in education training or employment, who were looked after on the 1st April at age 16	SSDA 903 Table AW
% of LAC age ten years or older who are not convicted or subject to a final warning or reprimand during the year	OC2 Table E
Proportion of children aged under 16 who have been looked after continually for at least two and a half years, who have been in the same placement for at least two years or placed for adoption'	SSDA 903 Vol. 2, Table 9
% of LAC adopted, who were placed within 12 months of a best interest decision	SSDA 903 Table AM

Table A3 Key Domains and PSS EX1 Net Expenditure, 2004 – 2005

	% Total Expenditure	Sub-set % Total Expenditure	Key Service Domains
CSS - commissioning and social work		26.4%	
Commissioning and social work	26.4%		II. III, IV
Children looked after		43.8%	
Children's homes	20.9%		III, IV
Secure accommodation (welfare)	0.7%		III, IV
Fostering services	20.0%		III, IV
Other children looked after services	2.2%		III, IV
Family support services		14.7%	
Family centres	3.6%		I,II
Services for under 8s	3.5%		I,II
Direct payments	0.3%		II
Home care	0.7%		I,II
Equipment and adaptations	0.3%		II, IV
Other family support services	6.4%		II
Youth justice		4.0%	
Secure accommodation (justice)	0.2%		IV
Youth offender teams	3.1%		IV
Other youth justice services	0.7%		IV
Other children's and families services		11.0%	
Adoption services	3.6%		III
Leaving care services	4.4%		III
Other other children's and families services	3.0%		I, II, III, IV
Total children's and families services	100.0%	100.0%	

Components of the new index

Table A4 Indicators and Expenditure, £ thousands

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Children's homes	713,332	785,152	850,271	917,694
Secure accommodation (welfare)	16,809	14,447	20,724	29,039
Foster placements	619,765	695,219	800,684	880,681
Other LAC placements	72,187	67,437	85,461	98,545
Adoption services	98,082	113,828	135,181	158,266
Leaving care services	94,494	114,069	185,115	191,172
CSFI: Family centres + Services for under 8s	262,351	271,874	296,696	309,878
Core assessments	47,853	49,793	59,015	71,853
Total other children's services	1,172,438	1,362,723	1,534,896	1,763,576
Total children's and families services	3,097,310	3,474,541	3,968,043	4,420,704

Table A5 Deflating Total other children's services

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Total other children's services £'000	1,172,438	1,362,723	1,534,896	1,763,576
Deflator Index	103.9	108.5	112.6	115.6
Deflated 'Total other children's services' £'000	1,128,429	1,255,966	1,363,140	1,525,584

Table A6 Activity data

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Children's homes (child days) 000's	2,660	2,640	2,582	2,494
Secure accommodation (welfare) (child days) 000's	81	90	84	94
Foster placements (child days) 000's (including adoption)	15,367	15,917	16,411	16,408
Other LAC placements (child days) 000's (excluding adoption)	3,498	3,257	3,217	3,242
Number of children adopted	3,400	3,500	3,800	3,800
Number of children aged 16 and over who ceased to be looked after during the year ending 31 March	6,600	6,700	6,800	7,500
Total hours of service provided for CSFI	367,800	385,650	392,867	394,767
Number of core assessments completed	56,100	55,700	63,600	74,100
Deflated expenditure: Total other children services, £'000	1,128,429	1,255,966	1,363,140	1,525,584

Calculation of the new CWAI without quality adjustment

Table A7 Expenditure weights

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Children's homes	23.03%	22.60%	21.43%	20.76%
Secure accommodation (welfare)	0.54%	0.42%	0.52%	0.66%
Foster placements	20.01%	20.01%	20.18%	19.92%
Other LAC placements	2.33%	1.94%	2.15%	2.23%
Adoption services	3.17%	3.28%	3.41%	3.58%
Leaving care services	3.05%	3.28%	4.67%	4.32%
CSFI: Family centres + Services for under 8s	8.47%	7.82%	7.48%	7.01%
Core assessments	1.54%	1.43%	1.49%	1.63%
Deflated expenditure: Total other children services	37.85%	39.22%	38.68%	39.89%

