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Unit Costs of  
Health & Social  
Care 2015

Compiled by Lesley Curtis  
and Amanda Burns

# **Unit Costs of Health and Social Care 2015**

**Compiled by Lesley Curtis and Amanda Burns**

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## Preface

### Lesley Curtis

Since the publication of our last volume of the *Unit Costs of Health and Social Care* in December 2014, the challenges facing local authorities and the NHS have increased, with a renewed drive to improve productivity. For example, *The Five Year Forward View* set out some fundamental principles about how the provision of health services needs to adapt: “to sustain a comprehensive high-quality NHS, action will be needed on all three fronts – demand, efficiency and funding” (NHS, 2014, p.5, para.13).

*The Five Year Forward View* also suggests that the funding gap between resources and patient needs could be as much as £30 billion. If the NHS is to provide the service to which it aspires and introduce some of the recently proposed changes, such as seven-day working, it is clear that decision-makers will need access to good-quality cost-related data.

England is not alone in facing such demands, and in recent years many countries have made efforts to improve the availability of data collection across the health care system to inform planning and to support health services evaluation (<http://www.who.int/healthmetrics/en/>). We are fortunate in England to have the relatively new *data.gov.uk* which holds a vast amount of data and from which we draw some information for our unit cost calculations. However, although this has made some data easier to find, data availability and the increased demand for cost-related information continue to provide us with challenges.

As usual in this preface, we describe the contents of this volume and the changes made in the light of requests from readers, new data and research findings, and our own analyses. One change certain to catch people’s eye is the new layout used in some sections. We believe this supports our aim of making unit cost estimates easily accessible to policy-makers, commissioners, service providers and practitioners, as well as other members of our broadening audience and it is encouraging for us to note that the report was cited in 65 per cent of health economic evaluations in England. We discuss these changes in more detail below, but first introduce a guest editorial and three short articles published in this year’s *Unit Costs of Health and Social Care*, and the new schema we have developed.

## Articles

Stephen Allan’s guest editorial discusses some of the implications of the 2014 *Care Act*. The legislation, which came in to force in April 2015, puts the individual at the heart of the adult social care system and this clear summary assesses the potential impacts for social care markets. Staying with the social care theme, Raphael Wittenberg and colleagues discuss the development of a new survey tool to gather self-reported data about respondents’ care needs, use of formal care, and their use and provision of informal care. Such data would add substantially to the evidence base for policy-makers.

For the first of our research-based articles, Kate Baxter and Parvaneh Rabiee from the Social Policy Research Unit at York University identify the costs of vision rehabilitation services in England: these are rarely studied supports. One component links well with a recent theme in the *Unit Costs of Health and Social Care* volumes. The authors identify time spent by staff in the sample sites on client- and non-client-related activities.

Finally, Colin Ridyard and Dyfrig Hughes from the University of Bangor discuss their review of resource-use questionnaires used in trial-based economic evaluations. Service use data are used to calculate the costs of support and underpin any cost-effectiveness analysis. In turn, findings from such analyses are key to informing commissioning.

## New unit costs

### Dentist information

In last year’s volume, we included unit costs for performer and provider performer dentists. This year we have carried out a survey in collaboration with the Department of Health and the General Dental Council to fill some of the information gaps. Over ten thousand dentists practising in England were contacted, and one response per dental practice was requested. Dentists with registration dates earlier than 1975 were excluded, and so too were suspended dentists and those without an e-mail address. Three hundred dentists responded (11.3% response rate, taking into account the number of dentists per

practice) and the results have been incorporated into the schema this year (see chapter 10). We are hoping to repeat this survey in the near future.

## **Environmental costs**

Building on the guest editorial in the 2013 *Unit Costs of Health and Social Care*, we have included some initial figures for environmental costs alongside the unit costs for inpatient and outpatient days, and for GP and dentist appointments, based on the 2015 guidance. Carbon impacts include direct energy use for buildings and travel, as well as indirect or embedded emissions in the goods and services used in the delivery of healthcare (<http://www.sduhealth.org.uk/policy-strategy/reporting/hcs-carbon-footprint.aspx>).

## **Acute medical units**

Acute medical units (AMUs) are the first point of entry for patients who are admitted for urgent investigation or care by their GP, an outpatient clinic or the Emergency Department. Schema 8.12, based on a study carried out by Matthew Franklin and colleagues (2014), provides a summary of patient resource-use and costs over three months, and data on service and average weekly/monthly cost for very high-cost patients.

## **Level 3 rehabilitation services**

To extend the information we currently hold on rehabilitation services for patients with highly complex rehabilitation needs, in schema 7.6 we have added the costs of a new service (hyper-acute specialist rehabilitation services) created since the development of the Major Trauma Networks (<https://www.networks.nhs.uk/nhs-networks/major-trauma-networks>). This year, the schema includes a mean cost per weighted occupied bed day, as well as the mean cost per occupied bed day, which takes into account the number of days patients spend at five identified levels of complexity.

## **GP and nurse-led triage**

As a result of the escalating demands on UK primary care, to support the evidence for using triage in primary care, a multi-centre cluster-randomised controlled trial and economic evaluation was carried out between 2011 and 2013, coordinated by the Peninsula Medical School, in collaboration with the Universities of Bristol, Warwick and East Anglia. Drawing on the 2014 paper by John Campbell and colleagues, in schema 10.9 we present the costs relating to GP- and nurse-led triage compared with usual care for patients seeking same-day consultations in primary care.

## **Adults with autism**

Thanks to the Autism Alliance (<http://autism-alliance.org.uk/about-us/the-alliance>), we have been able to expand on the information we provide on services for adults with autism and complex needs (see chapter 4). While previous research (schema 8.3.4.) estimated aggregated and support costs for adults with high-functioning and low-functioning autism, new information provides a detailed breakdown of expenses incurred in the running of residential services. These include staff training costs, travelling and medical expenses, and also other costs relating to maintenance. These costs have been collected from three member organisations.

## **Routine information**

### **Time use**

Our basic unit cost for health and social care professionals is the cost per working hour. However, for many purposes, in both research and commissioning, other 'units' are more useful, perhaps an hour of patient contact or an hour of patient-related activity. For these calculations we need to allocate time spent on other activities to patient contact (or patient-related) time but, to do this, we need detailed information on how professionals spend their time. In last year's volume, we drew the reader's attention to new surveys which had recently been published, and also discussed the poor response rate we had received from our initial attempts to collect the information from an on-line survey of professionals. This year, after further attempts, we have slightly improved the response rate, but are not confident that these results reflect nationally applicable working patterns of all staff in a particular professional group. We have reported the data in section V (Other useful information) alongside the number of survey respondents.

For next year's publication, we are hoping to draw on data collected as a result of the Productive General Practice programme, a programme first trialled in 2011 to help practices use resources more efficiently and therefore ultimately spend more time with patients.

[http://www.institute.nhs.uk/quality\\_and\\_value/productivity\\_series/productive\\_community\\_services.html](http://www.institute.nhs.uk/quality_and_value/productivity_series/productive_community_services.html). Work will also be carried out to analyse data from the Client Record Interactive Search (CRIS), a project supported by the National Institute for Health Research (NIHR), <http://www.slam.nhs.uk/about/core-facilities/cris>, to provide time-use information for a range of professionals involved in the provision of services for people with mental health problems.

## **NHS overheads**

Since 2011, we have based our estimates of NHS overheads on the NHS (England) Summarised Accounts, using the collated expenditure data from 121 NHS Trusts for 2012/13. We found that management and other non-care staff costs were 19.31 per cent of direct care salary costs and include administration and estates staff. Non-staff costs were 41.97 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), utilities such as water as well as gas and electricity.

As a result of the changes made to the way NHS services are organised, the NHS (England) Summarised Accounts are no longer produced but have been replaced, in the main, by the NHS Foundation Trusts: Consolidated Accounts. This year we have undertaken work to assess whether it is appropriate to draw on these accounts for our overheads' estimates, given that most community trusts had not attained foundation trust status and most of the unit costs we report are for community-based services.

Expenditure data from ten community trust accounts (60% of the total number) were compared with data from the NHS Foundation Trusts: Consolidated Accounts, which included 147 organisations for 2013/14. We found that total overheads (non-staff and administration and estates) as a percentage of care staff costs were 7.1 per cent higher in foundation trusts (69.8% compared with 62.7%). One important difference was that the accounting guidance for NHS Trusts (now mainly community trusts) requires expenditure on drugs to be included with 'supplies and services – clinical' whereas, in the foundation trusts' accounts, drugs are shown as a separate expenditure line. When comparing the foundation and community trust data for these two expenditure lines, we found that 'supplies and services – clinical' amounted to a similar proportion of care-staff costs for both types of organisations, but the separate 'drugs' expenditure line for foundation trusts added a further 15 per cent of care-staff costs. Higher spend on drugs in acute (hospital only) trusts is likely to be driving this figure.

Therefore, our approach for this year is to use the figures derived from the financial accounts of the community trusts to estimate overheads of NHS community-based services. Unit costs for hospital-based services include an overhead percentage calculated from the NHS Foundation Trusts: Consolidated Accounts. This has meant a slight increase in the percentage for community-based services' total overheads (from 61.3% to 62.7% of care staff costs), but a larger increase for hospital-based services to 69.8 per cent of care staff costs. Further work will be undertaken next year to identify the overheads for different groups of trusts.

## **Superannuation**

Every second year, we verify and update the employers' superannuation contribution rate for local authorities and the NHS. The rate paid by employers of NHS staff has remained at 14 per cent for a number of years, regardless of pay level (<http://www.nhsbsa.nhs.uk/Pensions.aspx>). This year, we have drawn on work published by the Local Government Pension Scheme Advisory Board, which suggests that the average rates for 23 local authorities for 2014-2017 is 20 per cent, ranging from 18.5 per cent to 24 per cent (<http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013>). The next scheme valuation is due in 2016, and the new rates will be included in the 2017 *Unit Costs of Health and Social Care* volume.

## **Qualification costs**

This year, in response to a request from the Department of Health for more detail on the costs of professionals' education and training, we have included the number of years over which the benefits of the training are delivered, equal to the working life of the professional. We have also separated the placement fee for postgraduate training from other costs, and provided an additional table showing the costs before allowing for their distribution over time.

## Equipment costs

Work is currently underway to provide additional staff-related costs to table 7.3 on the costs of equipment and adaptations. We will make these data available on the PSSRU website as soon as possible.

## Inflators

Responsibility for children's social care services was moved to the Department for Education in 2007. Since then, we have used the Personal Social Services (PSS) indices for adults to adjust the costs of children's social care services. Next year, we are hoping to address this gap and to create a new inflator for children's social care services, using the same method as that used for the adult services.

## Presentation of estimates

As outlined in our Christmas 2014 blog, we have been giving careful consideration to the presentation of unit costs in the *Unit Costs of Health and Social Care* (Curtis, 2014). Chapters 9 and 13 provide examples of this work in progress. In these chapters, we have provided unit costs for more grades of hospital nurses and community allied health professionals, but in a more condensed format. Thus, users can still find a particular unit cost quickly, but we have made sure that information on the methods used to arrive at the unit costs are still easily visible. Responding to user feedback, these tables will also be available in Excel format on our website.

Finally, we would like to take this opportunity to remind our readers that when the base data for any single schema is ten years old and we cannot find newer information, our policy is to delete the schema. This year, several schema have reached the ten-year deadline. As with other out-of-data unit costs, these are listed in the 'other sources of information' section at the back of the volume. We encourage readers to let us know about any studies that may help us reinstate schema where the service is still relevant; noticeable gaps in information are services for disabled people and people with intellectual disabilities. We would welcome contact from any organisations willing to work with us to provide unit costs for these services.

## Acknowledgements

I would like to thank all my readers who have sent feedback on these blogs we have published this year:

Christmas festivities or publication of the Unit Costs Report? <http://www.pssru.ac.uk/blogs/blog/christmas-festivities-or-publication-of-the-unit-costs-report/>

Unit Costs in Use – Mental Health Services <http://www.pssru.ac.uk/blogs/blog/unit-costs-in-use-mental-health-services/>

Unit Costs of Health and Social Care makes the news <http://www.pssru.ac.uk/blogs/blog/category/unit-costs/>

There is a form on the website or you can e-mail directly: [L.A.Curtis@kent.ac.uk](mailto:L.A.Curtis@kent.ac.uk) or [A.L.Burns@kent.ac.uk](mailto:A.L.Burns@kent.ac.uk). Finally, I would like to extend my special thanks to Jennifer Beecham, who is always an invaluable source of advice in the preparation of this volume; and also to second author Amanda Burns, who has been able to devote more time this year to the Unit Costs Programme. I would also like to extend my gratitude to Alan Dargan, Jane Dennett and Ed Ludlow, for their administrative and technical assistance prior to publication. Thanks too to all those who have provided articles and information for new schema, and particularly to Stephen Allan for his guest editorial.

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Others who have assisted this year are: Sarah Brigg, Will Fenton, Helen Foster, Peter Holden, Lisa Holmes, Bernard Horan, Elisabeth Jelfs, Armin Kirthi-Singha, Rozeen Mahroof, Samantha McDermid, Charles Middleton, Imogen Tennison and Helen Trivedi.

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# Implications of the Care Act 2014 on social care markets for older people

## Guest Editorial

Stephen Allan

## Introduction

The Care Act contains crucial reforms in law for the care and support of individuals in England. The Act is person-centred. Local authorities (LAs), instead of promoting certain types of care, now have a legal responsibility to promote individual wellbeing when exercising a care and support function; people should not fit into available social care, now social care must be tailored for the individual. The Act also reflects that social care is not just about crisis management; it is about intervening early to help people retain their confidence and prevent, or delay, needs occurring.

LAs have many legal responsibilities set out in the Care Act to help promote the wellbeing of people for whom they are providing care and support, including: provide information and advice on available social care, promote integration, and shape the local social care market. For the first time, the entitlement to support for carers is equivalent to that of cared-for individuals.<sup>1</sup>

The Care Act establishes a set of national eligibility criteria which sets the minimum threshold of needs for LA support.<sup>2</sup> The Act also establishes Deferred Payment Agreements (DPAs) whereby a person, subject to having eligible needs and a means test of non-housing assets, can delay paying for their residential care for a period of time, which can be the entire length of their stay, with LAs covering the cost.<sup>3</sup> DPAs will prevent the worry of having to sell homes promptly at a time of potential distress. In addition, the Act prevents individuals from losing their support for care if they move between LAs; an individual can move between LAs and their social care will continue at its current level until the new LA has assessed them. All of these changes will have implications for the funding of social care.<sup>4</sup>

The above came in to force in April 2015 and puts the individual at the centre of the social care market. Three key groups will be affected by the Act: the individuals in need of care, the providers of care (the market), and LAs. Each group is now briefly discussed.

## Individuals and the Care Act

A key goal of the Care Act is increased personalisation. Any individual can go to their LA for information and advice on not just care and support, but complementary areas including financial considerations and prevention of needs. The availability of this support is irrespective of need and wealth level. Every person is allowed to be assessed for their level of need. Those assessed as having eligible needs for LA support will agree a care and support plan with their LA, in which the person with needs (or carer) will be the primary leader of the development of the plan. This will include a personal budget, which will outline how much services to support individual needs will cost the LA. The personal budget can be received as a direct payment, which will give individuals more control over the services they choose to meet their needs.

## Carers

The Care Act gives LAs the duty to meet the eligible support needs of carers. Prior to the Care Act, LAs had only been legally obliged to assess those who provided a substantial amount of unpaid care on a regular basis, and support for carers was available at LA discretion. Now, if it appears that a carer requires support, LAs must assess their needs, including any potential future needs. If eligible for support, LAs will help carers to improve their outcomes, be it with direct support to the carer or support provided to the cared-for person to provide respite for the carer.<sup>5</sup>

<sup>1</sup> For full details on LA responsibilities, see Department of Health (2014).

<sup>2</sup> LAs can provide support and care for people with needs below this threshold if they wish.

<sup>3</sup> The length of deferral will also be subject to having adequate housing assets and an interest rate based on the cost of government borrowing will be applied to all deferrals.

<sup>4</sup> Further changes to public funding of social care, Phase II of the Care Act, including a social care cost spending 'cap' and increased means tested support, are now delayed until April 2020 (Department of Health, 2015).

<sup>5</sup> If eligible, any support a carer receives may be means tested.



LAs already provide support for carers: 334,000 carers received direct support in 2014/15, more than half of these (59%) receiving information and advice only, and a further 56,000 cared-for individuals received forms of carer support such as respite care (HSCIC, 2015). However, almost two million carers in England provided at least 20 hours of care a week according to the 2011 Census, and projections suggest there will be a shortfall between the supply of informal care provided by adult child carers and the demand for care from parents (Pickard, 2015). Therefore, increased carer support will be of great consequence.

### **Eligibility criteria**

Individuals will be assessed according to national eligibility criteria, which replace the Fair Access to Care Services (FACS) guidelines. The national eligibility criteria examine not what needs an individual has, but whether they are unable to meet certain outcomes and, if so, whether this has a significant impact on their wellbeing. This ensures where a person has eligible needs their care plan is developed, with their input, to meet the outcomes they want to achieve.

There is likely to be increased equality in LA social care support receipt with the new national eligibility criteria. Although these criteria will necessarily be open to interpretation across LAs (as before with FACS, e.g. Fernandez & Snell, 2012), this should remove a great deal of needs-based variation of social care receipt. A small increase in eligibility is also likely under the new criteria (Fernandez et al., 2014).

### **Impact**

At the individual level the key advantage that the Care Act brings is choice. There will be increased choice of care delivery given local markets will offer a range of services, direct payments and increased information and advice. There will also be choice in how much to pay for a service given competitive, diverse, local markets and when to pay with DPAs.

## **Markets and the Care Act**

For individuals to have choice requires a thriving social care market. The social care market is large and competitive, with a total value of over £20 billion (Laing & Buisson, 2012). The market involves individuals, providers and LAs alike, and so is crucial to the success of the Care Act. At the same time, the Care Act will be crucial to the market. It has a great number of supply-side reforms through the responsibilities given to both LAs and the Care Quality Commission (CQC), the independent health and social care regulator for England. For LAs this includes market-shaping responsibilities (see LAs and the Care Act below), and the provision of information and advice to individuals, which is also likely to influence market outcomes (see Forder et al., forthcoming).

### **The role of CQC**

A successful social care market therefore requires strong regulation to assure quality. The Care Act amends the Health and Social Care Act 2008 and gives the Care Quality Commission the formal power to grant a rating based on the level of care provided. The CQC now assesses the performance of social care providers using a star rating system based on the 'Mum Test'.<sup>1</sup>

Following the collapse of Southern Cross,<sup>2</sup> the Act also gives the CQC the statutory responsibility to assess the financial viability of large and difficult-to-replace social care providers, providing a warning to LAs if these providers are likely to become unable to deliver a service. If a provider does fail, LAs have a legal duty, temporarily, to meet the needs of the individuals affected, irrespective of how the care is funded (CQC, 2015). This should reduce the potential negative effects on individual wellbeing of care provider failure.<sup>3</sup>

### **Market pressures**

Certain factors outside of the Care Act may have wide-ranging consequences for social care markets. There are concerns that private (self-funded) placements cross-subsidise LA-funded placements, particularly in the care homes market (Office

<sup>1</sup> <http://www.cqc.org.uk/content/making-mum-test-real-our-new-model-inspecting-adult-social-care-has-launched-today> [accessed 20 October 2015]

<sup>2</sup> <http://www.theguardian.com/business/2011/jul/11/southern-cross-landlords-take-over-all-homes> [accessed 20 October 2015]

<sup>3</sup> There can be negative consequences to involuntary relocation between care homes unless well managed (Holder and Jolley, 2012).

of Fair Trading 2005; Laing & Buisson, 2012; Hancock et al., 2013). This could then have implications for quality and, in turn, care home viability (Forder & Allan, 2014; Allan & Forder, 2015).

Social care markets also face a number of cost pressures. First, the introduction of the National Living Wage from April 2016 for all those over the age of 25 (Department for Business, Innovation & Skills, 2015). Second, under current immigration rules, from April 2016 any migrant worker who has worked in the UK for five years must be earning more than £35,000 to be able to attain indefinite leave to remain.<sup>1</sup> Third, issues around working time and pay for home care workers in particular.<sup>2</sup> It is likely that there will be at least some upward pressure on costs and potential negative implications for outcomes given the composition and remuneration of the social care workforce (e.g. Skills for Care, 2015).

## Impact

The delayed phase II component of the Care Act was seen as most likely to impact on the care homes market (Forder et al., forthcoming). Nonetheless, the Care Act will result in increased interaction between self-funders and LAs which may still impact on the market. Increased assessments, and information and advice, may lead to increased demand for earlier forms of social care intervention. Overall, the impact of the Care Act on individuals, LAs and the CQC will provide the foundations for diverse local social care markets which provide high-quality services to meet the needs of individuals.

## LAs and the Care Act

The Care Act gives LAs an increased role within local social care markets. Increased support through provision of information and advice includes LAs providing this service directly and indirectly ensuring the sufficiency of information across the local market. The Care Act also places responsibility with LAs to increase integration and cooperation with not only the NHS and relevant stakeholders in the local market, but also other LA services that are linked to health and social care, e.g. housing.

## Market-shaping and budget cuts

Market-shaping involves promoting diversity of providers and quality across a spectrum of options that meet the needs of local residents. LAs will interact with the whole market and not just providers that LAs purchase from directly. Market-shaping will include the use of LA commissioning. This should focus on outcomes for individuals, possibly incorporate payments-by-outcomes, and ensure that local markets remain sustainable through sufficient, yet cost-effective, funding (Department of Health, 2014a).

Therefore, market-shaping is a potential solution to the supply-side issues that care providers are facing. LAs could ensure that social care providers receive sufficient payments so as to maintain the long-term sustainability of the market, and the outcomes individuals achieve. However, at the same time, the cost-effective, value-for-money, use of public funds must also be carefully considered. LA budgets continue to be squeezed, and with social care funding not ring-fenced, there will be continued pressure on the prices that LAs pay for social care (e.g. Local Government Association, 2013). Further downward pressure on LA fees for social care could then affect the sustainability of social care markets and individual outcomes.

## Impact

The Care Act itself will bring increased costs to LAs through assessments, appeals, greater financial support, and increased overheads. The Department of Health had allocated funds to cover these costs (Department of Health, 2014b). Therefore, the Care Act should not negatively affect the ability of LAs to fund social care and support for eligible individuals. Yet there is concern that demand for, and costs of, assessments may have been underestimated (National Audit Office, 2015).

<sup>1</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/117953/tiers125-pbs-overseas-soi.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/117953/tiers125-pbs-overseas-soi.pdf) [accessed 20 October 2015]

<sup>2</sup> See the recent European Court of Justice ruling on working time for those without a fixed office (<http://curia.europa.eu/jcms/upload/docs/application/pdf/2015-09/cp150099en.pdf>) and the UK employment appeal tribunal: Whittlestone v BJP Home Support Limited [2013] UKEAT 0128\_13\_1907, [2014] IRLR 176, [2014] ICR 275 (<http://www.employmentcasesupdate.co.uk/site.aspx?i=ed18895>) [accessed 20 October 2015]

## Conclusion

The Care Act, and the reforms included therein, will have far-reaching implications for social care, and comes at a time when the sector is under pressure (e.g. ADASS et al., 2015). As such, it will be of interest to see if the intended aims of the Care Act are achieved. Future research can help inform in this respect.

For LAs, the Care Act brings increased costs and responsibilities. Crucially, LAs having to maintain a sustainable, diverse, social care market in a time of austerity will be a careful balancing act. This is particularly important given cost pressures on the supply side for care providers and the expected rise in demand for social care (e.g. Wittenberg et al., 2011). The effect of the Care Act on providers is more difficult to assess given it depends on the effect the Act has on individuals, LAs and the CQC. A competitive, diverse and high-quality market meeting the needs of individuals is the intention of the Act. Markets should provide high-quality and continuous care given the regulatory powers of the CQC.

Most importantly, the Care Act puts individuals first, increasing their choice while easing some of their financial burden; social care is about achieving outcomes and ensuring wellbeing.

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## **Survey questions on older people's receipt of, and payment for, formal and unpaid care in the community**

**Meera Balarajan, Margaret Blake, Robin Darton, Michelle Gray, Ruth Hancock, Linda Pickard and Raphael Wittenberg**

Most countries, including the United Kingdom, are facing the challenge of meeting the needs of increasing numbers of older people who require care and support. The development of policy and practice on care for this group requires good evidence on patterns of need for help, the extent to which formal services and unpaid care from family and friends meet that need, and the costs of care and how these costs are met by the state, the service user and their family. Household surveys and evaluations of specific forms of care are important sources of such evidence.

Collecting such information directly from survey respondents poses some challenges. An older person may receive a service which is arranged by a public body but provided by a private sector agency; and he/she may pay all, part or none of the cost of that service depending on eligibility for public support. Initiatives such as 'direct payments' and 'personal budgets', which are intended to provide service users with more choice, blur the boundary between public and private care. Moreover, terminology used by professionals may not be understood in the same way by survey respondents.

This paper reports research which developed a new module of questions to collect data on the needs of older people (aged 65 and over) living in the community, their receipt of unpaid 'informal' care and 'formal' care services and payment for those services, and also questions on the provision of unpaid care. Our overall aim was to develop a valid and robust module of questions which could be used in household surveys and in evaluations. This was important because no such module was available which met the challenges of producing up-to-date data which adequately reflected the complexities of the adult social care system.

The research reported here was the second phase of a study in which phase one was used to define the scope of a new module and learn from relevant past work. Phase one comprised a review of the relevant questions in existing surveys, a systematic review of questions used in economic evaluations, and a stakeholder consultation. King et al. (2010) provides details of phase one; and a full report of the systematic review is available in Martin et al. (2012). Phase one established a clear need for a new module of questions. In particular, the teams responsible for the Health Survey for England (HSE)<sup>1</sup> and the English Longitudinal Survey of Ageing (ELSA)<sup>2</sup> expressed interest in the development of a new module.

Phase two of the study had three stages. The first stage involved in-depth interviews with service providers and focus groups with service users, to gain a full picture of current service provision and service users' understanding of what is provided to them. In the second stage, an initial set of survey questions was developed and tested, first with a panel of experts and then by two rounds of cognitive interviewing with a small sample of older people. Lastly, the questions were refined through expert review of a draft questionnaire and piloted as part of the process of incorporating them into the HSE and ELSA.

## **Methods used during Phase 2**

### **Stage 1**

The first stage was intended to ensure that the new questions were comprehensive and grounded in the context of current social care provision. It explored how service delivery and payments work in practice, and, importantly, the levels of knowledge and awareness of service users. Thirteen in-depth interviews were undertaken with people providing services in the public, private-for-profit and voluntary sectors, plus interviews with providers of unpaid care and with one organisation supporting unpaid carers. Two focus groups were also convened, each with six service users. Balarajan et al. (2009) contains full details of this stage of the research.

<sup>1</sup> <http://www.hscic.gov.uk/healthsurveyengland>

<sup>2</sup> <http://www.elsa-project.ac.uk/>

## Stage 2

The second stage began with the development of a preliminary questionnaire. Questions were either formulated from scratch or drawn from existing surveys. This was followed by two rounds of cognitive interviews to address whether the proposed questions would provide valid and reliable data. For both rounds, three types of respondent were recruited: people aged 65+ who had received formal services and/or unpaid care; unpaid care-givers (aged 18+); and people aged 65+ who had neither received nor provided care. Thirty cognitive interviews were conducted in round one and 26 interviews in round two. All were conducted face-to-face. Qualitative analysis was carried out using detailed notes made by interviewers from interview audio recordings. Further details are available in Balarajan et al. (2010).

## Stage 3

The draft questionnaire was discussed in multi-disciplinary expert panels, composed of subject experts, survey researchers and question design specialists, drawn from the research team and other colleagues from their organisations. Towards the end of the study, the HSE and ELSA teams confirmed their interest in incorporating the module in their surveys. This raised important practical matters which had an impact on the finalisation of the module and also provided a valuable opportunity for field piloting.

## Findings and outline of the module of social care questions

### General findings

Stage 1 confirmed the importance of developing questions that could be readily understood by respondents, given the complexity of the social care system. For example, the terms 'help' and 'helper' worked better than 'care' and 'carer'. Although the terms 'direct payments' and 'personal budgets' were not universally understood, it was best to use these descriptors but with explanation of their meaning. It was not always clear to service recipients *who* provided their care. The solution was to distinguish help arranged with involvement of a local authority from help where the local authority had not been involved.

The cognitive interviews were important in establishing whether people could be asked about payments for care and in what level of detail. The first round of these interviews revealed that some individuals did not know precisely how their care was organised and paid for. This was partly because care may be arranged by someone other than the respondent. In such cases, proxy responses or assistance with replying to questions might improve the accuracy of the data. It was clear also that it would be difficult to obtain the exact amounts that respondents pay towards their care, but questions to establish whether they paid all, some or part of the cost of their care worked reasonably well.

The second round of cognitive interviews showed that it was possible to ask about direct payments and privately purchased services. Those interviewed were mostly aware of whether they were in receipt of direct payments or if they paid privately for a service. The questions about types of care received, who provides this care and patterns of receipt were flexible enough to be asked of those arranging their own care as well as those using care arranged (or paid for) directly by the local authority. In contrast, questions about the *amounts* paid were difficult for people with direct payments because people either found the information too personal or did not know.

Unmet need was best identified by using a task-based approach to find out i) whether respondents *need* help with particular Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) and if so ii) whether they *receive* any help with those tasks. This would capture situations where some needs are met but others are not.

Discussions on incorporating the module into the HSE and ELSA highlighted two practical issues. First, there was a need for a shorter version to encourage such surveys to use at least some of the questions, while avoiding the pitfalls of *ad hoc* cuts to limit interview length. The final module therefore consists of a short and a long version. Secondly, ELSA already included questions about ADLs and IADLs which could not be changed. The tasks included in the new module were therefore designed to align with a subset of tasks in the existing ELSA questions.

### The question module

The module has two main sections: Section A covers *receipt* of social care, both formal care and unpaid care, and Section B covers the *provision* of unpaid care. The module begins with questions about ADL and IADL tasks with which people might

need help. By starting with tasks, the questions are likely to be easier and more salient for the respondent, and remain relevant over time. Thirteen ADLs and IADLs were identified for inclusion in the module. They were chosen to: cover a range of activities relevant to older people; to include all the tasks necessary to derive approximations to the Katz and Barthel indices (Katz et al., 1963; Mahoney and Barthel 1965); to fit with those already in ELSA; to include tasks requiring physical and cognitive ability; and to ensure that the overall selection of tasks is as gender-neutral as possible.

The questions first establish a respondent's ability to perform each of the 13 tasks and then whether they receive help, and if so from whom. Since asking who helped with each of the 13 individual tasks would be an excessive burden on interviewees, the tasks are grouped for this purpose. They were grouped in three ways designed to make sense to respondents: help with bathing/showering; help with other ADL tasks and indoor mobility; and help with IADL tasks and outdoor mobility.

The module then asks about hours of care received in the last week and patterns of care (such as whether care is received at the weekend). Questions on payments for care come next. The module first identifies whether the individual is in receipt of a direct payment or personal budget, and whether a local authority was involved in arranging any formal care. It then asks whether the older person pays for all, some or none of their care, with an option to obtain the exact amount where possible. It allows for information on payments to be obtained from someone other than the individual receiving care.

Parallel questions about care *provided* by adults (aged 16+) to people aged 65+ were also developed, using the same categories. Care-givers are asked about the hours of care they provide, support they receive in their caring role, and the effects of caring on their health and their employment.

Features of the long version of the module that do not appear in the short version include: exact hours of care received; the timing of care received; exact amounts paid for care; receipt of equipment and adaptations; and payments received by carers who are family and friends.

Feedback from the pilot and 'dress rehearsal' of the short version of the module in the 2010 HSE was positive, and no major problems arose during the first and second years of its inclusion (2011 and 2012). In 2013 the full longer version of the module was included in the HSE, and in 2014 the payments questions from the longer module were included with the remainder returning to the shorter module. The longer module has been included successfully in ELSA Wave 6 (2012-13) and Wave 7 (2014-2015) after piloting and a dress rehearsal.

## Discussion

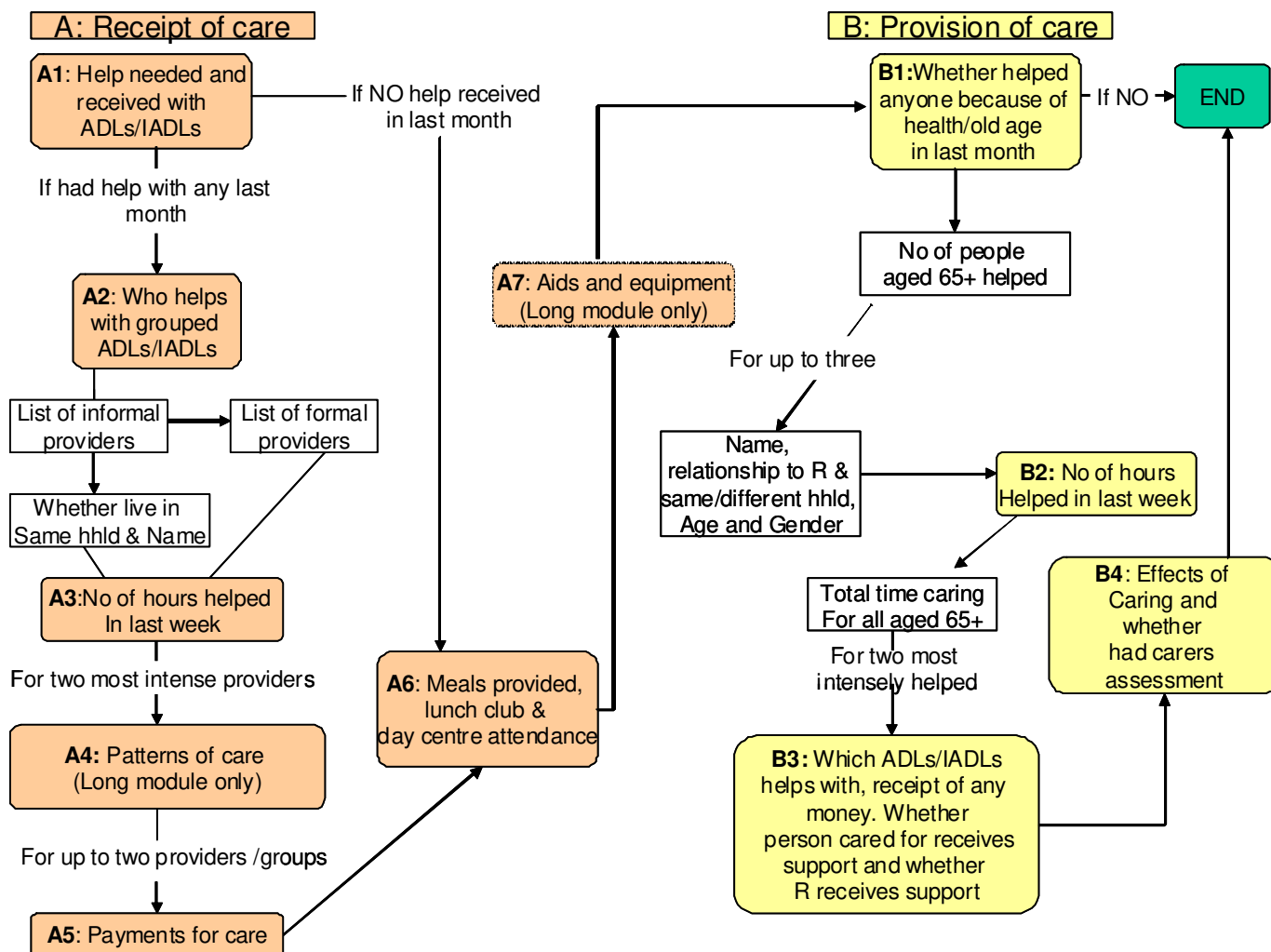
The new module was designed to be used in general population surveys or evaluations, in shorter or longer versions. It can be used to establish both need for care and whether different types of need are being met by formal and/or unpaid care or not at all. Unlike previous modules, it covers payments for care and accommodates the current policy emphasis on more personalised formal care services delivered via direct payments and personal budgets. It allows information on receipt and provision of care to be collected together. Its strength lies in the considerable development work that underpins its structure and wording.

The module has some limitations. It was designed to be asked in surveys of the household population, and would need considerable adaptation for use in care homes, with the possibility of proxy answers. Although the module is being used for people aged 50+ in ELSA, a different approach might be needed for younger adult user groups. The module was designed for England: since some aspects of the social care system are different in Scotland, Wales and Northern Ireland, the module would need adaptation for use there. The questions were designed for use in a CAPI interview. Owing to the module's complexity, it would be difficult to administer it as a paper or self-completion questionnaire or by telephone interview.

The module should be reviewed periodically and updated to reflect any policy changes. We have discussed with the HSE team changes required to reflect the provisions of the Care Act 2014 concerning personal budgets and (from 2020) independent personal budgets. In due course, further changes may be needed to evaluate the effects of the Care Act reforms. A balance will need to be struck between adapting the module to maintain its relevance and providing consistency over time.

To encourage use of the module, documentation is freely available on the project's website (NatCen 2010).<sup>1</sup>

Figure 1: Structure of the module



<sup>1</sup> <http://www.natcen.ac.uk/our-research/research/social-care-questions-for-over-65s/> [accessed 20 October 2015]



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## Estimating the unit costs of vision rehabilitation services

Kate Baxter and Parvaneh Rabiee

### Introduction

Sight loss is a major health issue that impacts on all aspects of wellbeing including daily functioning and mental health. Vision rehabilitation services aim to help people learn how to live as independently as possible, to build confidence and to maintain quality of life following full or partial sight loss. Vision rehabilitation services are provided by qualified vision rehabilitation officers. The services they offer include a range of interventions such as: orientation and mobility training; emotional support; communication skills; independent living skills; equipment training; and risk assessments.

Vision rehabilitation services are usually funded by local councils and provided either by in-house teams or contracted-out services. As with other preventive services, early access to vision rehabilitation is recommended (ADASS, 2013; Vision2020UK, 2013; UK Vision Strategy Advisory Group, 2013).

A literature review undertaken as part of a wider study (Rabiee et al., 2015) showed that there have been few economic studies of vision rehabilitation services and none that estimates unit costs. This short article therefore uses data from Rabiee et al. (2015) to estimate the unit costs of vision rehabilitation services in England. The calculations are based on detailed data from three case studies with additional data collected from a national survey.

### Unit costs of vision rehabilitation services in three case studies

Data were collected from three vision rehabilitation teams in May and June 2014. Case studies A and B were local council in-house vision rehabilitation teams, whereas C was a contracted-out service. Specially-designed forms requested detailed information about:

- the total number of hours worked per typical week by staff in the team;

- the total number of clients supported by the service in the previous 12 months;

- the typical weekly mileage accumulated by the team;

- the numbers of hours (or percentage of time) spent by team members in a typical week on activities categorised as:

- contact time - face-to-face and telephone contact delivering support to clients;

- other client-related time - client-related administrative tasks such as preparing for visits or writing case notes, client-related meetings with other professionals, and travel to and from client visits;

- non-client-related time - all other duties, such as general administrative tasks such as doing duty/taking new referrals, general meetings with other professionals or agencies, and providing or receiving training or supervision;

- annual staff salaries and on-costs, direct and indirect revenue costs and capital charges.

Data collection forms were discussed in detail with each manager. The forms used terms such as 'preparing for client visits' and 'writing up case notes'. The data were grouped into the broader categories presented above (e.g. other client-related time) by the researchers.

No account was taken of the cost of initial qualifications or ongoing professional training for vision rehabilitation officers. However, these costs are important as they are an integral part of becoming a rehabilitation officer and should be included in any future estimation of costs.

Table 1 shows the number and percentage of hours spent by staff on different activities in a typical week in each case study.

**Table 1: Number (%) of hours per week spent on client/non-client related activities**

	Contact time	Other client-related time	No-client-related time	Total			
	Hrs	%	Hrs	%	Hrs	%	Hrs
<b>Mean</b>	116	44%	80	31%	58	25%	254
<b>Case study A</b>							
Managers	2	6%	1	3%	26	92%	28
Rehab officers	60	42%	56	39%	27	19%	144
Admin support staff	5	27%	0	0%	14	73%	19
<b>Total</b>	<b>67</b>	<b>35%</b>	<b>57</b>	<b>30%</b>	<b>66</b>	<b>35%</b>	<b>190</b>
<b>Case study B</b>							
Managers	5	14%	10	27%	22	60%	37
Rehab officers	98	53%	62	36%	25	14%	185
Admin support staff	1	33%	0	0%	2	67%	3
<b>Total</b>	<b>104</b>	<b>46%</b>	<b>72</b>	<b>32%</b>	<b>49</b>	<b>22%</b>	<b>225</b>
<b>Case study C</b>							
Managers	3	11%	6	19%	21	70%	30
Senior rehab officer	8	35%	9	40%	6	25%	23
Rehab officers	151	85%	9	5%	18	10%	178
Admin support staff	3	3%	83	83%	14	14%	100
Assistant	11	66%	4	25%	2	9%	17
<b>Total</b>	<b>177</b>	<b>51%</b>	<b>112</b>	<b>32%</b>	<b>60</b>	<b>17%</b>	<b>348</b>

Numbers/% may not sum due to rounding errors

Table 1 reveals a number of differences between the services. Case study C, for example, is almost twice the size of case study A in terms of number of hours worked a week (348 and 190 hours respectively). The staffing structure was different (only case study C included senior rehabilitation officers and assistants) and the percentage of time that rehabilitation officers spent in face-to-face contact with clients was higher in case study C (85%) than the other case studies (42% and 53%). In addition, the administrative members of staff in case study C spent 83 per cent of their time on other client-related activities compared to zero in case studies A and B. As a proportion of total staff hours a week, case study C had more administrative support (approximately one third) than the other two (one tenth and almost zero).

The typical number of hours per week worked by each team was converted into hours per year based on 43 working weeks a year. This is based on a 41-week year for community-based staff (Curtis 2014), with ten days for study/training reinstated as time for receiving or providing training was already included in non-client-related time for the vision rehabilitation teams.

Each case study also provided details of their annual costs. These included: salaries and associated on-costs (for managers, rehabilitation officers, administrative staff and others); direct revenue costs (utilities, cleaning, equipment, consumables and other operating costs); indirect revenue costs (human resources and finance); and capital charges (building and land costs). The annual costs were £237,985; £256,276 and £336,241 for case studies A, B and C respectively (mean £276,834).

The costs per hour for different activities for each case study were calculated from the hours worked and the annual costs. These are presented in Table 2, along with the ratios of direct to indirect time spent on activities.

**Table 2: Ratios of direct to indirect time and costs per hour**

	Case study A	Case study B	Case study C	Average
Ratio of direct to indirect time				
face-to-face contact	1 : 1.85	1 : 1.16	1 : 0.97	1 : 1.33
client-related work	1 : 0.54	1 : 0.28	1 : 0.21	1 : 0.34
Cost per hour of contact with clients	£83	£57	£43	£61
Cost per hour of client-related work	£45	£34	£26	£35
Cost per hour worked by the team	£29	£26	£22	£26

## Annual costs of vision rehabilitation services using national survey data

In order to place the case-study budgets in a wider context, data on annual budgets and staffing levels from the national survey were used.

Twenty-two respondents to the national survey provided a figure for their annual budget (mean £220,624). In addition, 66 respondents provided details of the whole-time equivalent number of staff on their teams and their salary grades. The latter were used to build up a 'bottom-up' estimate of the staff costs of services.

Table 3 gives the annual budgets estimated from staffing details. Row one gives the salary costs calculated from data in the survey.

**Table 3: Estimated annual budgets based on staffing levels provided in national survey**

	Mean	Median	Minimum	Maximum
Salary costs	£173,026	£134,274	£25,716	£683,166
Salary on-costs <sup>1</sup>	£53,638	£41,625	£7,972	£211,781
Non-salary costs <sup>2</sup>	£75,555	£58,633	£11,229	£298,316
Total budget	£302,219	£234,532	£44,917	£1,193,263

<sup>1</sup> Salary on-costs assumed to be 31 per cent of salary costs (allowing for national insurance and employer pension contributions) (based on Curtis, 2014).

<sup>2</sup> Non-salary costs assumed to be 33 per cent of salary costs, based on survey data showing that salary costs accounted for an average of 75 per cent of the total vision rehabilitation service budgets (Rabiee et al., 2015).

The mean annual budget reported by the three case studies (£276,834) lies between the mean estimated from staffing levels in the national survey (£302, 219) and the annual 'top down' budget levels provided in the survey (£220,624). This suggests that the three case studies' annual budgets are fairly typical of current vision rehabilitation services.

The survey also asked for the size of annual caseloads. The intention was to combine survey data on annual caseloads with annual budget data to calculate the costs per case. However, this was not possible due to different interpretations of the term 'annual caseload'.

### Sensitivity analysis of time spent doing duty

One issue that was highlighted during focus groups with case study teams was that rehabilitation officers in case studies A and B spent a total of five and 1.5 days a week, respectively, doing duty: that is, spending time in the office answering the telephone and taking new referrals. Participants in the focus group in case study C reported that they did not do duty; this was undertaken by staff in a different organisation.

To explore how doing duty impacted on the unit costs of the teams, rehabilitation officers' time and the associated salary costs of doing duty were taken out of the calculations for case studies A and B. The results are given in Tables 5 and 6.

**Table 4: Hours per week worked and percentage of time spent on different activities (excluding duty)**

	Case study A	Case study B	Case study C	Average
Total hours a week	173 hours	215 hours	348 hours	245 hours
Face-to-face contact with clients	39%	48%	51%	46%
Other client-related time	33%	33%	32%	33%
Non-client-related time	28%	18%	17%	21%

**Table 5: Ratios of direct to indirect time and costs per hour (excluding duty)**

	Case study A	Case study B	Case study C	Average
Ratio of direct to indirect time face-to-face contact client-related work	1 : 1.59	1 : 1.07	1 : 0.97	1 : 1.21
	1 : 0.39	1 : 0.22	1 : 0.21	1 : 0.27
Cost per hour of contact with clients	£78	£55	£43	£59
Cost per hour of client-related work	£42	£33	£26	£34
Cost per hour worked by the team	£30	£27	£22	£26

Table 4 gives the total number of hours a week worked by the vision rehabilitation teams, excluding duty. For case studies A and B, total hours have been reduced by 17.5 and 10.5 hours a week respectively. For case study A, the reduction is far less than the reported five days (35 hours) that rehabilitation officers spent doing duty. This is because the team manager reported that the total time spent per week by rehabilitation officers on general administrative tasks (including duty) was 17.5 hours. Therefore, all 17.5 hours were excluded from the revised calculations. This may be an under- or overestimation of the impact of doing duty and should be explored more fully in future research.

Despite this limitation, Tables 5 and 6 shows that excluding an amount of non-client-related time affects the percentages and ratios of time spent on different activities. In case study A, for example, the ratio of time spent on face-to-face contact with clients increased from 1:1.85 (Table 2) to 1:1.59 (Table 5). Ratios of time spent on different activities in case study B mirrored those in case study C more closely after time doing duty was removed.

The impact on the unit costs was small. The cost per hour worked by teams in case studies A and B increased slightly; the costs per hour of face-to-face and of client-related contact time reduced by between £2 and £5 an hour (see Table 5). These changes reflect the fact that proportionately more time was spent on these activities compared to non-client-related tasks.