Table A8 Rate of change in activity

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Children's homes		-0.75%	-2.20%	-3.41%
Secure accommodation (welfare)		11.11%	-6.67%	11.90%
Foster placements (including adoption)		3.58%	3.10%	-0.02%
Other LAC placements (excluding adoption)		-6.89%	-1.23%	0.78%
Children adopted		2.94%	8.57%	0.00%
Children aged 16 and over who ceased to be looked after during the year ending 31 March		1.52%	1.49%	10.29%
Hours of service provided for CSFI		4.85%	1.87%	0.48%
Core assessments completed		-0.71%	14.18%	16.51%
Deflated expenditure: Total other children services		11.30%	8.53%	11.92%

Table A9 Contribution to growth

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Children's homes		-0.17%	-0.50%	-0.73%
Secure accommodation (welfare)		0.06%	-0.03%	0.06%
Foster placements (including adoption)		0.72%	0.62%	0.00%
Other LAC placements (excluding adoption)		-0.16%	-0.02%	0.02%
Children adopted		0.09%	0.28%	0.00%
Children aged 16 and over who ceased to be looked after during the year ending 31 March		0.05%	0.05%	0.48%
Hours of service provided for CSFI		0.41%	0.15%	0.04%
Core assessments completed		-0.01%	0.20%	0.25%
Deflated expenditure: Total other children services		4.28%	3.35%	4.61%
Rate of growth of the overall index		5.45%	3.85%	4.98%
Index based on 2001-2 = 100	100	105.3	109.6	114.7

Calculation of the new CWAI with additive quality adjustment

Table A10 Addition of quality adjustment to LAC activities

	2001 – 2002	2002 – 2003	2003 – 2004	2004 – 2005
Quality index for LAC		1.43%	2.95%	2.54%
Children's homes		0.68%	0.76%	-0.87%
Secure accommodation (welfare)		12.54%	-3.71%	14.44%
Foster placements		5.01%	6.06%	2.52%
Other LAC placements		-5.46%	1.73%	3.32%
Children adopted		4.37%	11.53%	2.54%
Children aged 16 and over who ceased to be looked after during the year ending 31 March		2.94%	4.45%	12.83%

Table A11 Contribution to growth including additive quality adjustment

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Children's homes		0.16%	0.17%	-0.19%
Secure accommodation (welfare)		0.07%	-0.02%	0.08%
Foster placements (including adoption)		1.00%	1.21%	0.51%
Other LAC placements (excluding adoption)		-0.13%	0.03%	0.07%
Children adopted		0.14%	0.38%	0.09%
Children aged 16 and over who ceased to be looked after during the year ending 31 March		0.09%	0.15%	0.60%
Hours of service provided for CSFI		0.41%	0.15%	0.04%
Core assessments completed		-0.01%	0.20%	0.25%
Deflated expenditure: Total other children services		4.28%	3.35%	4.61%
Rate of growth of the quality adjusted overall index		6.00%	5.62%	6.05%
Index based on 2001-2 = 100	100	106.0	112.0	118.7

Calculation of the new CWAI with multiplicative quality adjustment

Table A12 Multiplication of LAC activity growth and quality growth

	2001 – 2002	2002 – 2003	2003 – 2004	2004 – 2005
Quality index for LAC		1.43%	2.95%	2.54%
Children's homes		0.66%	0.69%	-0.96%
Secure accommodation (welfare)		12.70%	-3.91%	14.75%
Foster placements		5.06%	6.15%	2.52%
Other LAC placements		-5.56%	1.69%	3.34%
Children adopted		4.41%	11.78%	2.54%
Children aged 16 and over who ceased to be looked after during the year ending 31 March		2.96%	4.49%	13.09%