## Conclusion

The mean cost per hour across the three case studies was £26, and the cost per hour of contact time was £61. Excluding the time and costs of doing duty left the cost per hour the same but reduced the cost per hour of contact time to £59. The ratios of direct to indirect time were 1:1.33 and 1:1.21 on average, including and excluding time on duty respectively. This means that, for every hour spent in face to face contact with clients, approximately one hour and 20 minutes was spent on other (client and non-client-related) work. Vision rehabilitation services can be compared with reablement services to give an indication of their relative costs. Reablement is a short, intensive service which, like vision rehabilitation services, aims to help people relearn skills for independent living. It is usually delivered at home to people who have had an increase in support needs. Reablement is estimated to cost £22 per hour or £42 per hour of contact time, with a ratio of direct to indirect time of 1:0.94 (Curtis, 2014).

The intention had been to calculate the cost per case from caseload data and annual budgets. However, the case studies and respondents to the national survey varied in their interpretation and measurement of caseload. Some provided the number of people allocated to a vision rehabilitation worker, whereas others measured the number of episodes of support (individuals could receive more than one episode). It was not clear from the survey data which services had used which interpretation. Only one case study recorded the number of people allocated to a vision rehabilitation worker. Cost per case has therefore not been calculated.

The detailed bottom-up calculation of unit costs is based on only three case study sites. To be more confident in the generalisability of the costs, these calculations should be repeated for a larger number of services. Given the differences in the makeup and use of the team members in the in-house services (case studies A and B) compared to C (a contracted-out service), they should also be repeated for in-house and contracted-out services separately.

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## Review of resource-use measures in UK economic evaluations

Colin H. Ridyrd and Dyfrig A. Hughes

### Background

Economic evaluations in clinical trials employ a range of approaches for estimating patients' use of healthcare and other resources. These include: abstraction of data from routine medical records (e.g. patient notes, electronic medical records), use of dedicated sections within case report forms, and questionnaires (or diaries or logs (Marques et al., 2013)) for patients, healthcare professionals, researchers, or informal carers to complete (Figure 1) (Johnston et al., 1999, Evans et al., 2000). A review of trial-based economic evaluations found a widespread dependence on patient recall for resource-use estimation in the UK (Ridyrd et al., 2010).

Investigation and review of resource-use measures based on patient recall led to the establishment of DIRUM, the Database of Instruments for Resource-Use Measurement ([www.DIRUM.org](http://www.DIRUM.org)) (Ridyrd et al., 2012). Instruments within DIRUM are catalogued according to: type (diary, recall questionnaire or log); person responsible for completion (patient, patient/carer, healthcare professional, researcher, other); and the method of administration (in person, via telephone, via computer, via post, other). Categories of resources are broadly classified according to primary and secondary healthcare, social services, criminal justice, patient-incurred, and informal care.

A principal aim of DIRUM is to facilitate improvement in the design and development of resource-use measures through open-access to existing measures, challenging current practice regarding the reliability and validity of measurement and establishing guidance for best practice. Central to achieving this is the aim of the present study, which is to systematically define the characteristics of resource-use measures, in relation to the following objectives:

Which resource-use measures, if any, are commonly used?

How are resource-use measures administered?

Which items of resource-use were mostly measured using patient self-report?

How does the use of measures differ according to the availability of alternative methods?

How do estimates compare when more than one method is used for the estimation of the same resource items?

### Methods

#### Overview

A review was conducted of papers that cited publications reporting the use of resource-use measures catalogued in the DIRUM database. From each included article, data were extracted on pertinent characteristics relating to how and what resource-use data were measured, and on the comparative performance of alternative methods of resource-use estimation.

#### Review

Papers citing DIRUM-listed resource-use measures were identified using search engines which allow for citation searches, namely: Google Scholar, ISI Web of Science and Scopus.

After removal of duplicates, all citations were screened independently by two reviewers and considered eligible for inclusion. Articles were excluded if they were: (i) not a cost or economic study; (ii) lacked a primary analysis; (iii) not published in a peer-reviewed journal; (iv) a review, a book, protocol, thesis or dissertation; (v) not conducted in a UK setting; or (vi) a duplicate publication of the same cohort. Any review articles were screened for additional citations that might be relevant to the DIRUM references.

Data were extracted from DIRUM references and the identified citations, on the: (i) study cost perspective; (ii) methods of data collection for estimating resource-use; (iii) source of the resource-use data; (iv) categories of resources; (v) rates of return of postal questionnaires, (vi) questionnaire completion rates (e.g. for face-to-face or telephone administration); and (vii) correlation among different methods of resource-use measurement, where reported. The number of times the DIRUM



references were cited was recorded, as was whether the resource-use measures described in the citing references were used as originally intended.

Extracted data were tabulated and results described narratively.

## Results

At the time of searching, DIRUM listed 38 resource-use measures; however, two were non-UK questionnaires and 11 instruments were either a diary/questionnaire used alongside an existing questionnaire or not published in a citable format, and were excluded. Of the remaining 25 included measures, 23 were questionnaires, one was a diary and one was a log.

Citation searches of these 25 measures yielded 1503 articles (after removal of duplicates) for screening. Application of the selection criteria resulted in 1357 being excluded (Figure 2). Nearly all included citations (143/146) reported Jennifer Beecham and Martin Knapp's Client Service Receipt Inventory (CSRI), or a variation thereof (Beecham et al., 1990, 1999). The other three citations were based on the Annotated Cost Questionnaire (Wordsworth et al., 2001). (A tabulated list of references indicating their main properties is presented in Appendix 1 in the online copy).

Most of the instruments included relied on patient recall (93/146) and were generally administered during researcher interviews (64/93) or completed by the patient themselves (19/93). None of the instruments were reported explicitly as being logs or diaries; however, one questionnaire was reported to have been administered alongside a diary. Among these 93 instruments, the mode of interview was specified in 34 instances and based on the taxonomy for methods of resource-use measurement (Ridyard et al., 2015) were: researcher-completed, face-to-face administered, paper-based questionnaires (23); self-completed, postal-administered, paper-based questionnaires (8); and researcher-completed, telephone-administered, paper-based questionnaires (3). There was variation in the number of questionnaires returned; for example, face-to-face return rates ranged from 51 per cent to 100 per cent in 19 of the 23 studies reporting this; and postal returns ranged from 72 per cent to 89 per cent in six evaluable studies.

Only 37/146 of the studies stated the cost perspective explicitly, but in most cases this could be inferred from the items of resources being measured. The majority adopted an NHS perspective (138/146) and often also included a social services perspective (108). In a few studies, the cost perspective also included indirect costs to employers (18), patients (26) or criminal justice (32) systems.

Among the 93 instruments reliant on patient recall, primary (83) and secondary care (78) were the most widely reported categories of resource-use measured, followed by social services (66), criminal justice (24), accommodation (23), informal care (22), educational (14), patient-incurred costs (12) and lost time at work (10).

Forty-four of the 93 studies supplemented their resource-use measures with other sources of data which included: case notes (27), staff reports (9), computerised administration systems (8) and site finance (2). Where more than one source of information was utilised, it was often unclear what was being reported by the patient and what was being reported by the other source, although case notes were reported as a source of inpatient stays (14/27) and less often for medication usage (2/27).

Twelve studies (among all 146 studies) compared one or more method of data collection for the same resource items (Table 1). Comparisons were generally descriptive, and made between patients' recollection of primary and secondary care services as well as their use of social services, with eight indicating good agreement between medical/provider records and patient/carer recall, and one indicating the greater reliability of case notes. Three were not evaluable.

Where resource-use estimation was not reported to be based on patient recall (53/146), the majority of instruments were administered by researchers or proxies such as patients' relatives (34), with the remainder being unclear as to the source of information. Primary (40/53), secondary (47/53) and social services (38/53) were the most commonly-recorded categories of resource-use in these instances; however, studies in which these instruments were used differed in that case notes were used to a lesser extent (5/53) and hospital finance departments to a greater extent (12/53) than in studies which used resource-use questionnaires reliant on patient recall.

## Discussion

The review highlights the extensive use of the CSRI, and variations thereof, to estimate resource-use in economic evaluations in health and social care. Originally designed for mental health service evaluations, the CSRI collects retrospective information about the interviewee's use of health and social care services, accommodation and income. It can be tailored to capture: GP consultations, practice nurse visits, use of hospital services, and contacts with mental health helpline, psychiatric crisis support team, social worker, counselling, therapy, self-help groups and psychiatrist (Beecham et al., 1990; Patel et al., 2005). The review identified applications extending beyond mental health services, ranging from paediatrics to the management of diabetes, suggesting evolution to broader contexts.

Based on the citations of a convenience sample of measures catalogued in DIRUM, it is evident, however, that the reporting of measures is sub-standard, particularly with respect to the methods used. Many did not report the costing perspective, mode of administration, and return or completion rates. A lack of detail in the reporting of resource-use measures may undermine their quality (Ridyard et al., 2015). When details were reported, face-to-face administration was used most frequently and seemed to give higher proportions of questionnaire return than postal or telephone interview. Face-to-face patient interviews may align with responder preference for this method of administration over telephone interviewing (Bowling 2005) and lead to reduced non-response bias compared with mail questionnaires (Evans et al., 2000).

The review has also identified a number of resource-use measures completed by proxies, such as patients' relatives, friends or primary carers. While it is generally agreed patients are the better source of data (Evans et al., 2000), low comprehension, cognitive impairment or ill health in some patient groups may leave researchers little alternative but to rely on proxy report. Levels of concordance between patient and proxy are not well established (Evans et al., 2000).

Primary and secondary healthcare were the most widely-measured resources in studies included in the present review, along with use of social services. Informal care, patient-incurred costs, indirect costs (such as productivity losses), educational and criminal justice costs also featured, but to a lesser extent. Consistent with previous findings (Ridyard et al., 2010) was the large number of studies which supplemented data based on patient recall with alternative data sources, such as hospital records and general practitioner notes. Where more than one source of information was utilised, however, it was generally unclear what was being reported by the patient and what was being reported by the other source, although case notes were sometimes reported as a source of inpatient stays.

Data derived from patients are prone to recall bias and raise legitimate concerns about accuracy (Jessep et al., 2009; McCrone et al., 2007; Slade et al., 2006). Even for memorable events such as hospitalisations, recall periods in excess of 12 months are generally not recommended (Bhandari et al., 2006), with many resource-use questionnaires restricted to a maximum three month recall period (Ridyard et al., 2012). Among studies that compared different methods of resource-use estimation in the present review, there was indication of good correlation between medical records and patient or carer recall (Patel et al., 2004; Patel et al., 2005; Byford et al., 2007; Slead et al., 2005; Harrison-Read et al., 2002; Merson et al., 1996; McCullagh et al., 2005; Lang et al., 1997). What was not immediately clear from the study was how estimates based on patient or carer questionnaires compared with other sources in relation to education, social services and criminal justice.

The main strengths of the present study is the systematic identification and assessment of measures catalogued in DIRUM. As such, it represents an overview of the state of the art in the methods of resource-use measurement. There are weaknesses, however, particularly with respect to sampling bias, as resource-use measures catalogued in DIRUM may not be representative of others. However, the findings are consistent with other reviews which focused on studies funded by the UK Health Technology Assessment Programme (Ridyard et al., 2010), and resource-use measures for older people (Martin et al., 2012).

In conclusion, this review highlights the widespread use of the CSRI, and indicates resource-use questionnaires are most commonly employed for estimating patients' use of primary, secondary and social care. These are sometimes supplemented by data extracted from patient records such as GP and hospital notes, although with the possible exception of inpatient stays, the rationale for the selection and use of complementary approaches are not reported reliably. The review suggests that face-to-face interview with patients may result in less missing data than telephone interview or postal administration and, while there are concerns about recall bias, where presented, studies indicated good agreement with medical records.

**Table 1: Summary of studies that compare resource-use based on patient (or carer) recall, with other sources of data**

Paper	Research context (number of patients)	Method of questionnaire administration (completion rate)	Resource-use categories	Other methods of resource-use measurement	Data collection comparator
Patel et al., 2004	RCT of training care givers of stroke patients including cost-effectiveness analysis, societal perspective, health, social care and informal care; (N=300)	Patient/carer interview; (300/300)	Primary and secondary care, social services, accommodation and informal care	Hospital records for lengths of stay, social services records	Researchers verified the completeness and accuracy of data on use of resources of hospital and social services against records of service providers. No quantitative data reported on the comparison.
Afuwape et al., 2006	Ethnic differences among a community cohort of individuals with dual diagnosis in South London; (N=213)	Client interview; (146/213)	Primary and secondary care, and police contacts	Case notes and case manager interview	Case notes and case manager interview were compared with responses from clients and used as main source of data if client interview not undertaken. No comment on accuracy of questionnaire and no quantitative data reported on the comparison.
Fitzpatrick et al., 2004	The determinants and effect of shared care on patient outcomes and psychiatric admissions - an inner-city primary care cohort study; (N=349)	Patient self-report but unclear if this was during or prior to face-to-face interviews at baseline (349/349) and 12-month follow-up (n= 281/349)	Psychiatric admissions	Protechnic and PsyMon databases held by the local NHS Trust	Resource-use questionnaire and database outputs cross-checked, no comment on accuracy of questionnaire and no quantitative data reported on the comparison.
Byford et al., 2007	RCT data, comparison of alternative methods of collection of service use data for the economic evaluation of health care interventions for people who self-harm, broad multi-agency perspective inclusion of accommodation; (N=480)	Participant interview, (CSRI data 397/480, GP record data 272/480)	Primary and secondary care	GP records (including inpatient, outpatient, day hospital, A&E, GP, practice nurse)	GP records used to compare with patient recall for health contacts. Agreement was high for GP (Lin's coefficient 0.631), A&E (0.760) attendances and total inpatient days (0.658). Authors concluded GP records appear to provide more accurate information than patient report on contacts with GPs and practice nurses, but less reliable information on contacts with other health services.

<b>Paper</b>	<b>Research context (number of patients)</b>	<b>Method of questionnaire administration (completion rate)</b>	<b>Resource-use categories</b>	<b>Other methods of resource-use measurement</b>	<b>Data collection comparator</b>
Patel et al., 2005	A comparison of GP data and patient recall of collecting economic data in primary care; (N=303)	Self-completion postal questionnaire based on patient recall (229/303)	Primary and secondary care, social services	GP records	Authors concluded that there is good agreement between the number of GP visits recorded on GP case records (mean 3.03) and on the CSRI (mean 2.99) (concordance correlation coefficient 0.756).
Lam et al., 2005	Cost-effectiveness of relapse-prevention cognitive therapy for bipolar disorder: health service perspective; (N=103)	Face-to-face administered questionnaire with participant every 3 months; data available for 83/103 for 0-30 months	Primary and secondary care, social services, accommodation	Hospital computerised records	Hospital computerised records were used to confirm the exact length of hospital stays. Use of self-report alone was noted as being potentially limiting where accuracy was concerned. No quantitative data reported on comparison.
Sleed et al., 2005	The economic impact of chronic pain in adolescence: methodological considerations and a preliminary costs-of-illness study; (N=52)	Postal questionnaire for parental completion (but also used in face-to-face and telephone interview format during development); (52/52)	Primary and secondary care, education, time off work, informal care, out-of-pocket expenses	Hospital records	Hospital records corresponded well with parental recall measure, but the latter judged to be better as it also measured resources outside of hospital. Authors concluded that reliance on medical records would have greatly underestimated patients' service use. No quantitative data reported on the comparison.
Harrison-Read et al., 2002	RCT of enhanced community management in an outer-London borough; cost study, NHS & social care perspective; study group; (N=193)	Patient interview; (125/193)	Primary and secondary care	Patient computerised records	Patient computerised records were used to informally validate interview data and stated to show similar patterns to the reported costs. No quantitative data reported on the comparison.
Merson et al., 1996	RCT of the cost of treatment of psychiatric emergencies: comparing allocation to hospital or community services; (N=100)	Patient assessment interview; (95/100)	Primary and secondary care, social services, police and probation	Clinical records	Clinical records used to verify service use data collected but no quantitative data reported on the comparison

<b>Paper</b>	<b>Research context (number of patients)</b>	<b>Method of questionnaire administration (completion rate)</b>	<b>Resource-use categories</b>	<b>Other methods of resource-use measurement</b>	<b>Data collection comparator</b>
McCullagh et al., 2005	RCT of care-giving and QoL in carers of stroke patients; no economic analysis or costs; (N=300)	Patient interview; (232/300)	Primary and secondary care, social services	Records of service providers	The completeness and accuracy of data obtained via patient interview were reportedly verified against records of service providers but no quantitative data reported on the outcome.
Lang et al., 1997	Cohort study, Service provision for people with schizophrenia: NHS, social care, informal care perspective; (N=311)	Face-to-face administered questionnaire with 166 patients and carers; (131/166)	Primary and secondary care, social services, accommodation, adult education	Demographic and treatment data from patient record	The information given by the patients on their use of services was verified by referring to the service contacts recorded in their case notes. No quantitative data reported on the outcome.
McCrone et al., 2009	The REACT Study: Cost-Effectiveness Analysis of Assertive Community Treatment in North London; (N=251)	Patient interview; (166/251)	Primary and secondary care, social services, accommodation, informal care and criminal justice	Patient case notes	Case notes on inpatient stays and contacts with mental health workers used in preference to responses from patients.

Figure 1: Methods of resource-use measurement in the UK NHS

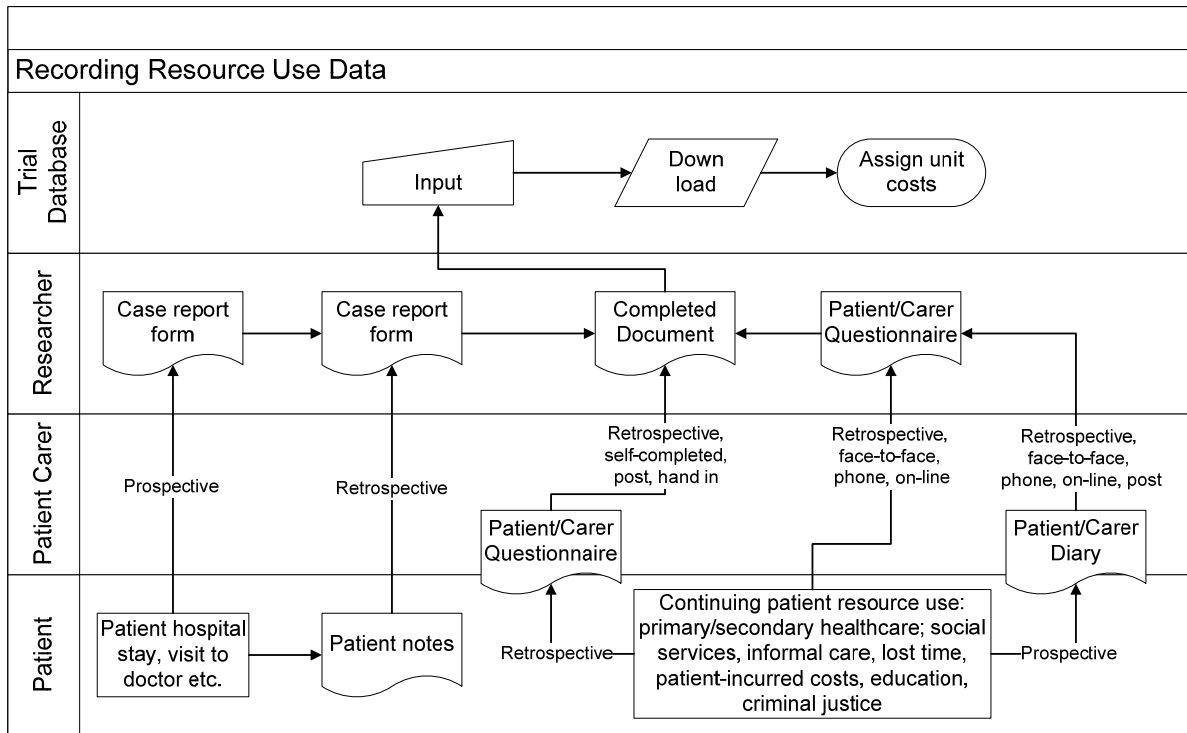
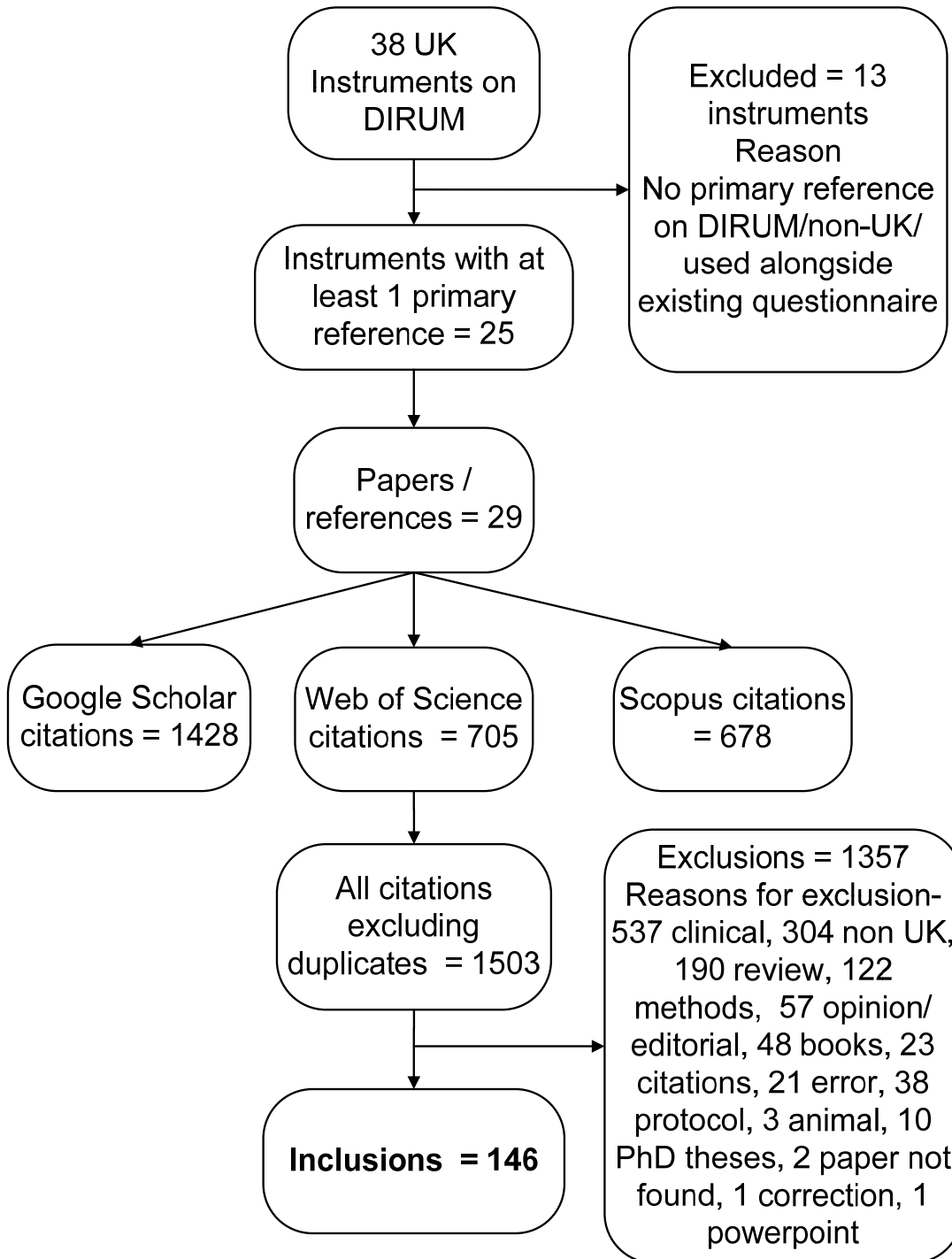


Figure 2: Flow diagram of study selection and inclusion



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# **I. SERVICES**



# **1. Services for older people**

- 1.1 Private sector nursing homes for older people
- 1.2 Private sector residential care for older people
- 1.3 Local authority residential care for older people
- 1.4 Local authority day care for older people
- 1.5 Extra-care housing for older people
- 1.6 Dementia memory service



## 1.1 Private sector nursing homes for older people

Using PSS EX1 2013/14<sup>1</sup> returns updated by the PSS pay & prices inflator, the median cost per person for supporting older people in a non-local authority nursing care home was £524 per week, with an interquartile range of £479 to £573. The mean cost was £535 per week. The standard NHS nursing care contribution is £110.89, and the higher-level NHS nursing care contribution is £151.10.<sup>2</sup> When we add the standard NHS nursing care contribution to PSS expenditure, the total expected median cost is £617 and the mean cost is £621.

Costs and unit estimation	2014/2015 value	Notes
A. Fees	£821 per week	The direct unit cost of private sector nursing homes is assumed to be the fee. Where a market is fairly competitive, such as that for private sector nursing homes, it is reasonable to assume that the fee will approximate the societal cost of the service. <sup>3</sup> A weighted average fee for England reflecting the distribution of single and shared rooms was taken from the Laing & Buisson market survey. <sup>4</sup>  Care home fees have been split into their component parts by Laing & Buisson (2013). <sup>5</sup> For nursing care for frail elderly people, total fees comprise care costs (45%), accommodation costs (20%), ancillary costs (27%) and operator's profit (8%).
External services B. Community nursing C. GP services D. Other external services		No current studies indicate how external services are used by nursing home residents. See previous editions of this volume for sources of information.
E. Personal living expenses	£24.40 per week	The Department for Work and Pensions (DWP) personal allowance for people in residential care or a nursing home is £24.40. <sup>2</sup> This has been used as a proxy for personal consumption.
Short-term care		No current information is available on whether residents in short-term care are less costly than those who live full-time in a nursing home. See previous editions of this volume for sources of information.
Dependency		No current information is available on the relationship of dependency with cost. See previous editions of this volume for sources of information.
Occupancy	89.6 per cent	The occupancy level in England for-profit and not-for-profit homes was 89.6 per cent in 2014. <sup>4</sup>
London multiplier	1.05 x A	Fees in London nursing homes were 5 per cent higher than the national average. <sup>4</sup>
<b>Unit costs available 2014/2015</b>		
£821 establishment cost per permanent resident week (A); £845 establishment cost plus personal living expenses per permanent resident week (A and E).		

<sup>1</sup> Health & Social Care Information Centre (2015) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> PayingForCare (2015) Types of state and local authority support, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 8 October 2015].

<sup>3</sup> Kavanagh, S., Schneider, J., Knapp, M., Beecham, J. & Netten, A. (1992) *Elderly people with cognitive impairment: costing possible changes in the balance of care*, PSSRU Discussion Paper 817/2, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Laing & Buisson (2015) *Care of older people: UK market report 2014/2015*, Laing & Buisson, London.

<sup>5</sup> Laing & Buisson (2013) *Councils rely on a 'hidden tax' on older care home residents*, Laing & Buisson, London. <http://www.laingbuisson.co.uk/MediaCentre/PressReleases/CareofElderly201213PressRelease.aspx> [accessed 19 September 2014].

## 1.2 Private sector residential care for older people

Using PSS EX1 2013/14<sup>1</sup> returns updated by the PSS pay & prices inflator, the median cost per person for supporting older people in a residential care home provided by all non-local authority organisations was £488 per week, with a mean cost of £504 per week.

Costs and unit estimation	2014/2015 value	Notes
A. Fees	£595 per week	The direct unit cost of private care homes is assumed to be the fee. Where a market is fairly competitive, such as that for private sector residential homes, it is reasonable to assume that the fee will approximate the societal cost of the service. <sup>2</sup> A weighted average fee for England reflecting the distribution of single and shared rooms was taken from the Laing & Buisson market survey. <sup>3</sup>  Care home fees have been split into their component parts by Laing & Buisson (2013). <sup>4</sup> For residential care for the frail elderly, total fees comprise care costs (33%), accommodation costs (25.5%), ancillary costs (34.5%) and operator's profit (7%).
External service B. Community nursing C. GP services D. Other external services		No current studies indicate how external services are used by residential care home residents. See previous editions of this volume for sources of information.
E. Personal living expenses	£24.40 per week	The Department for Work and Pensions (DWP) personal allowance for people in residential care or a nursing home is £24.40. <sup>5</sup> This has been used as a proxy for personal consumption.
Short-term care		No current information is available on whether residents in short-term care are less costly than those who live full-time in a residential care home. See previous editions of this volume for sources of information.
Dependency		No current information is available on the relationship of dependency with cost. See previous editions of this volume for sources of information.
London multiplier	1.11 x A	Fees in London residential homes were 11 per cent higher than the national average. <sup>3</sup>
Occupancy	90.5 per cent	The occupancy level in England for-profit and not-for-profit homes was 90.5 per cent in 2014. <sup>3</sup>
<b>Unit costs available 2014/2015</b>		
£595 establishment cost per permanent resident week (A); £619 establishment cost plus personal living expenses per permanent resident week (A and E).		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Kavanagh, S., Schneider, J., Knapp, M., Beecham, J. & Netten, A. (1992) *Elderly people with cognitive impairment: costing possible changes in the balance of care*, PSSRU Discussion Paper 817/2, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>3</sup> Laing & Buisson (2015) *Care of older people: UK market report 2014/2015*, Laing & Buisson, London.

<sup>4</sup> Laing & Buisson (2013) *Councils rely on a 'hidden tax' on older care home residents*, Laing & Buisson, London.  
<http://www.laingbuisson.co.uk/MediaCentre/PressReleases/CareofElderly201213PressRelease.aspx> [accessed 3 October 2014].

<sup>5</sup> PayingForCare (2015) Types of state and local authority support, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 8 October 2015].



### 1.3 Local authority residential care for older people

This table uses the Personal Social Services Expenditure return (PSS EX1) for 2013/14<sup>1</sup> for local authority expenditure, which has been updated using the PSS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
Capital costs (A, B & C)		
A. Buildings and oncosts	£93 per week	Based on the new-build and land requirements for local authority residential care establishments. These allow for 57.3 square metres per person. <sup>2</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
B. Land	£18.40 per week	Land costs researched for PSSRU by the Valuation Office Agency. <sup>3</sup> The cost of land has been annuitised at 3.5 per cent over 60 years.
C. Other capital costs		Capital costs not relating to buildings and oncosts are included in the local authority expenditure costs so no additional cost has been added for items such as equipment and durables.
D. Total local authority expenditure (minus capital)	£999 per week	The median estimate is taken from PSS EX1 2013/14 updated using the PSS pay & prices Index. <sup>1</sup> Capital charges relating to buildings and oncosts have been deducted. The mean cost is £889 per week (interquartile range £789-£1,395).
E. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 total expenditure figures so no additional overheads have been added.
External services		
F. Community nursing		
G. GP services		
H. Other external services		No current studies indicate how external services are used by residential care home residents. See previous editions of this volume for sources of information.
I. Personal living expenses	£24.40 per week	The Department for Work and Pensions (DWP) personal allowance for people in residential care or a nursing home is £24.40. <sup>4</sup> This has been used as a proxy for personal consumption.
Use of facility by client	52.18 weeks per year	
Occupancy	89 per cent	Based on information reported by Laing & Buisson. <sup>5</sup>
Short-term care		No current information is available on whether residents in short-term care are less costly than those who live full-time in a residential care home. See previous editions of this volume for sources of information.
Dependency		No current information is available on the relationship of dependency with cost. See previous editions of this volume for sources of information.
London multiplier	1.32 x (D)	Based on PSS EX1 2013/14 data. <sup>1</sup>
<b>Unit costs available 2014/2015</b>		
£1,110 establishment cost per permanent resident week (includes A to E); £1,134 establishment cost plus personal living expenses per permanent resident week (includes A to D and I).		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>3</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>4</sup> PayingForCare (2015) Types of state and local authority support, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 8 October 2015].

<sup>5</sup> Laing & Buisson (2010) *Councils set to shunt social care costs to the NHS and service users as cuts take effect*, Laing & Buisson, <http://www.laingbuisson.co.uk/LinkClick.aspx?fileticket=7NqbsCOgKA%3D&tabid=558&mid=1888> [accessed 10 October 2014].

## 1.4 Local authority day care for older people

This table uses data from the Personal Social Services Expenditure return (PSS EX1) for 2013/14<sup>1</sup>, which has been updated using the PSS pay & prices inflator. The median and mean cost was £137 per client week (including capital costs). These data do not report on the number of sessions clients attended each week.

To determine the best unit of activity, we have submitted a Freedom of Information request to ask local authorities the duration of a 'unit of activity' and to provide approximate guidance on how many times a week clients attend.

Based on information provided by ten local authorities,<sup>2</sup> we have calculated an average cost per client attendance and also a cost per client hour. We have then used this information to calculate the cost of a client session lasting 3.5 hours, which is a typical standard unit of day care for most local authorities responding to our information request.

Costs and unit estimation	2014/2015 value	Notes
Capital costs (A, B & C)		
A. Buildings and oncosts	£5.60 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). <sup>3</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. Land costs researched for PSSRU by the Valuation Office Agency. <sup>4</sup> These allow for 33.4 square metres per person. The cost of land has been annuitised at 3.5 per cent over 60 years.
B. Land	£1.40 per client attendance	
C. Other capital costs		Capital costs not relating to buildings and oncosts are included in the local authority expenditure figures so no additional cost has been added for items such as equipment and durables.
D. Total local authority expenditure (minus capital)	£52 per client attendance	The median and mean cost per week is taken from PSS EX1 2013/14 and has been updated using the PSS pay & prices index. Based on PSSRU research, <sup>2</sup> older people attend on average 2.5 times per week (4.6 hours in duration) resulting in a median and mean cost per day care attendance of £52 and £57. Capital charges relating to buildings have been deducted.
E. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 total expenditure figures so no additional overheads have been added.
Use of facility by client		Assumes clients attend 2.5 times per week. <sup>2</sup>
Occupancy		
London multiplier	1.34 x A 1.88 x B 1.32 x D	Relative London costs are drawn from the same source as the base data for each cost element.
<b>Unit costs available 2014/2015</b>		
£59 per client attendance (includes A to D); £13 per client hour; £45 per client session lasting 3.5 hours.		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Based on research carried out by PSSRU in 2014.

<sup>3</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

## 1.5 Extra-care housing for older people

This is based on an evaluation of extra-care housing which followed the development of 19 new-build extra-care housing schemes located across England.<sup>1</sup>

Extra-care housing is primarily for older people, and the accommodation is (almost always) self-contained. Care can be delivered flexibly, usually by a team of staff on the premises for 24 hours a day. Domestic care and communal facilities are available. For more information, see the Bäumker & Netten article in the 2011 edition of this report, <http://www.pssru.ac.uk/project-pages/unit-costs/2011/index.php>.

All costs have been updated from 2008 to current prices using the appropriate inflators. The mean cost of living in extra-care housing was estimated at £455 per resident per week, with a standard deviation of £189 and a range of £184 to £1,302. The median cost was £380 per resident per week.

Costs and unit estimation	2014/2015 value	Notes
A. Capital costs		
Building and land costs	£113 per resident per week	Based on detailed valuations for the buildings and the land provided by the housing associations operating the extra-care schemes. For properties constructed before 2008, capital values were obtained from the BCIS, and adjusted using the All-In Tender Price Index. Includes the cost of land, works including site development and landscaping, equipment and furniture, professional fees (architects, design and surveyors' fees). <sup>1</sup>
B. Housing management and support costs		
Housing management	£55 per resident per week	Information taken from the annual income and expenditure accounts for each individual scheme after at least one full operational year. Average running costs were calculated by dividing the adjusted total running cost by the number of units in the scheme. The cost includes management staff costs (salary and oncosts including national insurance and pension contributions, and office supplies), property maintenance and repairs, grounds maintenance and landscaping, cleaning of communal areas, utilities, and appropriate central establishment costs (excluding capital financing).
Support costs	£10 per resident per week	
C. Personal living expenses	£99 per resident per week	As significant variability existed in the approaches to meal provision in the schemes, items related to catering costs were removed from the financial accounts, and the cost of food and other consumables was estimated using the Family Expenditure Survey (2013), table 24. <sup>2</sup> and updated using the Retail Price Index.
D. Health and social service costs	.	Estimates of health and social service costs were made combining resource use information reported by 465 residents six months after admission, with the appropriate unit costs taken from the respective local authorities or, where appropriate, from national sources. <sup>3</sup>
Health services	£71 per resident per week	Health care estimates ranged from £0-£720.
Social services	£107 per resident week	Social care estimates ranged from £0-£703
Use of facility by client	52.18 weeks per year	
<b>Unit costs available 2014/2015</b>		
£179 accommodation, housing management and support costs; £278 accommodation, housing management, support and living expenses; £455 total cost (A to D).		

<sup>1</sup> Darton, R., Bäumker, T., Callaghan, L. & Netten, A. (2011) *The PSSRU evaluation of the extra-care housing initiative: Technical Report*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>2</sup> Office for National Statistics (2013) *Family spending 2013 edition*, Office for National Statistics, London, available at [http://data.gov.uk/dataset/family\\_spending](http://data.gov.uk/dataset/family_spending) [accessed 10 October 2014].

<sup>3</sup> Curtis, L. (2008) *Unit Costs of Health and Social Care 2008*, Personal Social Services Research Unit, University of Kent, Canterbury.

## 1.6 Dementia memory service

Memory assessment services support the early identification and care of people with dementia. They offer a comprehensive assessment of an individual's current memory abilities and attempt to determine whether they have experienced greater memory impairment than would be expected for their age. Memory assessment services are typically provided in community centres by community mental health teams, but also are available in psychiatric and general hospitals. Some commissioners consider locating services (or aspects of such services) in primary care, where they are provided by practitioners with a special interest in dementia.<sup>1</sup> The goal is to help people, from the first sign of memory problems, to maintain their health and their independence. See *Commissioning a memory assessment service for the early identification and care of people with dementia* for more information on this service.<sup>2</sup>

Information for this service has been provided by the South London and Maudsley (SLAM) NHS Foundation Trust. Based in the Heavers Resource Centre, Croydon, the service provides early assessment, treatment and care for people aged 65 and over who have memory problems that may be associated with dementia. The initial assessment is provided in the client's own home wherever possible. The average annual cost per client is £996. Two further dementia memory services provided by SLAM (but not providing assessments) had average annual costs per client of £1,007 (Lambeth and Southwark) and £761 (Lewisham). The costs of another London dementia memory service can be found in <http://www.londonhp.nhs.uk/wp-content/uploads/2011/03/Dementia-Services-Guide.pdf>.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£445,366 per year	Based on mean salaries for Agenda for Change (AfC) bands. <sup>3</sup> Weighted to reflect the input of 1 WTE associate specialist, 0.40 WTE consultant, 2 WTE occupational therapists (bands 6 & 7), 2.8 WTE psychologists (bands 5, 7 & 8) and nurses (band 6 & two nurses on band 7).
B. Salary oncosts	£113,711 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Overheads Management and administration	£110,059 per year	Provided by the South London and Maudsley NHS Foundation Trust and based on median salaries for Agenda for Change (AfC) administrative and clerical grades. <sup>3</sup> Includes 3 FTE administrative and clerical assistants (bands 3, 4 & 5) and management provided by 0.2 WTE psychologist (band 8).
Non-staff	£181,458 per year	Provided by the South London and Maudsley NHS Foundation Trust. This includes expenditure to the provider for travel/transport and telephone, education and training, office supplies and services (clinical and general), as well as utilities such as water, gas and electricity
D. Capital overheads	£3,776 per year	Based on the new-build and land requirements of 4 NHS offices and a large open-plan area for shared use. <sup>4,5</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	50.4 weeks per year 40 hours per week	Unit costs are based on 2,016 hours per year: 260 working days (8 hours per day) minus bank holidays.
Caseload	708 clients per year	Provided by the South London and Maudsley NHS Foundation Trust.
<b>Unit costs available 2014/2015</b>		
Total annual cost £854,370; total cost per hour £424; cost per client £996.		

<sup>1</sup> Department of Health (2011) *Commissioning services for people with dementia*, [http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH\\_127381](http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_127381) [accessed 9 October 2014].

<sup>2</sup> National Institute for Health and Clinical Excellence (NICE) (2007) *Commissioning a memory assessment service for the early identification and care of people with dementia*, <http://dementianews.wordpress.com/2011/05/12/nice-commissioning-guide-memory-assessment-services/> [accessed 9 October 2014].

<sup>3</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015*, Health & Social Care Information Centre, Leeds.

<sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

## **2. Services for people with mental health problems**

- 2.1 NHS reference costs for mental health services
- 2.2 Local authority care homes for people with mental health problems
- 2.3 Private sector care homes for people with mental health problems
- 2.4 Local authority social services day care for people with mental health problems
- 2.5 Private sector day care for people with mental health problems
- 2.6 Behavioural activation delivered by the non-specialist
- 2.7 Individual placement and support
- 2.8 Deprivation of liberty safeguards in England: implementation costs
- 2.9 Mindfulness-based cognitive therapy: group-based intervention
- 2.10 Interventions for mental health promotion and mental illness prevention



## 2.1 NHS reference costs for mental health services

We have drawn on the *NHS Trust and Primary Care Trusts combined* to report on the NHS reference costs of selected mental health services.<sup>1</sup> All costs have been updated to 2014/15 prices using the HCHS pay & prices inflators. Only services with more than 10 data submissions have been included, but weighted costs have been provided for service groups which do include services with fewer than 10 submissions. Children's services have only been included in the group averages, and the costs of selected mental health care services for children can be found in table 6.1.

As the first step towards the introduction of a national tariff for mental health services, the Department of Health mandated the use of the mental health care clusters as the currencies for adult mental health services for working-age adults and older people. The care clusters cover most services for working-age adults and older people, and replace previous reference cost currencies for adult and elderly mental health services. They also replace some currencies previously provided for specialist mental health services or mental health specialist teams. The mental health care cluster for working-age adults and older people focuses on the characteristics and needs of a service user, rather than the individual interventions they receive or their diagnosis. See *NHS reference costs guidance* for 2013-2014<sup>1</sup> for more information on care clusters and the method used to allocate drugs to services.

Each reported unit cost includes:

- (a) direct costs – which can be easily identified with a particular activity (e.g. consultants and nurses)
- (b) indirect costs – which cannot be directly attributed to an activity but can usually be shared among a number of activities (e.g. laundry and lighting)
- (c) overheads – which relate to the overall running of the organisation (e.g. finance and human resources).

	Mean £	Lower quartile £	Upper quartile £
<b>MENTAL HEALTH SERVICES</b>			
Mental health care clusters (per bed day)	£223	NA	NA
Mental health care clusters (initial assessment)	£284	£190	£342
<b>All drug and alcohol services (adults and children)</b>	<b>£128</b>	<b>£94</b>	<b>£148</b>
Alcohol services – admitted (per bed day)	£341	£320	£357
Alcohol services – community (per care contact)	£122	£115	£137
Alcohol services – outpatient (per attendance, consultant-led)	£130		
Drug services – admitted (per bed day)	£433	£336	£539
Drug services – community (per care contact)	£124	£81	£1584
Drug services – outpatient (per attendance)	£130	£79	£113
<b>Mental health specialist teams (per care contact)</b>	<b>£118</b>	<b>£831</b>	<b>£136</b>
A&E mental health liaison services	£206	£155	£234
Criminal justice liaison services	£197	£108	£295
Improving Access to Psychological Therapies (IAPT), adult and elderly	£105	£86	£118
Prison health adult and elderly	£82	£16	£121
Forensic community, adult and elderly	£235	£118	£278
<b>Secure mental health services (per bed day)</b>	<b>£521</b>	<b>£465</b>	<b>£583</b>
Low-level secure services	£395	£3372	£460
Medium-level secure services	£497	£454	£555
<b>Specialist mental health services (per bed day)</b>	<b>£353</b>	<b>£281</b>	<b>£394</b>
Eating disorder (adults) – admitted	£435	£363	£479
Mother and baby units – admitted	£684	£610	£746

<sup>1</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

## 2.2 Local authority care homes for people with mental health problems

This table uses the Personal Social Services Expenditure return (PSS EX1)<sup>1</sup> for expenditure which has been updated using the PSS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
Capital costs		
A. Buildings and oncosts	£105 per resident week	Based on the new-build and land requirements for homes for people with mental health problems. <sup>2</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
B. Total local authority expenditure (minus capital)	£801 per resident week	The median revenue weekly cost estimate (£801) for supporting adults in own-provision residential care (includes full-cost paying and preserved-rights residents). Capital costs relating to buildings and land have been deducted. The mean cost per client per week is reported as £765. Councils reporting costs of over £2,000 per client week have not been included in this estimate.
C. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 expenditure figures so no additional overheads have been added.
Other costs		
D. Personal living expenses	£24.40 per week	The DWP personal allowance for people in residential care or a nursing home is £24.40. <sup>3</sup> This has been used as a proxy for personal consumption.
E. External services		No information is available.
Use of facility by client	365.25 days per year	
Occupancy	100 per cent	No statistics available, therefore 100 per cent occupancy assumed.
London multiplier	1.05 x (A to B)	Relative London costs are drawn from the same source as the base data for each cost element.
<b>Unit costs available 2014/2015</b>		
£906 per resident week establishment costs (includes A to B); £930 per resident week (includes A to D).		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>3</sup> PayingForCare (2015) Types of state and local authority support, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 8 October 2015].



## 2.3 Voluntary and private sector care homes for people with mental health problems

This table uses the Personal Social Services Expenditure return (PSS EX1)<sup>1</sup> for 2013/14 for expenditure costs, which have been updated using the PSS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
Capital costs		
A. Buildings and oncosts	£105 per resident week	Based on the new-build and land requirements for homes for people with mental health problems. <sup>2</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
B. Total expenditure (minus capital)	£631 per resident week	The median cost estimate (£633) for supporting adults in residential care provided by all non-local authority organisations (includes full-cost paying and preserved-rights residents). The mean cost per client per week is reported as £647. Capital charges relating to building and oncosts have been deducted. <sup>1</sup> Councils reporting costs of over £2,000 per client week have not been included in this estimate.
C. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 expenditure figures so no additional overheads have been added.
Other costs		
D. Personal living expenses	£24.40 per week	The DWP allowance is used as a proxy for personal consumption. <sup>3</sup>
E. Service use		No information available on service use.
Use of facility by client	365.25 days per year	
Occupancy	100 per cent	No statistics available, therefore 100 per cent occupancy assumed.
London multiplier	1.15 x (A to B)	Relative London costs are drawn from the same source as the base data for each cost element.
<b>Unit costs available 2014/2015</b>		
£736 per resident week establishment costs (includes A to B); £760 per resident week (includes A to D).		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>3</sup> PayingForCare (2015) Types of state and local authority support, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 8 October 2015].

## 2.4 Local authority social services day care for people with mental health problems

This table uses the Personal Social Services Expenditure return (PSS EX1)<sup>1</sup> for 2013/14 for local authority expenditure costs, which have been uprated using the PSS pay & prices inflator. Councils reporting costs of more than £500 per client week have been excluded from these estimates. The median cost was £104 and mean cost was £107 per client week (including capital costs). These data do not include the number of sessions clients attended each week.

To determine the best unit of activity, we submitted a Freedom of Information request to ask local authorities the duration of a 'unit of activity' and to provide approximate guidance on how many units a week clients attend.

Based on information provided by ten local authorities,<sup>2</sup> we have calculated an average cost per client attendance and also a cost per client hour. We have then used this information to calculate the cost of a client session lasting 3.5 hours, which is a typical standard unit of day care for most local authorities responding to our information request.