Table A13 Contribution to growth including multiplicative quality adjustment

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Children's homes		0.15%	0.16%	-0.20%
Secure accommodation (welfare)		0.07%	-0.02%	0.08%
Foster placements (including adoption)		1.01%	1.23%	0.51%
Other LAC placements (excluding adoption)		-0.13%	0.03%	0.07%
Children adopted		0.14%	0.39%	0.09%
Children aged 16 and over who ceased to be looked after during the year ending 31 March		0.09%	0.15%	0.61%
Hours of service provided for CSFI		0.41%	0.15%	0.04%
Core assessments completed		-0.01%	0.20%	0.25%
Deflated expenditure: Total other children services		4.28%	3.35%	4.61%
Rate of growth of the quality adjusted overall index		6.01%	5.63%	6.04%
Index based on 2001-2 = 100	100	106.0	112.0	118.7

Current index

Table A14 Current Index Indicators and Expenditure, £ thousands

	2001 – 2002	2002 – 2003	2003 – 2004	2004 – 2005
Children's homes	713,332	785,152	850,271	917,694
Secure accommodation (welfare)	16,809	14,447	20,724	29,039
Foster placements	619,765	695,219	800,684	880,681
Other LAC placements	72,187	67,437	85,461	98,545
Total other children's services	1,675,217	1,912,286	2,210,903	2,494,745
Total children's and families services	3,097,310	3,474,541	3,968,043	4,420,704

Table A15 Current Index: Deflating Total other children's services

	2001 – 2002	2002 – 2003	2003 – 2004	2004 – 2005
Total other children services £'000	1,675,217	1,912,286	2,210,903	2,494,745
Deflator Index	103.9	108.5	112.6	115.6
Deflated 'Total other children's services' £'000	1,613,112	1,762,151	1,963,153	2,158,084

Table A16 Current Index: Activity data

	2001 – 2002	2002 – 2003	2003 – 2004	2004 – 2005
Children's homes (child days) 000's	2,661	2,640	2,582	2,494
Secure accommodation (welfare) (child days) 000's	80	90	84	94
Foster placements (child days) 000's (excluding adoption)	13,967	14,417	15,011	15,008
Other LAC placements (child days) 000's (including adoption)	4,898	4,757	4,616	4,641
Total other children's services £'000	1,613,112	1,762,151	1,963,153	2,158,084

Table A17 Current Index: Expenditure weights

	2001 – 2002	2002 – 2003	2003 – 2004	2004 – 2005
Children's homes	23.03%	22.60%	21.43%	20.76%
Secure accommodation (welfare)	0.54%	0.42%	0.52%	0.66%
Foster placements	20.01%	20.01%	20.18%	19.92%
Other LAC placements	2.33%	1.94%	2.15%	2.23%
Total other children's services	54.09%	55.04%	55.72%	56.43%

Table A18 Current Index: Contribution to growth

	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005
Children's homes		-0.18%	-0.50%	-0.73%
Secure accommodation (welfare)		0.07%	-0.03%	0.06%
Foster placements (excluding adoption)		0.64%	0.82%	0.00%
Other LAC placements (including adoption)		-0.07%	-0.06%	0.01%
Total other children's services		5.00%	6.28%	5.53%
Rate of growth of the overall index		5.46%	6.52%	4.87%
Index based on 2001-2 = 100	100	105.5	112.3	117.8

List of Abbreviations

CiN	Child(ren) in Need
CPR 3	Child Protection and Referrals data return
CSFI	Children Supported in their Families and Independently
CSS	Children's Social Services
CWAI	Cost Weighted Activity Index
DCLG	Department for Communities and Local Government
DfES	Department for Education and Skills
DH	Department of Health
ECM	Every Child Matters
ECM:CfC	Every Child Matters: Change for Children
GCSE	General Certificate of Secondary Education
ICS	Integrated Children's System
LAC	Looked After Child(ren)
MIS	Management Information System
ONS	Office for National Statistics
PAF	Performance Assessment Framework
PEP	Personal Education Plan
PSS EX 1	Personal Social Services Expenditure
SSDA 903	Looked after children data collection
UK	United Kingdom
USA	United States of America

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Produced by the Department for Education and Skills

Ref No: RW104

www.dfes.go.uk/research