For day care for people with mental health problems, the average number of sessions attended per week was 3, which is also the number of sessions recommended as part of a total recovery programme.<sup>3</sup>

Costs and unit estimation	2014/2015 value	Notes
Capital costs		
A. Buildings and oncosts	£5.60 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
B. Land	£1.40 per client attendance	Based on research carried out by the Valuation Office Agency. <sup>4</sup> These allow for 33.4 square metres per person. <sup>5</sup> The cost of land has been annuitised at 3.5 per cent over 60 years.
C. Other capital		Capital costs not relating to buildings and oncosts are included in the local authority expenditure figures, so no additional cost has been added for other items such as equipment and durables.
D. Total local authority expenditure (minus capital)	£25 per client attendance	The median cost per client week has been taken from PSS EX1 2013/14 <sup>1</sup> and uprated using the PSS pay & prices index. Assuming people with mental health problems attend on average 3 times per week (4.1 hours in duration), the median and mean cost per day care attendance is £25 and £19 respectively. Capital charges relating to buildings have been deducted.
E. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 expenditure figures so no additional overheads have been added.
Use of facility by client		Assumes clients attend 3 times per week. <sup>2</sup>
London multiplier	1.07 x A 1.88 x B 1.09 x D	Relative London costs are drawn from the same source as the base data.
<b>Unit costs available 2014/2015</b>		
£32 per client attendance (includes A to D); £8.00 per client hour; £28 per client session lasting 3.5 hours.		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Based on research carried out by PSSRU in 2014.

<sup>3</sup> Salford City Council (2011) *Mental health*, Salford City Council. <http://www.salford.gov.uk/mentalhealth.htm> [accessed 9 October 2014].

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

## 2.5 Private and voluntary sector day care for people with mental health problems

This table uses the Personal Social Services Expenditure return (PSS EX1)<sup>1</sup> for 2013/14 for expenditure costs, which have been uprated using the PSS pay & prices inflator. The median cost was £99 per client week and the mean cost was £86 (including capital costs).

To determine the best unit of activity, this year we have submitted a Freedom of Information request to ask local authorities the duration of a 'unit of activity' and to provide approximate guidance on how many times a week clients attend.

Based on information provided by ten local authorities,<sup>2</sup> we have calculated an average cost per client attendance and also a cost per client hour. We have then used this information to calculate the cost of a client session lasting 3.5 hours, which is a typical standard unit of day care for most local authorities responding to our information request.

For day care for people with mental health problems, the average number of sessions attended per week was 3, which is also the number of sessions recommended as part of a total recovery programme.<sup>3</sup>

Costs and unit estimation	2014/2015 value	Notes
Capital costs		
A. Buildings and oncosts	£5.60 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
B. Land	£1.40 per client attendance	Based on research carried out by the Valuation Office Agency. <sup>4</sup> These allow for 33.4 square metres per person. <sup>5</sup> The cost of land has been annuitised at 3.5 per cent over 60 years.
C. Other capital		Capital costs not relating to buildings are included in the local authority expenditure figures, so no additional cost has been added for other items such as equipment and durables.
D. Total local authority expenditure (minus capital)	£34 per client attendance	The median cost per client week has been taken from PSS EX1 2013/14 <sup>1</sup> and uprated using the PSS pay & prices index. Assuming people with mental health problems attend on average 3 times per week (4.1 hours in duration), <sup>2</sup> the median cost per day care attendance per day is £34 and the mean cost per day is £30. Capital charges relating to buildings have been deducted.
E. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 expenditure figures so no additional overheads have been added.
Use of facility by client		Assumes clients attend 3 times per week. <sup>2</sup>
Occupancy		
London multiplier	1.07 x A 1.88 x B 1.05 x D	Relative London costs are drawn from the same source as the base data.
<b>Unit costs available 2014/2015</b>		
£41 per client attendance (includes A to D); £10.10 per client hour; £35 per client session lasting 3.5 hours.		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds

<sup>2</sup> Based on research carried out by PSSRU in 2014.

<sup>3</sup> Salford City Council (2011) *Mental health*, Salford City Council. <http://www.salford.gov.uk/mentalhealth.htm> [accessed 9 October 2014].

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

## 2.6 Behavioural activation delivered by a non-specialist

Behavioural activation provides a simple, effective treatment for depression. This group-based intervention is delivered over 12 one-hour sessions by two mental health nurses on post-qualification pay bands with no previous formal therapy training. They received 5 days training in behavioural activation and 1 hour clinical supervision fortnightly from the principal investigator.<sup>1</sup> Sessions are usually attended by 10 people. Costs are based on Agenda for Change band 7, the grade normally used for this service. However, if we base the costs on Agenda for Change band 5, the cost per session per person is £10 (£12 with qualifications) and for 12 sessions £125 (£149 with qualifications).<sup>1</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£76,664 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 7 of the July 2013-June 2014 NHS staff earnings estimates. <sup>2</sup>
B. Salary oncosts	£19,117 per year	Employer's national insurance is included plus 14 per cent of salary for contribution to superannuation.
C. Qualifications	£21,237 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>4</sup> This is for 2 mental health nurses.
D. Training for behavioural activation	£649 per year	Training costs were calculated by facilitators' hourly rate for the duration of the training (35 hours) divided by the number of participants attending (n=10) (£220 per therapist). Supervision costs were based on 1-hour fortnightly contact for 40 weeks (£2,963 per therapist). 12 session behavioural protocol (£228 per therapist). These costs have been annuitised over the working life of the nurse.
E. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£23,466 per year	Management and other non-care staff costs were 24.5 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£36,588 per year	Non-staff costs were 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
F. Capital overheads	£7,435 per year	Based on the new-build and land requirements of NHS facilities (2 offices) but adjusted to reflect shared use of both treatment and non-treatment space. <sup>5,6</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42 weeks per year 37.5 hours per week	Unit costs are based on 1,575 hours per year: 210 working days minus sickness absence and training/study days as reported for all NHS staff groups. <sup>7</sup>
Ratio of direct to indirect time		
Face-to-face contacts	1:0.89	Based on the National Child and Adolescent Mental Health Service Mapping data and returns from over 500 grade G nurses, 45 per cent of time was spent on direct clinical work, 13 per cent on consultation and liaison, 8 per cent on training and education, 4 per cent on research and evaluation, 23 per cent on administration and management, 7 per cent on other work. Seventeen per cent was spent on tier 1 work and this was assumed to be spread across all types of activity for the purpose of the analysis.
Patient-related work	1:0.33	
Duration of contact		One-hour sessions included direct treatment time of 40-50 minutes and administration.
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
Cost per session per person £15 (£17); Cost per 12 sessions per person £183 (£207)		

<sup>1</sup> Ekers, D., Godfrey, C., Gilbody, S., Parrott, S., Richards, D., Hammond, D. & Hayes, A. (2011) Cost utility of behavioural activation delivered by the non-specialist, *British Journal of Psychology*, 199, 510-511, doi:10.1192/bjp.bp.110.090266

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>6</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>7</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London, <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

## 2.7 Individual placement and support

Provided by Justine Schneider and Sheila Durie

### Description of Individual Placement and Support (IPS)

People with severe mental health problems face particular barriers to employment, both in relation to their impairments<sup>1</sup> and as a result of stigma and prejudice.<sup>2</sup> To overcome these, an approach known as Individual Placement and Support (IPS) has been developed<sup>3</sup> and has strong evidence to support it.<sup>4,5</sup> There are 25 criteria for 'fidelity' of IPS to the standards of best practice. The management ratio and the caseload sizes used here are within the bounds of 'good to exemplary' scores; most of the other fidelity criteria have little or no direct impact on service costs. Caseload capacity is determined both by size and by turnover. There is evidence from the US that each place on a caseload serves about 1.8 clients over a year, so a caseload of 20 has a throughput of 38 individuals per year on average. Although caseload size is used here to estimate a range of unit costs for IPS, turnover has not been factored in because it is likely to vary according to the skills of the post-holder.

### Necessary conditions for IPS to operate

Successful operation of IPS requires work-oriented mental health services, through cross-sector engagement and partnership working. The specialist skills of IPS staff and managers provide direct interventions with service users and employers to place people in work and support them as required. Responsibility for the maintenance of work-oriented mental health is shared more widely across professionals in the field.

### Variations in the costs presented

The IPS approach requires employment specialists to be integrated into the mental health team. However, there is a wide range of levels at which the specialists are currently appointed. Therefore, in table 1 we offer costs for four grades of staff, two with professional qualifications (e.g. psychology, occupational therapy) and two with no particular qualifications. These different levels of pay, combined with a range of caseload sizes, yield a range of unit costs, as shown in table 2. To the salary costs are added the usual overheads, plus a cost for a team leader, who according to IPS guidance should not supervise more than 10 staff and should be available to provide practical support. A small marketing budget is included here, but annual costs for training were not available. We were advised by experienced IPS services that no other costs are commonly incurred. The unit cost per year shown in table 2 ranges from £1,972 to £7,551, depending on caseload size and salary level of the worker. This does not take account of turnover in clients, who are unlikely to remain in the service for a full year.

### Comparative costs of day care

Unit costs of IPS may be compared to the costs of private and voluntary sector day care. In schema 2.5 of this volume, the cost of private and voluntary sector day care was £41 per session outside of London. Table 3 shows the unit cost per day for the four grades of staff, combined with the same range of caseload sizes as in table 2. The unit costs per day shown in table 3 range from £47 to £180, depending on caseload size and salary level of the worker. Whereas day care is often allocated in perpetuity, IPS is geared to finding a person paid work, and therefore the amount used by a given individual is likely to decrease over time. Moreover, there is some evidence that those individuals who attain work gain self-esteem<sup>6</sup> and reduce their reliance on mental health services, though not necessarily on social security benefits.<sup>7</sup>

<sup>1</sup> McGurk, S. & Mueser, K. (2004) Cognitive functioning, symptoms and work in supported employment; a review and heuristic model, *Schizophrenia Research*, 70, 147-174.

<sup>2</sup> Thornicroft, G. (2006) *Shunned: discrimination against people with mental illness*, Oxford University Press, Oxford.

<sup>3</sup> Department of Health (2006) *Vocational services for people with severe mental health problems: commissioning guidance*, CSIP for Department of Work and Pensions and Department of Health.

<sup>4</sup> Bond, G.R., Drake, R.E. & Becker, D.R. (2008) An update on randomized controlled trials of evidence based supported employment, *Psychiatric Rehabilitation Journal*, 31, 280-289.

<sup>5</sup> Burns, T., Catty, J., Becker, T., Drake, R., Fioritti, A., Knapp, M., Lauber, C., Rossler, W., Tomov, T., van Busschbach, J., White, S. & Wiersma, D. (2007) The effectiveness of supported employment for people with severe mental illness: a randomised controlled trial, *The Lancet*, 370, 1146-1152.

<sup>6</sup> Sesami Research and Practice Partnership (2007) The SESAMI evaluation of employment support in the UK: background and baseline data, *Journal of Mental Health*, 16, 3, 375-388.

<sup>7</sup> Schneider, J., Boyce, M., Johnson, R., Secker, J., Grove, B. & Floyd, M. (2009) Impact of supported employment on service costs and income of people, *Journal of Mental Health*, 18, 6, 533-542.

**Table 1 Cost components**

	<b>Unqualified</b>	<b>Unqualified</b>	<b>Qualified</b>	<b>Qualified</b>
	<b>Band 3</b>	<b>Band 4</b>	<b>Band 5</b>	<b>Band 6</b>
Salary	£18,459	£21,248	£23,284	£31,070
Salary oncosts	£4,034	£4,809	£5,375	£7,540
Overheads – staff	£5,511	£6,384	£7,021	£9,459
Overheads – other	£8,592	£9,954	£10,948	£14,749
Capital	£4,370	£4,370	£4,370	£4,370
Team leader	£7,216	£7,216	£7,216	£7,216
Marketing budget	£1,109	£1,109	£1,109	£1,109
<b>Total</b>	<b>£49,290</b>	<b>£55,089</b>	<b>£59,323</b>	<b>£75,512</b>

**Table 2 Unit costs per person per year**

	<b>Unqualified</b>	<b>Unqualified</b>	<b>Qualified</b>	<b>Qualified</b>
<b>Caseload size</b>	<b>Band 3</b>	<b>Band 4</b>	<b>Band 5</b>	<b>Band 6</b>
10 people	£4,929	£5,509	£5,932	£7,551
15 people	£3,286	£3,673	£3,955	£5,034
20 people	£2,465	£2,754	£2,966	£3,776
25 people	£1,972	£2,204	£2,373	£3,020

**Table 3 Unit costs per person per day**

	<b>Unqualified</b>	<b>Unqualified</b>	<b>Qualified</b>	<b>Qualified</b>
<b>Caseload size</b>	<b>Band 3</b>	<b>Band 4</b>	<b>Band 5</b>	<b>Band 6</b>
10 people	£117	£131	£141	£180
15 people	£78	£87	£94	£120
20 people	£59	£66	£71	£90
25 people	£47	£52	£56	£72

## 2.8 Deprivation of liberty safeguards in England: implementation costs

In 2009 the government provided additional funding of £10 million for local authorities and £2.2 million for the National Health Service (NHS) for the implementation of deprivation of liberty safeguards (DoLS). This amends a breach of the European Convention on Human Rights and provides for the lawful deprivation of liberty of those people who lack the capacity to consent to arrangements made for their care or treatment in either hospitals or care homes, but who need to be deprived of liberty in their own best interests, to protect them from harm.

In 2009, a study was carried out to estimate the costs likely to be incurred with the implementation of the DoLS in England, and data on resource utilisation were collected from professionals conducting the six formal assessments required.<sup>1</sup> These are: age assessment, mental health assessment, mental capacity assessment, best-interest assessment, eligibility assessment and no refusal assessment, the latter of which establishes whether authorisation of deprivation of liberty would conflict with other authorities (for example, power of attorney) for decision-making for that individual.

The 40 interviews included professionals conducting the six DoLS assessments, the secretarial staff in DoLS offices and the independent mental capacity advocates. Each professional provided the average time taken for an individual DoLS assessment or for combined assessments, when more than one of the six DoLS assessments were conducted together. Information on average travelling time and distance was also provided. Total assessment time for each individual (including travelling time) was multiplied by the unit cost for that professional and a travelling allowance.

The average cost for a single DoLS assessment across the five DoLS offices was £1,393. The standard deviation around the estimated cost of a single DoLS assessment was £416, and the 95 per cent confidence interval was £536 to £2,169. All costs have been updated to 2014/2015 prices using the appropriate inflators.

### Costs for a single deprivation of liberty safeguards (DoLS) assessment

All assessments include travel time	DoLS office 1	DoLS office 2	DoLS office 3	DoLS office 4	DoLS office 5	Average of the five offices
Assessments by mental health assessor	£496	£226	£578	£287	£247	£367
Assessments by best-interest assessor	£697	£419	£293	£1,020	£568	£600
Secretarial costs	£325	£182	£129	£586	£308	£306
Independent mental capacity advocates assessments	£112	£86	£61	£59	£73	£78
Court protection costs	£43	£43	£43	£43	£43	£43
<b>Total costs</b>	<b>£1,674</b>	<b>£956</b>	<b>£1,104</b>	<b>£1,994</b>	<b>£1,238</b>	<b>£1,393</b>

<sup>1</sup> Shah, A., Pennington, M., Heginbotham, C. & Donaldson, C. (2011) Deprivation of liberty safeguards in England: implementation costs, *British Journal of Psychiatry*, 199,232-238, doi:10.1192/bjp.bp.110.089474.

## 2.9 Mindfulness-based cognitive therapy – group-based intervention

Mindfulness-based cognitive therapy (MBCT) is a manualised skills training programme designed to enable patients to learn skills that prevent the recurrence of depression. It is derived from mindfulness-based stress reduction, a programme with proven efficacy in ameliorating distress in people suffering chronic disease.

To provide the unit costs of this service, we have drawn on information provided by Kuyken et al. (2008)<sup>1</sup> which was based on data from three mindfulness-based cognitive therapy therapists who took part in the study. There were 12 individuals in each group.

Costs and unit estimation	Unit cost 2014/2015	Notes
A. Wages/salary	£37,931 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 7 of the July 2013-June 2014 NHS staff earnings estimates. <sup>2</sup> See section V for further information on salaries.
B. Salary oncosts	£9,447 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications		No information available
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£11,608 per year	Management and other non-care staff costs were 24.5 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£18,098 per year	Non-staff costs were 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£4,370 per year	Based on the new-build requirements of NHS facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>3,4</sup>
Working time	42.4 weeks per year 37.5 hours per week	Unit costs are based on 1,590 hours per year: 225 working days minus sickness absence and training/study days as reported for all NHS staff groups. <sup>5</sup>
Face-to-face time	1:0.67	Based on data from the 3 MBCT therapists who took part in the study.
Length of sessions	2 hours	Therapy sessions lasted 2 hours with 12 people attending each session.
<b>Unit costs available 2014/2015</b>		
£51 per hour, £86 per hour of direct contact, £171 per session, £14 per service user.		

<sup>1</sup> Kuyken, W., Byford, S., Taylor, R.S., Watkins, E., Holden, E., White, K., Barrett, B., Byng, R., Evans, A Mullan, E. & Teasdale, J.D. (2008) Mindfulness-based cognitive therapy to prevent relapse in recurrent depression, *Journal of Consulting and Clinical Psychology*, 76, 966-978.

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>5</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits*, National Health Service, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.



## 2.10 Interventions for mental health promotion and mental illness prevention

Information has been drawn from Knapp et al. (2011)<sup>1</sup> and explores the economic case for mental health promotion and prevention, based on a detailed analysis of costs and benefits for 15 different interventions. All costs have been updated using the appropriate inflators.

The full report can be downloaded at:

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_126085/](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_126085/).

### Parenting interventions for the prevention of persistent conduct disorders

**Context:** Conduct disorders are the most common childhood psychiatric disorders, with a UK prevalence of 4.9 per cent for children aged 5-10 years. The condition leads to adulthood anti-social personality disorder in about 50 per cent of cases, and is associated with a wide range of adverse long-term outcomes, particularly delinquency and criminality. The costs to society are high, with average potential savings from early intervention previously estimated at £150,000 (2011 prices) per case.

**Intervention:** Parenting programmes can be targeted at parents of children with, or at risk of, developing conduct disorder, and are designed to improve parenting styles and parent-child relationships. Reviews have found parent training to have positive effects on children's behaviour, and that benefits remain one year later. Longer-term studies show sustained effects but lack control groups; cost-effectiveness data are limited, but in one trial, health and social services costs were found to reduce over time.

**Cost:** The median cost of an 8-12 week group-based parenting programme is estimated at £1,009 per family, while that of individual interventions is £2,202. Assuming 80 per cent of people receive group-based interventions and 20 per cent individual interventions, in line with NICE guidance, the average cost of the intervention can be estimated at £1,247 per family.

### School-based social and emotional learning programmes to prevent conduct problems in childhood.

**Context:** Conduct problems in childhood cover a range of oppositional or anti-social forms of behaviour, such as disobedience, lying, fighting and stealing, and are associated with a range of poor outcomes, including increased risk of criminal activity, fewer school qualifications, parenthood at a young age, unemployment, divorce or separation, substance abuse and psychiatric disorders, many of which lead to increased costs across several agencies.

**Intervention:** School-based Social and Emotional Learning (SEL) programmes help children and young people to recognise and manage emotions, and to set and achieve positive goals. International evidence shows that SEL participants demonstrate significantly improved social and emotional skills, attitudes, behaviour and academic performance.

**Cost:** The costs of a representative intervention, including teacher training, programme co-ordinator and materials, were estimated at £140 per child per year at current prices.

### School-based interventions to reduce bullying

**Context:** Being bullied at school has adverse effects on both psychological well-being and educational attainment. There is evidence from longitudinal data that this has a negative long-term impact on employability and earnings; on average, lifetime earnings of a victim of bullying are reduced by around £50,000. According to an Ofsted survey,<sup>2</sup> 39 per cent of children reported being bullied in the previous 12 months.

**Intervention:** Anti-bullying programmes show mixed results. One high-quality evaluation of a school-based anti-bullying intervention found a 21-22 per cent reduction in the proportion of children victimised.

**Cost:** Information is limited on the cost of anti-bullying programmes, but one study estimates this at £16 per pupil per year at current prices.

<sup>1</sup> Knapp, M., McDaid, D. & Parsonage, M. (2011) *Mental health promotion and mental illness prevention: the economic case*, Department of Health, London.

<sup>2</sup> Ofsted (2008) *Children on bullying*, Ofsted, <http://www.ofsted.gov.uk/resources/children-bullying> [accessed 9 October 2014].

### Early detection for psychosis

**Context:** It is estimated that each year in England more than 15,000 people exhibit early symptoms before the onset of full psychosis. Progression of the disease is associated with higher costs to public services (including health, social care and criminal justice), lost employment, and greatly diminished quality of life for the individual and their family.

**Intervention:** Early detection services aim to identify the early symptoms of psychosis, reduce the risk of transition to full psychosis, and shorten the duration of untreated psychosis for those who develop it. Such services include cognitive behavioural therapy, psychotropic medication, and contact with psychiatrists. This contrasts with treatment as usual which typically consists of GP and counsellor contacts.

**Cost:** One year of an early detection intervention has been estimated to cost £3,089 per patient, compared with £779 for standard care (2009 prices).

### Early intervention for psychosis

**Context:** Psychosis related to schizophrenia is associated with higher costs to public services (including health, social care and criminal justice), lost employment, and greatly diminished quality of life for the individual with the illness and their family.

**Intervention:** Early intervention teams aim to reduce relapse and readmission rates for patients who have suffered a first episode of psychosis, and to improve their chances of returning to employment, education or training, and more generally their future quality of life. This intervention involves a multidisciplinary team that could include a range of professionals (psychiatrists, psychologists, occupational therapists, community support workers, social workers and vocational workers).

**Cost:** The annual direct cost per patient of this type of service, plus other community psychiatric services and inpatient care, has been estimated at £11,921 at current prices. The first year of the early intervention team's input is estimated to cost £2,490 per patient.

### Screening and brief intervention in primary care for alcohol misuse

**Context:** It is estimated that 6.6 million adults in England currently consume alcohol at hazardous levels, and 2.3 million at harmful levels.

**Intervention:** An inexpensive intervention in primary care combines universal screening by GPs of all patients, followed by a 5-minute advice session for those who screen positive.

**Cost:** The total cost of the intervention averaged over all those screened was £18.40 at current prices.

### Workplace screening for depression and anxiety disorders

**Context:** Labour Force Survey data suggest that 11.4 million working days were lost in Britain in 2008/09 due to work-related stress, depression or anxiety. This equates to 27.3 days lost per affected worker.

**Intervention:** Workplace-based enhanced depression care consists of employees completing a screening questionnaire, followed by care management for those found to be suffering from, or at risk of developing, depression and/or anxiety disorders. Those at risk of depression or anxiety disorders are offered a course of cognitive behaviour therapy (CBT) delivered in six sessions over 12 weeks.

**Cost:** It is estimated that £33 covers the cost of facilitating the completion of the screening questionnaire, follow-up assessment to confirm depression, and care management costs. For those identified as being at risk, the authors estimated that the cost of six sessions of face-to-face CBT is £254.

### Promoting well-being in the workplace

**Context:** Deteriorating well-being in the workplace is potentially costly for businesses as it may increase absenteeism and presenteeism (lost productivity while at work), and in the longer term potentially leads to premature withdrawal from the labour market.

**Intervention:** There are a wide range of approaches: flexible working arrangements; career progression opportunities; ergonomics and environment; stress audits; and improved recognition of risk factors for poor mental health by line managers. A multi-component health promotion intervention consists of personalised health and well-being information

and advice; a health-risk appraisal questionnaire; access to a tailored health-improvement web portal; wellness literature, and seminars and workshops focused on identified wellness issues.

**Cost:** The cost of a multi-component intervention is estimated at £85 per employee per year.

### **Debt and mental health**

**Context:** Only about half of all people with debt problems seek advice, and without intervention almost two-thirds of people with unmanageable debt problems will still face such problems 12 months later. Research has demonstrated a link between debt and mental health. On average, the lost employment costs of each case of poor mental health are £12,472 per year, while the annual costs of health and social service use are £1,645.

**Intervention:** Current evidence suggests that there is potential for debt advice interventions to alleviate financial debt, and hence reduce mental health problems resulting from debt. For the general population, contact with face-to-face advice services is associated with a 56 per cent likelihood of debt becoming manageable, while telephone services achieve 47 per cent.

**Cost:** The costs of this type of intervention vary significantly, depending on whether it is through face-to-face, telephone or internet-based services. The Department for Business, Innovation and Skills suggests expenditure of £265 per client for face-face-debt advice; telephone and internet-based services are cheaper.

### **Population-level suicide awareness training and intervention**

**Context:** The economic impacts of suicide are profound, although comparatively few studies have sought to quantify these costs. This is in part because a proportion of individuals who survive suicide attempts are likely to make further attempts, in some cases fatal.

**Intervention:** There is evidence that suicide prevention education for GPs can have an impact as a population-level intervention to prevent suicide. With better identification of those at risk, individuals can receive cognitive behavioural therapy (CBT), followed by ongoing pharmaceutical and psychological support to help manage underlying depressive disorders.

**Cost:** The authors estimated that a course of CBT in the first year is around £436 per person. Further ongoing pharmaceutical and psychological therapy is estimated to cost £1,290 a year. The cost of suicide prevention training for GPs, based on the Applied Suicide Intervention Skills Training (ASIST) course, is £218.

### **Bridge safety measures for suicide prevention**

**Context:** Jumping from height accounts for around 3 per cent of completed suicides.

**Intervention and cost:** Following the installation of a safety barrier in 1998, at a cost of £324,382 at current prices, the number of suicides reduced from an average of 8.2 per year in the five years before the barrier, to 4 per year in the five years after it was installed.

### **Collaborative care for depression in individuals with Type II diabetes**

**Context:** Depression is commonly associated with chronic physical health problems. US data indicate that 13 per cent of all new cases of Type II diabetes will also have clinical depression. These patterns are important as evidence shows that co-morbid depression exacerbates the complications and adverse consequences of diabetes, in part because patients may more poorly manage their diabetes. This has substantial economic consequences.

**Intervention:** 'Collaborative care', including GP advice and care, the use of antidepressants and cognitive behavioural therapy (CBT) for some patients, can be delivered in a primary care setting to individuals with co-morbid diabetes.

**Cost:** It is estimated that the total cost of six months of collaborative care is £744, compared with £377 for usual care.

### **Tackling medically unexplained symptoms**

**Context:** Somatoform conditions present physical symptoms for which there is no identifiable physical cause. These medically unexplained symptoms are thought to be triggered or exacerbated by emotional factors, such as psychosocial stress, depression or anxiety. The financial costs to public services and society are considerable.

**Intervention:** Cognitive behavioural therapy (CBT) has been found to be an effective intervention for tackling somatoform conditions and their underlying psychological causes.

**Cost:** A course of CBT may last for 10 sessions at £98 per session. Costs associated with the need to raise the awareness of GPs to the potential role of CBT treatment for somatoform conditions, either through e-learning or face-to-face training.

### **Befriending of older adults**

**Context:** Befriending initiatives, often delivered by volunteers, provide an 'upstream' intervention that is potentially of value both to the person being befriended and the befriender.

**Intervention:** The intervention is not usually structured and nor does it have formally-defined goals. Instead, an informal, natural relationship develops between the participants, who will usually have been matched for interests and preferences. This relationship facilitates improved mental health, reduced loneliness and greater social inclusion.

**Cost:** The contact is generally for an hour per week or fortnight. The cost to public services of 12 hours of befriending contact is estimated at £90, based on the lower end of the cost range for befriending interventions.

## **3. Services for people who misuse drugs or alcohol**

3.1 Residential rehabilitation for people who misuse drugs or alcohol

3.2 Inpatient detoxification for people who misuse drugs or alcohol

3.3 Specialist prescribing

3.4 Alcohol health worker, Accident & Emergency Department



## Services for people who misuse drugs or alcohol

Using data from the NHS reference costs 2013/14,<sup>1</sup> the mean average cost for an outpatient attendance (adult) for alcohol services is estimated to be £61 and for drug services £105. The mean average cost for community contacts for alcohol services (adults) is estimated to be £122 and for drug services £124. Admitted patient stays for adults cost on average £341 for alcohol services and £433 for drug services. These costs have been updated using the Hospital and Community Health Services (HCHS) inflator.

Statistics published on Public Health England's website (<http://www.nta.nhs.uk/facts-prevalence.aspx>) provide the prevalence of people who misuse drugs or alcohol.

The information presented in schema 3.1 to 3.3 was provided by the National Treatment Agency<sup>2</sup> and present the unit costs of three treatment interventions: (a) residential rehabilitation, (b) inpatient detoxification and (c) specialist prescribing. These interventions are described fully in *Business Definition for Adult Drug Treatment Providers* (National Treatment Agency, 2010).<sup>3</sup>

National average costs for the interventions were calculated. These excluded instances where the provider data fell in the top and bottom 5 per cent of unit costs for service users in treatment **OR** days in treatment, and the top and bottom 10 per cent of unit costs for service users in treatment **AND** days in treatment.

<sup>1</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>2</sup> Personal communication with the National Treatment Agency, 2010.

<sup>3</sup> National Treatment Agency for Substance Misuse (2010) *NDTMS dataset G, definition, business definition for adult drug treatment providers*, <http://www.nta.nhs.uk/core-data-set.aspx/> [accessed 9 October 2014].

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### **3.1 Residential rehabilitation for people who misuse drugs or alcohol**

Residential rehabilitation consists of a range of treatment delivery models or programmes to address drug and alcohol misuse, including abstinence orientated drug interventions within the context of residential accommodation. Other examples include inpatient treatment for the pharmacological management of substance misuse, and therapeutic residential services designed to address adolescent substance misuse.

Information has been drawn from a sample of 34 residential rehabilitation programmes to produce a unit cost per resident week of £635 at 2014/2015 prices. The Gross Domestic Product (GDP) index has been used to uprate from 2007/08 prices, as suggested by the NTA. It was not possible to provide details of costs for this service due to the method of data collection.



### 3.2 Inpatient detoxification for people who misuse drugs or alcohol

An Inpatient Unit (IPU) provides care to service users with substance-related problems (medical, psychological or social) that are so severe that they require medical, psychiatric and psychological care. The key feature of an IPU is the provision of these services with 24-hour cover, seven days per week, from a multidisciplinary clinical team who have had specialist training in managing addictive behaviours.

Treatment in an inpatient setting may involve one or more of the following interventions: (a) assessment, (b) stabilisation and (c) assisted withdrawal (detoxification). A combination of all three may be provided, or one followed by another.

The three main settings for inpatient treatment are: (a) general hospital psychiatric units, (b) specialist drug misuse inpatient units in hospitals and (c) residential rehabilitation units (usually as a precursor to the rehabilitation programme). See *Business Definition for Adult Drug Treatment Providers*<sup>1</sup> for more detailed information on this intervention.

Based on information provided by the National Treatment Agency in 2010, the average cost for inpatient detoxification (NHS and voluntary organisations) is £152 per patient day, which is equivalent to £1,067 per patient week.

Costs and unit estimation	2014/2015 value	Notes
A. Direct pay	£88 per patient day	Salaries plus oncosts for care staff.
B. Direct overheads	£16 per patient day	Includes drugs, pharmacy and dispensing costs. Also includes other treatment materials, toxicology and drug testing, medical supplies, rent and rates, staff travel, training, service user travel costs, volunteer expenses, contingency management, office costs specifically attributed to the provision of the service, non-pay administration (for example, telephones and information technology).
C. Indirect costs and overheads	£48 per patient day	Includes capital charges, expenditure on refurbishment, property and buildings, housekeeping, catering, portage, transport, waste disposal, security, finance, human resources, personnel, communications and corporate charges.
<b>Unit costs available 2014/2015</b>		
£152 per patient day or £1,067 per patient week		

<sup>1</sup> National Treatment Agency for Substance Misuse (2010) *NDTMS dataset G, definition, business definition for adult drug treatment providers*, <http://www.nta.nhs.uk/core-data-set.aspx> [accessed 9 October 2014].

### 3.3 Specialist prescribing

Specialist prescribing is community prescribing for drug misuse in a specialist drug service setting, normally staffed by a multidisciplinary substance misuse team. Specialist prescribing interventions normally include comprehensive assessments of drug treatment need and the provision of a full range of prescribing treatments in the context of care-planned drug treatment. The specialist team should also provide, or provide access to, a range of other care-planned health-care interventions including psychosocial interventions, a wide range of harm-reduction interventions, Blood Borne Virus (BBV) prevention and vaccination, and abstinence-oriented interventions.

The teams include specialist doctors who are usually consultant addiction psychiatrists 'with a Certificate of Completion of Training (CCT) in psychiatry, with endorsement in substance misuse working exclusively to provide a full range of services to substance misusers'. See *Business Definition for Adult Drug Treatment Providers*<sup>1</sup> for more detailed information on this intervention.

Based on information provided by the National Treatment Agency,<sup>2</sup> the average cost for specialist prescribing is £53 per patient week. All costs have been updated from 2007/08 using the Gross Domestic Product (GDP) index, as suggested by the NTA.

Using reference costs 2013-2014,<sup>3</sup> the mean cost per client contact in a NHS and PCT combined drugs and alcohol mental health team was £119 per face-to-face contact and £51 per non-face-to-face contact. These costs have been updated using the Hospital and Community Health Services (HCHS) inflator.

Costs and unit estimation	2014/2015 value	Notes
A. Direct pay	£24 per patient week	Salaries plus oncosts for care staff.
B. Direct overheads	£19 per patient week	Includes drugs, pharmacy and dispensing costs. Also includes other treatment materials, toxicology and drug testing, medical supplies, rent and rates, staff travel, training, service user travel costs, volunteer expenses, contingency management, office costs specifically attributed to the provision of the service, non-pay administration (for example, telephones and information technology).
C. Indirect costs and overheads	£10 per patient week	Includes capital charges, capital on refurbishment, property and buildings, housekeeping, catering, portorage, transport, waste disposal, security, finance, human resources, personnel, communications and corporate charges.
<b>Unit costs available 2014/2015</b>		
£53 per patient week		

<sup>1</sup> National Treatment Agency for Substance Misuse (2010) *NDTMS dataset G, definition, business definition for adult drug treatment providers*, <http://www.nta.nhs.uk/core-data-set.aspx> [accessed 9 October 2014].

<sup>2</sup> Personal communication with the National Treatment Agency, 2010.

<sup>3</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

### 3.4 Alcohol health worker, Accident & Emergency Department

Alcohol health workers (AHWs) are experienced mental health nurses who have undertaken specific training in counselling people who misuse alcohol. AHWs interact with people in a non-confrontational and patient-centred way, and during an assessment may offer feedback about safe levels of drinking and suggest a range of strategies aimed at reducing levels of consumption. Information for this table is based on a study carried out by the Centre for the Economics of Mental and Physical Health at the Institute of Psychiatry (now King's Health Economics), London.<sup>1</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£31,914 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 7 of the July 2013-June 2014 NHS staff earnings estimates. <sup>2</sup> An additional 14.7 per cent can be added to reflect payments for over-time, shift work and geographic allowances. See Preface and section V for further information on salaries.
B. Salary oncosts	£7,774 per year	Employer's national insurance contribution is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£10,619 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>4</sup> It has been assumed that this health worker requires the same qualifications as a staff nurse/ward manager.
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£10,619 per year	Management and other non-care staff costs were 24.5 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£16,687 per year	Non-staff costs were 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£3,718 per year	Based on the new-build and land requirements of NHS facilities, but adjusted to reflect shared office space for administration, and recreational and changing facilities. <sup>5,6</sup> Treatment space has not been included.
Working time	41.7 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for all NHS staff groups. <sup>7</sup>
Ratio of direct to indirect time on: clinic contacts	1:0.22	Based on a survey of AHWs in a London A&E department, <sup>1</sup> 82 per cent of time is spent on face-to-face contact and 18 per cent on onward referral. Based on survey of AHWs in London A&E department. <sup>1</sup>
Length of contact	55 minutes	Per clinic contact. Based on survey of AHWs in London A&E department. <sup>1</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£49 (£56) per clinic consultation		

<sup>1</sup> Barrett, B., Byford, S., Crawford, M.J., Patton, R., Drummond, C., Henry, J.A. & Touquet, R. (2006) Cost-effectiveness of screening and referral to an alcohol health worker in alcohol misusing patients attending an accident and emergency department: a decision-making approach, *Drug and Alcohol Dependence*, 81, 1, 47-54.

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>5</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits*, National Health Service, London. <http://www.nhs Careers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Training days as recommended by professional bodies. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.



## **4. Services for people with learning disabilities**

- 4.1 Local authority day care for people with learning disabilities
- 4.2 Advocacy for parents with learning disabilities
- 4.3 Adults with learning disabilities
- 4.4 Residential care for adults with autism and complex needs



## 4.1 Local authority day care for people with learning disabilities

This table uses the Personal Social Services Expenditure return (PSS EX1)<sup>1</sup> for 2013/14 for expenditure costs, which have been updated using the PSS pay & prices inflator. The median cost was £284 per client week and the mean cost was £293 per client week (including capital costs). These data do not report on the number of sessions clients attended each week.

To determine the best unit of activity, we have submitted a Freedom of Information request to ask local authorities the duration of a 'unit of activity' and to provide approximate guidance on how many times a week clients attend.

Based on information provided by ten local authorities,<sup>2</sup> we have calculated an average cost per client attendance and also a cost per client hour. We have then used this information to calculate the cost of a client session lasting 3.5 hours, which is a typical standard unit of day care for most local authorities responding to our information request.

Costs and unit estimation	2014/2015 value	Notes
Capital costs (A, B & C)		
A. Buildings and oncosts	£5.60 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. <sup>3</sup>
B. Land	£1.40 per client attendance	Based on research carried out by the Valuation Office Agency. <sup>4</sup> The cost of land has been annuitised at 3.5 per cent over 60 years.
C. Other capital		Capital costs not relating to buildings and oncosts are included in the revenue costs so no additional cost has been added for other capital such as equipment and durables.
D. Total local authority expenditure (minus capital)	£74 per client attendance	The median cost per client week has been taken from PSS EX1 2013/14 <sup>1</sup> and updated using the PSS pay & prices index. Assuming people with learning disabilities attend on average 4.8 times per week (4 hours in duration), <sup>2</sup> the median and mean cost per day care attendance is £74. Capital charges relating to buildings have been deducted. Councils reporting costs of over £2,000 per client week have not been included in this estimate.
E. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 expenditure figures so no additional overheads have been added.
Use of facility by client		Assumes clients attend 4.8 times per week. <sup>2</sup>
Occupancy		No current information is available.
London multiplier	1.58 x (A to B) 1.42 x (D to E)	Relative London costs are drawn from the same source as the base data for each cost element. <sup>3,4</sup>
<b>Unit costs available 2014/2015</b>		
£81 per client attendance (includes A to D); £17 per client hour; £59 per client session lasting 3.5 hours.		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Based on research carried out by PSSRU in 2014.

<sup>3</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

## 4.2 Advocacy for parents with learning disabilities

Advocacy can help service users both to understand their rights and choices and also to support them in resolving issues of great significance to their lives. We have drawn on an article by Bauer et al. (2014)<sup>1</sup> for the costs of providing an advocate for parents with learning disabilities and at risk of having their children taken into care. Based on information provided by two of the four projects and taking mid-points of salary ranges provided, combined with routine data and assumptions made for staff employed by local authorities, the mean cost of an advocacy intervention consuming 95 hours of client-related work (including one-to-one sessions, external meetings, but excluding travel and training costs) was £4,251. Information on the wider costs and benefits of advocacy and early intervention signposted or referred to by the advocate can be found in the referenced paper (Bauer et al. 2014).<sup>1</sup>

The costs below are based on the average of two advocacy projects. The first is in rural and urban parts of the country where most service users are in areas of deprivation; and the second in urban regions with large areas of poverty and child protection issues.

Costs and unit estimation	2014/2015 value	Notes (for further clarification see Commentary)
A. Wages/salary	£31,093 per year	<b>Project A:</b> Two part-time advocates (salary range £20,000-£25,000); <b>Project B:</b> Eighty per cent of a service manager (salary range £29,604-£31,766), plus one part-time (3.5 hours per week) advocate (salary range £26,401-£28,031).
B. Salary oncosts	£10,857 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation.
C. Overheads Management/supervision	£5,980 per year	<b>Project A:</b> supervision from a service manager for 2 hours per month (24 hours per year) <b>Project B:</b> service manager is provided with 4 hours formal supervision and 20 hours informal supervision per month (288 hours per year). Advocate has 3 hours formal and 3 hours informal supervision by manager per month (72 hours per year).
Direct overheads	£2,937 per year	Premises costs (office, stationery, utilities etc.) are estimated at 7 per cent of salary costs. <sup>2</sup>
Indirect overheads	£6,712 per year	Indirect overheads assumed to be 16 per cent of direct care salary costs. <sup>2</sup> They include general management and support services such as finance and human resource departments.
D. Qualifications	No costs available	<b>Project A:</b> advocates required 20 hours of national advocacy training. <b>Project B:</b> NVQ level 4 management and national advocacy qualification required.
E. Training	No costs available	<b>Project A:</b> further training consisted of 8 hours by Family Rights Group plus additional training to individual requirements. <b>Project B:</b> 5 days per year provided by a range of safeguarding, advocacy, legal and community organisations.
F. Capital overheads	£2,566 per year	It is assumed that one office is used and costs are based on the new-build and land requirements of a local office and shared facilities for waiting, interviews and clerical support. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
G. Travel	No costs available	<b>Project A:</b> average travel time per intervention = 70 minutes, range (40-120 minutes) <b>Project B:</b> average travel time = 15 minutes.
Working time	41 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.2 days sickness leave have been assumed based on the median average sickness absence level in England for all authorities. Unit costs assume 1,516 hours of client-related work per year.
Ratio of direct to indirect time on client-related work	1:0.13	1,344 hours of client-related work are assumed per year. <sup>1</sup>
Caseload		Project A: Caseload of 8-10 parents. Project B: 10 families.
Time per case	95 hours of client related work.	On average, an advocacy intervention consisted of 95 hours of client-related work (one-to-one sessions, external meetings travelling and preparation time) provided over a 10-month period. Face-to-face time ranged from 3 to 68 hours.
<b>Unit costs available 2014/2015</b>		
Average cost per working hour £26, average cost per client-related hour £45. (Estimates exclude travel costs).		
Average total cost £60,145; Total cost for project A: £41,374; Total cost for project B: £78,916.		
Average cost per advocacy intervention (based on 95 hours); £4,251 (Project A £2,924 and Project B £5,578).		

1 Bauer, A., Wistow, G., Dixon, J. & Knapp, M. (2014) Investing in advocacy for parents with learning disabilities: what is the economic argument? *British Journal of Learning Disabilities*, doi: 10.1111.blid.12089.

<sup>2</sup> Based on information taken from Selwyn, J., Sempik, J., Thurston, P. & Wijedasa, D. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010). Home care re-ablement services: Investigating the longer-term impacts, Final Report, University of York, PSSRU Kent, Department of Health, London.



## 4.3 Adults with learning disabilities

The following schema draw on research carried out by Laing & Buisson<sup>1</sup> and commissioned by the Department of Health. They provide illustrative cost models in learning disabilities social care provision, first for residential care homes and then for supported living schemes.

### 4.3.1 Residential care homes

The table below provides examples of high-specification care homes in the South East of England, one with 4 bedrooms and one with 8 bedrooms. Twenty four-hour support is provided in both houses; they are well equipped and include en suites with bath or shower rooms and good communal spaces. The average fee paid for a place in the 4-bedroom house is £1,979 per week and is £1,728 for a place in the 8-bedroom house.

Costs and unit estimation	2014/15	
	4-bed house	8-bed house
<b>Staff costs</b>		
Salaries	£211,404	Based on approximately 7.5 WTE staff providing 257 hours of support per week plus 1 waking night staff member and an additional sleep-in support staff member. There is also a full-time manager earning £28,395 per year.
Training	£6,328	£6,855
Staff overheads	£7,277	£21,515
<b>Capital costs</b>		
Building	£23,906	The purchase price of the building was £596,167. This has been annuitised over 60 years at 3.5 per cent
Equipment	£9,563	Major adaptations cost £238,466. This amount has been annuitised over 60 years at 3.5 per cent
<b>Living expenses</b>		
Personal living expenses	£26,477	Living expenses per person per week cover £48 food, £48 travel, £24 service user activities and £6 for holidays.
Utilities	£7,565	£15,130
<b>Direct overheads</b>		
Maintenance/ service	£29,503	Includes the costs of boiler and other equipment maintenance, cleaning materials, maintenance staff costs and damages and breakages.
<b>Indirect overheads</b>		
Head office costs	£18,457	Head office costs are charged at £88 per person per week, on the basis of full occupancy.
<b>Total cost per year</b>	<b>£340,480</b>	<b>£536,013</b>
<b>Total cost per person per year</b>	<b>£85,120</b>	<b>£67,002</b>
<b>Total cost per person per week</b>	<b>£1,631</b>	<b>£1,284</b>

<sup>1</sup> Laing & Buisson (2011) *Illustrative cost models in learning disabilities social care provision*, Department of Health, London.

### 4.3.2 Supported living homes

The weekly unit costs per service user for both homes in this table are similar. Both homes support service users with, on average, the same level of needs for support hours, although there are some offsetting differences: in particular, staff costs are higher at the two-bedded home but the manager costs are lower, reflecting input of only five hours a week for both services (i.e. 2.5 hours per service user).<sup>1</sup>

Costs and unit estimation	This example is of a two-bedded supported living home in the North West of England, using budgeted costs (average of 94 hours of support)		This example is of a three-bedded supported living home in the North West of England, using budgeted costs (average of 85.7 hours of support)	
	Per person fee/cost per week (including oncosts)	2 residents Total per year	Per person fee/cost per week (including oncosts)	3 residents Total per year
<b>Income</b>				
<b>INCOME</b>				
Fees	£935	£97,241	£935	£145,862
<b>COSTS</b>				
Direct staff costs				
Senior support staff	£218	£22,714	£274	£42,838
Support staff	£373	£38,853	£303	£47,321
<b>Sub-total</b>	<b>£590</b>	<b>£61,566</b>	<b>£577</b>	<b>£90,158</b>
Waking nights				
Sleep-in	£113	£11,243	£72	£11,243
Manager	£40	£4,078	£92	£14,524
<b>Sub-total</b>	<b>£153</b>	<b>£15,322</b>	<b>£164</b>	<b>£25,767</b>
Recruitment	£5	£514	£5	£745
Training	£12	£1,335	£12	£2,054
Other staff overheads	£16	£1,712	£20	£3,010
<b>Total staff support costs</b>	<b>£777</b>	<b>£80,449</b>	<b>£778</b>	<b>£21,734</b>
<b>Management costs-area, division, central</b>	<b>£127</b>	<b>£13,261</b>	<b>£128</b>	<b>£20,079</b>

<sup>1</sup> Laing & Buisson (2011) *Illustrative cost models in learning disabilities social care provision*, Department of Health, London.

## 4.4 Residential care for adults with autism and complex needs

This schema has been prepared in collaboration with 3 members of the Autism Alliance <http://autism-alliance.org.uk/about-us/the-alliance>, a major UK network of specialist autism charities supporting thousands of people with autism and complex needs. The annual cost per client year has been calculated by taking an average of the per client figures from the three participating agencies.

When interpreting the costs, it should be taken into account that these clients have very specific needs, resulting in the necessity for a high level of staff support (usually one-to-one) and more specialist staff training and therefore higher salaries. There is also a need for specialist professionals such as behavioural specialists and psychologists and speech and language therapists who provide support in response to urgent need and fulfil a function that a LA specialist would be unable to meet. Given that the clients often display challenging behaviour, there is more staff sickness and also more costs associated with furniture and equipment as well as the need to recruit specialists. The people these organisations support have problems sharing space, and therefore a cost associated with environment and specifically space has to be factored in. The people in question will have specific demands on transport and the costs associated with transport, specialist diets, clothing, and bedding. Also there must be consideration for the type of activities and specific interests that the person will demand with regularity and its associated costs.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£44,826 per client year	Based on actual salaries of care staff including support workers, service co-ordinators, team leaders, waking night support and sleep-in workers. Therapists are included in this cost (includes positive behaviour and communications therapists).
B. Salary oncosts	£6,386 per client year	Employer's national insurance contribution plus employer's contribution to superannuation.
C. Direct overheads Management and supervision	£9,612 per client year	Support staff and management included administrators, cooks and managers. Staff costs were 19 per cent of direct care salary costs.
Non-staff	£10,940 per client year	Non-staff overheads formed in total 21 per cent of direct care salary costs. They include training (2%), supplies and services (5%), maintenance (4%), utilities (3%), staff travel (0.1%), rent (5%) and other (2%).
D. Indirect overheads	£12,732 per client year	Indirect overheads include general management and support services such as finance departments and human resource departments. On average, these costs comprised 33 per cent of direct care salary costs.
E. Personal living expenses	£3,777 per client year	This includes an amount for groceries, household provisions, clothing and medical expenses, comprising 8 per cent of direct care salary costs.
F. Day Care	£23,712 per client year	This includes the costs for 37.5 hours per week per person of separately based specialist day care with a ratio of one member of staff for every two clients attending.
Working time	24 hours per day, 365 days per year.	
Number of clients	65	This cost was based on the expenditure for 65 clients.
<b>Unit costs available 2014/2015</b>		
Average annual cost per client (excluding day care) £88,274; average weekly cost per client £1,691.		
Average annual cost per client (including day care, ratio one member of staff for every two clients attending) £111,985; average weekly cost per client £2,153.		



## **5. Services for adults with a physical disability**

5.1 Local authority care homes for adults with a physical disability

5.2 Voluntary, private and independent sector care homes for adults with a physical disability

5.3 Day care for adults with a physical disability

5.4 Home care for adults with a physical disability



## 5.1 Local authority care homes for adults with a physical disability

This table uses the Personal Social Services Expenditure return (PSS EX1) for 2013/14,<sup>1</sup> which has been updated using the PSS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
Capital costs		
A. Buildings and oncosts	£213 per resident week	Based on the new-build and land requirements for local authority residential care establishments. These allow for 57.3 square metres per person. <sup>2</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
B. Land costs	£17 per resident week	Based on Department for Communities and Local Government statistics. <sup>3</sup> The cost of land has been annuitised at 3.5 per cent over 60 years.
C. Total local authority expenditure (minus capital)	£604 per resident week	The median revenue weekly cost estimate (£604) for supporting adults in own-provision residential care (includes full-cost paying and preserved-rights residents). Capital costs relating to buildings and land have been deducted. The mean cost per client per week is reported as being £851.
D. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 expenditure figures so no additional overheads have been added.
Other costs		
E. Personal living expenses	£24.40 per week	The DWP personal allowance for people in residential care or a nursing home is £24.40. <sup>4</sup> This has been used as a proxy for personal consumption.
F. External services		No information is available.
Use of facility by client	365.25 days per year	
Occupancy	100 per cent	No statistics available, therefore 100 per cent occupancy assumed.
London multiplier		No statistics available.
<b>Unit costs available 2014/2015</b>		
£834 per resident week establishment costs (includes A to C); £859 per resident week (includes A to E).		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>3</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>4</sup> PayingForCare (2015) Types of state and local authority support, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 8 October 2015].

## 5.2 Voluntary and private sector care homes for adults with a physical disability

This table uses the Personal Social Services Expenditure return (PSS EX1)<sup>1</sup> for expenditure which has been updated using the PSS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
Capital costs		
A. Buildings and oncosts	£213 per resident week	Based on the new-build and land requirements for local authority residential care establishments. These allow for 57.3 square metres per person. <sup>2</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
B. Land costs	£17 per resident week	Land costs have been based on research carried out by the Valuation Office Agency. <sup>3</sup> The cost of land has been annuitised at 3.5 per cent over 60 years.
C. Total expenditure (minus capital)	£673 per resident week	The median weekly expenditure (£673) for supporting adults in residential care provided by others (includes full-cost paying and preserved-rights residents). Capital charges relating to buildings and land have been deducted. The mean cost per client per week is reported as being £652.
D. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 expenditure figures so no additional overheads have been added.
Other costs		
E. Personal living expenses	£24.40 per week	The DWP personal allowance for people in residential care or a nursing home is £24.40. <sup>4</sup> This has been used as a proxy for personal consumption.
F. External services		No information is available.
Use of facility by client	365.25 days per year	
Occupancy	100 per cent	No statistics available, therefore 100 per cent occupancy assumed.
London multiplier		No statistics available.
<b>Unit costs available 2014/2015</b>		
£903 per resident week establishment costs (includes A to C); £869 per resident week (includes A to E).		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>3</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>4</sup> PayingForCare (2015) Types of state and local authority support, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 8 October 2015].



### 5.3 Day care for adults with a physical disability

This table uses the Personal Social Services Expenditure return (PSS EX1) for 2013/14<sup>1</sup> for revenue costs, which have been updated using the PSS pay & prices inflator. The median cost was £214 per client week and the mean cost was £213 per client week (including capital costs). These data do not report on how many sessions clients attended each week.

To determine the best unit of activity, we submitted a Freedom of Information request to ask local authorities the duration of a 'unit of activity' and to provide approximate guidance on how many times a week clients attend.

Based on information provided by ten local authorities,<sup>2</sup> we have calculated an average cost per client attendance and also a cost per client hour. We have then used this information to calculate the cost of a client session lasting 3.5 hours, which is a typical standard unit of day care for most local authorities responding to our information request.

Costs and unit estimation	2014/2015 value	Notes
<b>Capital costs (A&amp;B)</b>		
A. Buildings and oncosts	£5.60 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. <sup>3</sup>
B. Land	£1.40 per client attendance	Land costs have been based on research carried out by the Valuation Office Agency. <sup>4</sup> The cost of land has been annuitised at 3.5 per cent over 60 years.
C. Other capital		
Revenue costs		
D. Salary and other revenue costs	£79 per client attendance	The median cost per client week has been taken from PSS EX1 2013/14 <sup>1</sup> and updated using the PSS pay & prices index. Assuming people with learning disabilities attend on average 2.7 times per week (4.8 hours in duration), <sup>2</sup> the median cost per day care attendance is £79 and the mean cost per attendance is £78. Capital charges relating to buildings have been deducted. Councils reporting costs of over £2,000 per client week have not been included in this estimate.
E. Agency overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 expenditure figures so no additional overheads have been added.
Use of facility by client		Assumes clients attend 2.7 times per week. <sup>2</sup>
Occupancy		No current information is available.
London multiplier	1.58 x A&B 1.30 x D	Relative London costs are drawn from the same source as the base data for each cost element. <sup>1,3,4</sup>
<b>Unit costs available 2014/2015</b>		
£86 per client attendance (includes A to D); £18 per client hour; £62 client per session lasting 4.8 hours.		

<sup>1</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Based on research carried out by PSSRU in 2014.

<sup>3</sup> Building Cost Information Service (2015) Surveys of tender prices, Royal Institute of Chartered Surveyors, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

## **5.4 Home care**

The mean (median) gross weekly expenditure on home care per adult aged under 65 with a physical disability is £200 (£193). Assuming home care is provided 7 days a week, the median and mean weekly expenditure is £29.

See schema 11.6 and 11.7 for more information on home care.

## **6. Services for children and their families**

- 6.1 NHS reference costs for children's health services
- 6.2 Care home for children—local authority
- 6.3 Voluntary and private sector care homes for children
- 6.4 Local authority foster care for children
- 6.5 Key worker services for disabled children and their families
- 6.6 End-of-life care at home for children
- 6.7 Multi-systemic therapy (MST)
- 6.8 Cognitive behaviour therapy
- 6.9 Adoption
- 6.10 Multidimensional treatment foster care
- 6.11 Decision-making panels
- 6.12 Costs of reunification
- 6.13 Short-break provision for disabled children and their families
- 6.14 Local safeguarding children's boards
- 6.15 Parenting programmes for the prevention of persistent conduct disorder
- 6.16 Parent training interventions for parents of disabled children with sleep problems
- 6.17 Independent reviewing officer (IRO)
- 6.18 Early Years Teacher Classroom Management programme



## 6.1 NHS reference costs for children's health services

We have drawn on the *NHS Trust and Primary Care Trusts combined* dataset to report the costs of selected children's health services.<sup>1</sup> All costs have been updated to 2014/2015 levels using the HCHS pay & prices inflator.

Each reported unit cost includes:

- (a) direct costs – which can be easily identified with a particular activity (e.g. consultants and nurses)
- (b) indirect costs – which cannot be directly attributed to an activity but can usually be shared among a number of activities (e.g. laundry and lighting)
- (c) overheads – which relate to the overall running of the organisation (e.g. finance and human resources).

For information on the method used to allocate drugs to services, see *NHS reference costs guidance* for 2013-14.<sup>1</sup>

	National average	Lower quartile	Upper quartile
<b>COMMUNITY SERVICES, average cost per one-to-one session (group)</b>			
Therapy services			
Physiotherapy	£80 (£90)	£62 (£69)	£93 (£91)
Occupational therapy	£124 (£146)	£91 (£90)	£152 (£172)
Speech therapy services	£91 (£96)	£73 (£72)	£108 (£108)
<b>Community health services – nursing, average cost per care contact/group session</b>			
School-based children's health core (other) services – group multi professional	£96 (£134)	£73 (£119)	£83 (£158)
School-based children's health core (other) services – group single professional	£50 (£74)	£32 (£44)	£72 (£80)
School-based children's health core (other) services – one to one	£50 (£54)	£33 (£38)	£60 (£61)
<b>Elective inpatient (paediatrics), average cost per stay</b>	£2,812	£1,423	£3,507
<b>OUTPATIENT ATTENDANCES, average cost per attendance</b>			
Paediatrics	£205	£208	£187
Paediatric consultant-led outpatient attendances	£208		
Paediatric non-consultant-led outpatient attendances	£186		
<b>SPECIALIST PALLIATIVE CARE, average cost per bed day</b>			
Inpatient specialist palliative care	£140	£76	£188
<b>CHILD AND ADOLESCENT MENTAL HEALTH SERVICES, average cost per patient contact</b>			
Mental health specialist teams	£230	£206	£257
Day care facilities – regular attendances	£308	£307	£353
Admitted patients (excluding psychiatric intensive care)	£620	£471	£734
Community contacts	£239	£201	£277
Community contacts, crisis resolution	£203	£150	£150
Outpatient attendances	£284	£250	£307

<sup>1</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

## 6.2 Care home for children — local authority

This table presents the costs per resident week for a local authority care home for children. Establishment costs are £3,170 per resident week. All costs have been uprated using the PSS pay & prices index. For more information on the market in children's care homes see: *DfE Children's Homes Data Pack 2014*

(<https://www.gov.uk/government/publications/childrens-homes-data-pack>) and Department for Education (2015) *Financial Stability, Cost Charge and Value for Money in the Children's Residential Care Market*, Institute for Public Care ([https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/436452/RR451 - Children s residential care report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/436452/RR451_-_Children_s_residential_care_report.pdf)).

Costs and unit estimation	2014/2015 value	Notes
Capital costs (A & B)		
A. Buildings	£155 per resident week	Based on the new-build requirements for local authority children's homes. These allow for 59.95 m <sup>2</sup> per person. <sup>1</sup> Capital costs are discounted at 3.5 per cent over 60 years.
B. Land	£21 per resident week	Land costs researched for PSSRU by the Valuation Office Agency <sup>2</sup> and annuitised at 3.5 per cent over 60 years.
C. Total local authority expenditure (minus capital)	£2,994 per resident week	Mean costs for children looked after in own-provision children's homes are based on the underlying data of the DfE Section 251 outturn data for 2013/14. <sup>3</sup>  The cost for a child for a week in an own-provision residential care home was £2,994. This was calculated by dividing total current expenditure for local authority (LA) provision children's care homes (£310,653,119) by the number of LA provision care days for children in residential care (residential care homes: R1; children in secure units: K1; children in homes and hostels: K2; residential schools: S1) (690,702) to give a cost of £450 per day or £3,148 per week, and £3,170 when inflated using the PSS pay and prices inflator. <sup>4</sup> Capital charges for buildings and land have been excluded to give a cost per resident week of £2,994. Local authorities reporting costs of less than £400 per week (£57 per day) or more than £14,000 per week (£2,000 per day) have been excluded.
D. Agency overheads		No current information available. See previous editions of this volume for sources of information.
E. Other costs	£11.60 per resident week	Using Section 251 data <sup>3</sup> and dividing total expenditure for 'education of looked after children' (£32,065,000) by total children looked after aged 5 and over (53,520), <sup>4</sup> a cost per child per year for education was calculated (£599). This cost was uprated using the PSS pay & prices inflator (£603) or £11.60 per resident week. This cost excludes school spending and relates to additional LA services to promote the education of looked after children, for example virtual heads.
Use of facility by client	52.18 weeks	
Occupancy		No current information available. See previous editions of this volume for sources of information.
London multiplier	1.50 x A 1.88 x B 1.23 x C	Relative London costs are drawn from the same source as the base data for each cost element. <sup>1,2,3</sup>
<b>Unit costs available 2014/2015</b>		
£3,170 establishment costs per resident week (includes A to D); £3,181.60 per resident week (includes A to E).		

<sup>1</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>2</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>3</sup> Department for Education (2014) *Underlying data of the section 251 data archive: outturn summary 2013-14*, Department for Education, London. <https://www.gov.uk/government/publications/section-251-outturn-2013-to-2014-data> [accessed 14 October 2015].

<sup>4</sup> Department for Education (2015) *Children looked after in England including adoption and care leavers, year ending 31 March 2014, SSDA903*. Data provided by DfE. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/359277/SFR36\\_2014\\_Text.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/359277/SFR36_2014_Text.pdf).

## 6.3 Voluntary and private sector care homes for children

This table presents the costs per resident week for a non-statutory care home for children. Establishment costs are £2,889 per resident week. See *DfE Children's Homes Data Pack 2014* (<https://www.gov.uk/government/publications/childrens-homes-data-pack>) and Department for Education (2015) *Financial Stability, Cost Charge and Value for Money in the Children's Residential Care Market*, Institute for Public Care ([https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/436452/RR451 - Children s residential care report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/436452/RR451_-_Children_s_residential_care_report.pdf)).

Costs and unit estimation	2014/2015 value	Notes
Capital costs (A & B)		
A. Buildings	£155 per resident week	Based on the new-build requirements for local authority children's homes. These allow for 59.95 m <sup>2</sup> per person. <sup>1</sup> Capital costs are discounted at 3.5 per cent over 60 years.
B. Land	£21 per resident week	Land costs researched for PSSRU by the Valuation Office Agency <sup>2</sup> and annuitised at 3.5 per cent over 60 years.
C. Total expenditure (minus capital)	£2,713 per resident week	Mean costs for children looked after in externally provided children's homes (e.g. non local authority (LA) own provision) are based on the underlying data of the DfE Section 251 <sup>3</sup> outturn data for 2013/14.  The cost for a child for a week in a non-statutory residential care home for children was £2,706. This was calculated by dividing total expenditure for other provision children's care homes (£663,675,572) by the number of care days in non-LA provision for children in residential care (residential care homes: R1; children in secure units: K1; children in homes and hostels: K2; residential schools: S1) (1,629,228) to give a cost of £407 per day (£2,851 per week, and £2,889 when uprated using the PSS pay and prices inflator). <sup>4</sup> Capital charges for buildings and land have been excluded to give a cost per resident week of £2,713. Local authorities reporting costs of less than £400 per week (£57 per day) or more than £14,000 per week (£2,000 per day) have been excluded.
D. Agency overheads		No current information available. See previous editions of this volume for sources of information.
E. Other costs External services	£11.60 per resident week	Using Section 251 data <sup>3</sup> and dividing total expenditure for 'education of looked after children' (£32,065,000) by total children looked after aged 5 and over (53,520), <sup>4</sup> a cost per child per year for education was calculated (£599). This cost was uprated using the PSS pay & prices inflator (£603) or £11.60 per resident week. This cost excludes school spending and relates to additional LA services to promote the education of looked after children, for example virtual heads.
Use of facility by client	52.18 weeks	
Occupancy		No current information available. See previous editions of this volume for sources of information.
London multiplier	1.50 x A 1.88 x B 0.90 x C	Relative London costs are drawn from the same source as the base data for each cost element. <sup>1,2,3</sup>
<b>Unit costs available 2014/2015</b>		
£2,889 establishment costs per resident week (includes A to D); £2,900 per resident week (includes A to E).		

<sup>1</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>2</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>3</sup> Department for Education (2014) *Underlying data of the section 251 data archive: outturn summary 2013-14*, Department for Education, London. <https://www.gov.uk/government/publications/section-251-outturn-2013-to-2014-data> [accessed 14 October 2015].

## 6.4 Foster care for children

This table provides the cost of foster care for children. For information on multidimensional treatment foster care, see table 6.10 of this volume. See Holmes & Soper (2010)<sup>1</sup> and Department for Education (2006)<sup>2</sup> for more information on the costs of foster care.

Costs and unit estimation	2014/2015 value	Notes
A. Boarding out allowances, administration and the costs of social worker and other support staff who support foster carers	£603 per child per week	Using Section 251 data and dividing total expenditure for all foster care (including children placed with family and friends, own-provision, private, other public and voluntary foster care) of £1,582,142,466 <sup>3</sup> by the total number of days of care for children in foster placements with a relative or friend (code Q1) and children in foster placements with other foster carers (code Q2) (18,582,501) <sup>4</sup> , the cost per day for all foster care for 2014/15 was £85 (£596 per week and £603 when uprated using the Personal Social Services (PSS) pay & prices inflator). No outliers were reported.  Using Section 251 data <sup>3</sup> and dividing total expenditure for own-provision foster care (including children placed with family and friends, own provision and other public provision) of £849,625,941 by the total number of days of care for children in foster placements with a relative or friend (code Q1) and children in foster placements with other foster carers (code Q2) (12,487,358) <sup>4</sup> , the cost per day for 2014/15 was £68 (£476 per week and £480 when uprated to 2014/15 prices using the PSS pay & prices inflator). Local authorities reporting an average cost of less than £50 (1 local authority) and more than £1,500 per week (1 local authority) have been excluded.
B. Social services (including cost of social worker and support)		No current information available. See previous editions for the cost of social services support estimated from the Children in Need (CiN) census 2005. <sup>5</sup>
C. Other services, including education	£11.60 per child per week	Using Section 251 data <sup>3</sup> and dividing total expenditure for 'education of looked after children' (£32,065,000) by total children looked after aged 5 and over (53,520), <sup>4</sup> a cost per child per year for education was calculated (£599). This cost was uprated using the PSS pay & prices inflator (£603) or £11.60 per resident week. This cost excludes school spending and relates to additional LA services to promote the education of looked after children, for example virtual heads.
Service use by client	52.18 weeks per year	
London multiplier	1.14 x A	Relative London costs are drawn from the same source as the base data. <sup>3</sup>
<b>Unit costs available 2014/2015</b>		
£614.60 per child per week (excluding social services support but including education).		

<sup>1</sup> Holmes, L. & Soper, J. (2010) *Update to the cost of foster care*, Loughborough University, Loughborough.

<sup>2</sup> Department for Education (2006) *DfES children's services: children's homes and fostering*, PricewaterhouseCoopers, London.  
<https://www.education.gov.uk/publications/RSG/publicationDetail/Page1/RW74> [accessed 9 October 2013].

<sup>3</sup> Department for Education (2014) *Underlying data of the section 251 data archive: outturn summary 2013-14*, Department for Education, London.  
<https://www.gov.uk/government/publications/section-251-outturn-2013-to-2014-data> [accessed 14 October 2015].

<sup>4</sup> Department for Education (2015) *Children looked after in England including adoption and care leavers, year ending 31 March 2014, SSDA903*. Data provided by DfE. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/359277/SFR36\\_2014\\_Text.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/359277/SFR36_2014_Text.pdf)

<sup>5</sup> Department for Education & Skills (2005) *Children in need in England: results of a survey of activity and expenditure as reported by local authority social services' children and families teams for a survey week in February 2005*, Department for Education & Skills, London.



## 6.5 Key worker services for disabled children and their families

Key workers provide a single point of contact for disabled children and their families, supporting them and facilitating access to other services. Both key workers and the families supported see the key worker role as providing information and advice, identifying and addressing needs, accessing and co-ordinating services for the family, providing emotional support, and acting as an advocate. Research has shown that key worker services generate good outcomes for families, and provision is encouraged through central government policy.

In 2004/05, research was carried out in seven sites providing key worker services to explore the effectiveness of different models and also to calculate costs.<sup>1,2</sup> In total, 205 families returned questionnaires of which there were 189 valid responses. Predominantly, key workers included in the study came from four professional backgrounds: health visiting, nursing, teaching and social work. However, parents, paediatricians, dietitians, speech therapists, occupational therapists, physiotherapists and early years workers also acted as key workers. The children supported by these seven key worker services had a range of diagnoses, of which autistic spectrum disorders, cerebral palsy and developmental delay were the most common. Most children had more than one condition.

The table below shows that the average cost per working hour for the seven services was £34, ranging from £24 to £43. This has been calculated by dividing the total cost by the total number of hours for which staff members undertook key-working activities. The unit cost is, therefore, weighted for the staff-mix in each service. Over a three-month period, the mean and median costs of contact, taking into account telephone calls and the costs of visits, were £153 and £88 respectively. All costs have been updated to reflect 2014/2015 prices.

Assuming this level of contact to be constant over 12 months, annual average contact costs would be £613. Using information provided by 11 key workers reporting time use, the contact to other activity ratio is 1:1.6 (for each hour spent in contact with the family, one and a half hours are spent on activities such as travel, liaison, meetings etc.). At 2014/2015 prices, the total cost of all participating schemes was £2,282,021 and this total caseload was 1,237, giving an average annual cost per family across the schemes of £1,845.

<b>Use and costs of key worker services in three months prior to survey</b>					
<b>Service</b>	<b>Cost per working hour</b>	<b>Mean number of visits (range)</b>	<b>Mean number of telephone calls (range)</b>	<b>Mean cost of visits and telephone calls</b>	<b>Median cost of visits and telephone calls</b>
A	£26	2.9 (0-8)	6.7 (1-16)	£145	£127
B	£43	2.7 (0-24)	5.0 (0-60)	£188	£91
C	£37	3.6 (0-10)	5.4 (1-80)	£192	£143
D	£39	1.9 (0-12)	2.5 (0-12)	£110	£61
E	£39	2.8 (0-20)	4.6 (0-50)	£187	£116
F	£32	4.4 (0-12)	2.5 (0-12)	£113	£76
G	£24	1.4 (0-6)	2.1 (0-6)	£40	£24
<b>Total/average</b>	<b>£34</b>	<b>2.8 (0-24)</b>	<b>4.4 (0-60)</b>	<b>£153</b>	<b>£88</b>

<sup>1</sup> Greco, V., Sloper, P., Webb, R. & Beecham, J. (2005) *An exploration of different models of multi-agency partnerships in key worker services for disabled children: effectiveness and costs*, Social Policy Research Unit, University of York.

<sup>2</sup> Beecham, J., Sloper, P., Greco, V. & Webb, R. (2007) The costs of key worker support for disabled children and their families, *Child: Care, Health and Development*, 33, 5, 611-618.

## 6.6 End-of-life care at home for children

Information for this table has been provided by Rhiannon Edwards and Jane Noyes at Bangor University and was taken from the *My Choices* project report<sup>1</sup> which provided a summary of the proposed *additional costs* associated with providing palliative care at home (assuming care is provided for one week, 24 hours per day).

Costs and unit estimation	2014/15 value	Notes
A. Wages/salary	£288,797 per year	Based on the mean basic salaries for 5.5 community nurses (band 6), 1 specialist palliative care nurse (band 7), 0.2 medical equipment technician (band 6), 0.5 clinical psychologist (band 7) and 15 band 7 nurses, each working 100 hours per year.
B. Salary oncosts	£70,505 per year	Employer's national insurance plus 14 per cent of salary for employer's contribution to superannuation.
C. Overheads Staff costs	£20,475 per year	Includes IT and administrative support, 0.5 WTE band 7 and 0.5 WTE band 5 respectively. <i>Additional overheads</i> are 6% of salary costs.
D. Travel costs	£25,765 per year	Based on information provided by a Rapid Response Service in the 2013 edition, schema 7.5 of this publication.
Working time	24 hours per day, 52.18 weeks	Unit costs based on 168 hours per week and 52.18 weeks per year.
<b>Unit costs available 2014/15</b>		
Cost per week £7,772; cost per hour £46.30 (if working 24/7).		

<sup>1</sup> Noyes, J., Hain, R., Tudor Edwards, R., Spencer, L., Bennett, V., Hobson, L., & Thompson, A. (2010) *My choices project report*, Bangor University, CRC Cymru, Cardiff University School of Medicine, N Warwickshire PCT, Royal College of Paediatrics and Child Health, Public Health Wales NHS Trust, Bath and NE Somerset PCT, <http://public.ukcrn.org.uk/search/StudyDetail.aspx?StudyID=6597> [accessed 9 October 2013].

## 6.7 Multi-systemic therapy (MST)

Multi-systemic therapy (MST) is an intensive family- and community-based treatment programme that focuses on addressing all environmental systems that impact on chronic and violent juvenile offenders: their homes and families, schools and teachers, neighbourhoods and friends (<http://mstservices.com/>).

This table is based on costs estimated for a randomised controlled trial of interventions for adolescents aged 11-17 years at risk of continuing criminal activity.<sup>1</sup>

Costs and unit estimation	Unit cost 2014/15	Notes
A. Salary plus oncosts	£47,045 per year	Based on the salary of a chartered counselling psychologist. <sup>1</sup> Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
B. Overheads		
Management, administration and estates staff.	£11,526 per year	Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information. Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£17,971 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
C. Capital overheads	£4,320 per year	Based on the new-build and land requirements of NHS facilities and adjusted to reflect shared used of both treatment and non-treatment space. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42.4 weeks per year 37.5 hours per week	Unit costs are based on 1,590 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>2</sup>
Face-to-face time	1:1.40	The direct: indirect ratio was based on a survey of the three MST therapists who took part in the trial.
Length of sessions	60 minutes	Therapy sessions lasted 60 minutes.
<b>Unit costs available 2014/15</b>		
£51 per hour; £122 per therapy session.		

<sup>1</sup> Cary, M., Butler, S., Baruch, G., Hickey, N. & Byford, S. (2013) Economic evaluation of multisystemic therapy for young people at risk for continuing criminal activity in the UK, *PLoS One*, 8(4), e61070, doi:10.1371/journal.pone.0061070. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0061070> [accessed 11 November 2014].

<sup>2</sup> Contracted hours are taken from NHS Careers (2015) *Pay and benefits*, National Health Service, London, <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2015]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2015) *Sickness absence rates in the NHS: April 2009 – April 2015*, Health & Social Care Information Centre, Leeds.

## 6.8 Cognitive behaviour therapy (CBT)

This table is based on costs estimated for a randomised controlled trial of interventions for adolescents with depression. The setting was two Child and Mental Health Services (CAMHS) teams in secondary care where CBT was delivered.<sup>1</sup> Barrett and Petkova summarise CBT costs over 21 studies in a short article in the 2013 edition of this publication.

Costs and unit estimation	2014/15 value	Notes
A. Wages/salary	£42,996 per year	Based on the full-time equivalent basic salary of the July-June 2015 NHS Staff Earnings estimates <sup>2</sup> for a specialty doctor (midpoint), clinical psychologist (band 8 median) and mental health nurse (band 6 median). An average has been taken of these salaries.
B. Oncosts	£5,556 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications		No information available.
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administrative and estates staff	£10,147 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£23,742 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Ongoing training		Information not available for all care staff.
F. Capital overheads	£4,245 per year	Based on the new-build and land requirements of an NHS office and shared facilities, capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. <sup>3,4</sup> Based on the assumption that there is one office per team.
Working time	43.4 weeks per year, 37.5 hours per week	Unit costs are based on 1,627 hours per year: 225 working days minus sickness absence and training/study days as reported for all NHS staff groups. <sup>5</sup>
Ratio of direct to indirect time on face-to-face contact	1:1	Fifty per cent of time is spent on face-to-face contact and 50 per cent on other activities.
Length of contact	55 minutes	Average duration of CBT session.
<b>Unit costs available 2014/15</b>		
£98 cost per CBT session.		

<sup>1</sup> Goodyer, I., Harrington, R., Breen, S., Dubicka, B., Leech, A., Rothwell, J., White, L., Ford, C., Kelvin, R., Wilkinson, P., Barrett, B., Byford, S. & Roberts, C. (2007) A randomised controlled trial of SSRIs with and without cognitive behavioural therapy in adolescents with major depression, *British Medical Journal*, doi:10.1136/bmj.39224.494340.55.

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</sup> Contracted hours are taken from NHS Careers (2015) *Pay and benefits*, National Health Service, London, <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2015]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2015) *Sickness absence rates in the NHS: April 2009 – April 2015*, Health & Social Care Information Centre, Leeds.

## 6.9 Adoption

In 2013, an overview of the adoption research initiative was published.<sup>1</sup> This draws on studies commissioned by the Department for Education (DfE) as part of the Adoption Research Initiative (ARI) to explore issues relating to the implementation of the Adoption and Children Act 2002 in England and Wales. This table draws mainly on information contained in this overview, providing the costs of various stages of the adoption process, from the fees to post-adoption support for families. It also includes information from a routine source: Section 251 of the Department of Education's financial data collection. All costs have been updated using appropriate inflators.

### Local authority expenditure – Section 251

Based on the Section 251 outturn account for 2013/14, the total expenditure on Adoption Services was £339,527,628.<sup>2</sup> This comprises staff and overhead costs associated with adoption including the costs of social workers recruiting and assessing prospective adopters, supporting existing prospective adopters, and costs related to post-adoption support services. Support services can include: financial support; services to enable discussion groups for adoptive children/parents and birth parents or guardians; contact and mediation assistance; therapeutic services; counselling, advice and information. Provision of adoption support is based on assessed needs. Financial payments are made depending on the needs of the child and are means-tested. Expenditure on care placements for children with a placement order and waiting to be adopted is excluded, as are any direct social work costs for adopted children.<sup>3</sup>

At 31 March 2014, 9,260 children had a placement order and a further 60 were freed for adoption; 3,580 children had been placed for adoption.<sup>4</sup> There were 5,050 looked after children adopted during the year ending 31 March 2014.<sup>5</sup> A Placement Order is dispensed by the court and authorises the local authority to find, match and place a child with prospective adopters, and is revoked once the Adoption Order is made.<sup>6</sup> Placement Orders replaced Freeing Orders on 30 December 2005.

### Inter-agency fees

Local authorities (LAs) and voluntary adoption agencies (VAAs) arrange adoptions in England. LAs place children for adoption with their own approved prospective adopters (an 'internal placement') or with approved prospective adopters provided by another local authority or by a VAA (an 'external placement'). VAAs also place a very small number of children relinquished into their care for adoption. Where an external placement is made, an inter-agency fee is charged. This fee enables an agency that has recruited and approved the prospective adopters to recoup their costs. Current fees (2015) are shown in table 1 below (<https://www.gov.uk/guidance/inter-agency-adoption-fee-grant-for-local-authorities>).

**Table 1 Inter-agency fees**

Local authorities	Costs for 2014/15
Fees for one child	£27,000
Fees for two children	150 per cent of the above fee
Fees for three or more children	200 per cent of the above fee
Voluntary adoption agencies	
Fees for one child	£27,000 comprising £18,000 on placement, and £9,000 when the adoption order is made or 12 months from start of placement, whichever is sooner
Ongoing support	£750 per month

<sup>1</sup> Thomas, C. (2013) *Adoption for looked after children: messages from research*, British Association for Adoption & Fostering (BAAF).

<sup>2</sup> Department for Education (2014) *Underlying data of the section 251 data archive: outturn summary 2013-14*, Department for Education, London. <https://www.gov.uk/government/publications/section-251-outturn-2013-to-2014-data> [accessed 14 October 2015].

<sup>3</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/412156/S251\\_budget\\_guide\\_2015\\_to\\_2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/412156/S251_budget_guide_2015_to_2016.pdf).

<sup>4</sup> Department for Education (2015) *Children looked after in England including adoption*, tables A2 and A3, year ending 31 March 2014, Data provided by DfE, see <https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption--2> [accessed 14 October 2015].

<sup>5</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/359277/SFR36\\_2014\\_Text.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/359277/SFR36_2014_Text.pdf).

<sup>6</sup> [http://trixresources.proceduresonline.com/nat\\_key/keywords/placement\\_order.html](http://trixresources.proceduresonline.com/nat_key/keywords/placement_order.html)

As part of the Adoption Research Initiative, the DfE funded a study to establish whether the inter-agency fee was a good reflection of the expenditure incurred by LAs and VAAs in placing a child or sibling group (Selwyn et al., 2009, 2011).<sup>1</sup> Financial accounts for 2007-08 from ten LAs and 17 VAAs were analysed, and the average cost per adoptive placement was estimated as £37,200 for a VAA and £35,000 for LAs, when expenditure on inter-agency fees had been excluded. The inter-agency fee in 2009 was £24,080 for a VAA, or around three-quarters of the estimated cost per placement in a typical VAA: a shortfall of around £10,000 per placement. 'Accounts submitted to the Charity Commission 2007-08 suggest VAAs contribute about £3.5 million to adoption services from income received from donations, legacies and investments' (Selwyn, 2011, p.427).

## Family-finding

Linking and matching in adoption is the process of identifying an adoptive family which might best be able to meet the needs of a specific child who is waiting for an adoptive placement. More specifically, linking refers to the process of investigating the suitability of one or more prospective adoptive families who might meet the needs of a certain child or sibling group, based on their prospective adopter reports. Matching refers to the process whereby a local authority decides which prospective adoptive family is the most suitable to adopt a particular child. This family will be identified as a 'match' for the child or sibling group at the Adoption Panel, but the large variation in the way adoption panels are implemented means these costs are difficult to estimate.

Information has been drawn from a survey of adoption agencies (Dance et al., 2008),<sup>2</sup> and table 2 shows how much social worker time was spent on the relevant activities required to produce the assessment form for a prospective adoptive family. The number of hours spent on each activity was broadly in line with other research (Selwyn et al., 2006).<sup>3</sup> Many other activities are undertaken as part of the adoption process, including completing the various legal procedures, writing reports for adoption panel meetings, and preparing and introducing children and adoptive families. Each of these activities will involve considerable amounts of social work time and input from other professions, thereby adding to the costs shown here.<sup>4</sup> The average cost to the adoption agency of these four sub-processes amounts to £6,600. Costs for participating teams were estimated during the study and have been updated from 2007/08 prices using the PSS pay & prices inflator.

**Table 2 Cost estimation of adoption activities**

		<b>Costs 2014/15</b>
Child assessment	55 social work hours (over four months)	<b>£2,729</b>
Adopter's assessment	64 social work hours (over six months)	<b>£2,401</b>
Preparing child's profile	6 social work hours	<b>£160</b>
Family-finding process – talking to children, families and professionals as part of the linking process	16 social work hours	<b>£1,310</b>
<b>Total</b>	<b>141 social work hours</b>	<b>£6,600</b>

## Helping birth families

A study undertaken by Neil & colleagues (2010)<sup>5</sup> and commissioned by the DfE aimed to estimate the cost of providing support services to birth relatives over 12 months. Seventy-three birth relatives were interviewed, and 57 (78%) were re-interviewed approximately 15 months later. Case workers completed diaries to record time spent on each of the various services provided to birth relatives, and other agencies provided information about the number and type of services provided for each person in the interview sample over one year. For each type of support, a unit cost was taken from the

<sup>1</sup> Selwyn, J., Sempik, J., Thurston, P. & Wijedasa, D. (2009) *Adoption and the inter-agency fee*, Centre for Child and Family Research, <http://www.bristol.ac.uk/sps/research/projects/current/rk6582a/rk6582afinalreport.pdf> [accessed 9 October 2013]. See also Selwyn, J. & Sempik, J. (2011) Recruiting adoptive families: the costs of family finding and the failure of the inter-agency fee, *British Journal of Social Work*, 41, 415-431.

<sup>2</sup> Dance, C., Ouwejan, D., Beecham, J. & Farmer, E. (2008) *Adoption agency linking and matching practice in adoption in England and Wales, Survey Findings*, Department for Education, Research Brief DCSF-RBX-16-08. <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DCSF-RBX-16-08/> [accessed 9 October 2013].

<sup>3</sup> Selwyn, J., Sturgess, W., Quinton, D. & Baxter, C. (2006) *Costs and outcomes of non-infant adoptions*, BAAF, London.

<sup>4</sup> Dance, C., Ouwejan, D., Beecham, J. & Farmer, E. (2010) *Linking and matching: a survey of adoption agency practice in England and Wales*, BAAF, London.

<sup>5</sup> Neil, E., Cossar, J., Lorgelly, P. & Young, J. (2010) *Helping birth families: a study of service provision, costs and outcomes*. <http://www.adoptionresearchinitiative.org.uk/study5.html> [accessed 9 October 2013]. See also consultation on the review of contact arrangements for children in care and adopted children and on the placement of sibling groups for adoption, <http://www.education.gov.uk/childrenandyoungpeople/families/adoption/a00212027/> [accessed 9 October 2013].

2007 volume of the *Unit Costs of Health and Social Care*. The unit costs were combined with each person's use of support services to calculate the total costs of support. Costs have been uprated using the PSS pay & prices inflator.

Birth relatives were reported to have used 8.35 support services (range 0 to 70) over the 12-month study period at an average cost of £570 (range £0 to £5,093). Services included a telephone line for out-of-hours support, drop-in sessions, duty sessions, following referrals by telephone, providing venues for meetings, and liaison with other service providers. All other services were excluded from the cost estimates. The research was completed before the current consultation on the review of contact arrangements <http://www.education.gov.uk/childrenandyoungpeople/families/adoption/a00212027/>.

### Supporting direct contact after adoption

A study undertaken by Neil & colleagues (2010)<sup>1</sup> explored services provided to support post-adoption contact in 'complex' cases, i.e. direct contact where agencies had an ongoing role in the contact. They reported that the average adoptive family was estimated to have used contact support services 12 times over a 12-month period at a mean total cost of £1,115 (range £0-£4,523). The average birth relative used contact support services 8.9 times over a 12-month period, at a mean total cost of £833 (range £0-£2,214).

### Post-adoption support for adoptive parents

A legal framework for the provision of adoption support is set out in the Adoption and Children Act 2002 and the Adoption Support Services Regulations 2005 (Department of Health, 2005; Bonin et al. 2013).<sup>1,2</sup> Families have a right to an assessment of their support needs and may be entitled to (means-tested) financial support, access to support groups, support for contact with birth relatives, and therapeutic services that support the relationship between children and their adoptive parents, including training to meet the child's needs, respite care and assistance in cases of disruption.

Bonin et al. (2013)<sup>1</sup> provide the costs of post-adoption services used over a six-month period through data collected from 19 adoptive parents six months after a child (average age 23 months) had been placed with them. Table 3 shows that the total mean public sector cost for support services was £3,953 (uprated from 2007/08 prices), rising to £7,078 if financial support is included.

**Table 3 Services received by adoptive parents**

Service or support	Mean costs (sd)	Range (lower)	Range (upper)
Adoption support & social care	£2,415	£854	£6,502
Health care	£524	£0	£2,022
Education support	£11	£0	£119
Specialist services	£115	£0	£1,333
<b>Total cost of services</b>	<b>£3,065</b>	<b>£1,057</b>	<b>£6,762</b>
Financial support	£4,282	£0	£22,953
<b>Total cost (services and financial support)</b>	<b>£7,347</b>	<b>£1,424</b>	<b>£24,010</b>

Financial support includes Adoption Allowances (n=6 families), settling-in grants (n=7), reimbursed expenses over the introductory period (n=8), and benefits and tax credits. In a more recent study, 61 adoptive parents caring for 94 children were interviewed: 88 per cent were reimbursed for expenses during introductions, 70 per cent had received a settling-in grant, and 26 per cent received an Adoption Allowance (Selwyn et al., 2009).<sup>2</sup>

Another study funded through the Adoption Research Initiative reported costs of £3,348 (uprated from 2006/07 prices using the PSS pay & prices inflator) for adopters of children with severe behavioural difficulties, estimated over an average of 12 months of the placement (Sharac et al., 2011).<sup>3</sup> Social work was at the heart of adoption support, accounting for nearly half (44%) of costs. Use of education support (20% of total costs), health care (13%) and other services such as day care and home help (23%) were also recorded.

<sup>1</sup>Neil, E., Cossar, J., Jones, C., Lorgelly, P. & Young, J. (2010) *Helping birth relatives and supporting contact after adoption*, Adoption Research Initiative, [http://www.adoptionresearchinitiative.org.uk/summaries/ARi\\_summary\\_8.pdf](http://www.adoptionresearchinitiative.org.uk/summaries/ARi_summary_8.pdf) [accessed 23 October 2013].

<sup>2</sup>Selwyn, J., Sempik, J., Thurston, P. & Wijedasa, D. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol.

<sup>3</sup>Sharac, J., McCrone, P., Rushton, A. & Monck, E. (2011) *Enhancing adoptive parenting: a cost-effectiveness analysis*, Child and Adolescent Mental Health, 16, 2, 110-115. See also <http://www.adoptionresearchinitiative.org.uk/study6.html> [accessed 9 October 2013].

## 6.10 Multidimensional treatment foster care (MTFC)

Multidimensional treatment foster care (MTFC) is a programme of intervention designed for young people who display emotional and behavioural difficulties. It is based on social learning and attachment theories, and provides intensive support in a family setting. A multidisciplinary team of professionals works with foster carers to change behaviour through the promotion of positive role models. Placements are intensive and tailored to the child's specific needs, with 24-hour support to carers. The specialised team of professionals is responsible for the planning and delivery of the programme, and each practitioner has a clearly-defined role. The core team consists of a programme supervisor, individual therapist, birth family therapist, skills worker, administrator, foster carer recruiter and education worker; additional staff may be appointed in some local authorities (see table 6.4 for information on local authority foster care for children).

Research to calculate the costs of multidimensional treatment foster care<sup>1,2</sup> built on a previous study that calculated unit costs for eight social care processes.<sup>3</sup> The process costs shown below align with those in the tables for children in care (8.4.1-8.4.4): in particular the high-cost children. Costs per hour have been calculated using Curtis (2007)<sup>4</sup> and include overheads and capital costs. For each process, the salary and overhead costs have been multiplied by the time spent by the practitioners involved. The costs tabulated below for providing and maintaining the placement account for over 90 per cent of the costs of a care episode, but exclude the set-up costs. Costs have been updated from 2006/2007 to 2014/2015 prices using the PSS pay & prices inflators.

**Table 1 Costs of eight social care processes for MTFC**

Process number	MTFC cost per child (2014/15 prices)
Process one: decision to place and finding first MTFC placement	£9,944
Process two: care planning	£255
Process three: maintaining the placement (per month)	£7,520
Process four: leaving care/accommodation	£495
Process five: finding subsequent MTFC placement	£9,241
Process six: review	£702
Process seven: legal process	£4,976
Process eight: transition to leaving care services	£2,204

**Table 2 Process costs for other types of provision for young people**

Process number	LA foster care in LA area (2014/15 prices)	Agency/foster care in LA area (2014/15 prices)	Agency residential in LA area (2014/15 prices)
Process one	£1,244	£1,766	£1,568
Process two	£255	£255	£255
Process three	£3,897	£5,636	£10,806
Process four	£495	£495	£495
Process five	£558	£1,112	£1,134
Process six	£845	£845	£845
Process seven	£4,976	£4,976	£4,976
Process eight	£2,204	£2,204	£2,204

<sup>1</sup> Holmes, L., Westlake, D. & Ward, H. (2008) *Calculating and comparing the costs of multidimensional treatment foster care*, Report to the Department for Children, Schools & Families, Loughborough Centre for Child and Family Research, Loughborough University.

<sup>2</sup> Holmes, L., Ward, H. & McDermid, S. (2012) *Calculating and comparing the costs of multidimensional treatment foster care in English local authorities*, *Children and Youth Services Review*, 34, 2141-2146.

<sup>3</sup> Ward, H., Holmes, L. & Soper, J. (2008) *Costs and Consequences of Placing Children in Care*, Jessica Kingsley, London.

<sup>4</sup> Curtis, L. (2007) *Unit Costs of Health and Social Care 2007*, Personal Social Services Research Unit, University of Kent, Canterbury.



## 6.11 Decision-making panels

A number of studies carried out by the Centre for Child and Family Research at Loughborough University have explored the costs of decision-making panels for the Common Assessment Framework (CAF),<sup>1</sup> short-break services for disabled children and their families,<sup>2</sup> and joint commissioning for children with additional needs.<sup>3</sup> The joint commissioning panels were held to discuss both looked-after children and children in need cases. Information was gathered from practitioners, managers and administrative staff on the time taken to complete activities prior to, during and after panel meetings. The costs of the Common Assessment Framework and short-breaks panels are based on data provided by two local authorities. The joint commissioning panel is based on information gathered in one local authority. The activity times for each personnel type involved in the three panels are shown in the table below.

**Table 1 Activity times for CAF, short breaks for disabled children and their families and joint commissioning for children with additional needs panels by personnel type**

Panel	Activity times				
	Panel member	Social worker	Principal manager	Administrator	Lead professional
CAF panel	1 hour 10 minutes	N/A	N/A		5 hours
Short-breaks panel	3 hours 20 minutes	1 hour 45 minutes	N/A	4 hours 40 minutes	N/A
Joint commissioning panel	1 hour 45 minutes	2 hours	1 hour 45 minutes	3 hours 20 minutes	N/A

Unit costs are calculated by multiplying the number of hours carried out for each process by each type of personnel, by the relevant unit costs per hour. Unit costs per hour are based on average salaries for each staff type using national salary scales including salary oncosts (national insurance and superannuation). Direct, indirect and capital overheads are applied as outlined in the *Unit Costs of Health and Social Care* (2011).

Personnel type	Unit cost per hour
Panel member (senior manager)	£49
Family support worker	£30
Social worker	£42
Team manager	£49
Administration	£29

The cost of the CAF panel is based on 12 panel members, discussing eight cases per meeting. The cost of the short breaks panel is based on five panel members discussing four cases per meeting. The cost of the joint commissioning panel is based on four panel members discussing eight cases per meeting.

**Table 2 Cost per case for CAF, short breaks and joint commissioning panels**

Panel	Costs per case considered £					Total cost per case
	Panel member	Social worker	Principal manager	Administrator	Lead professional	
CAF panel	£85				£142	£227
Short-breaks panel	£116	£65		£137		£318
Joint commissioning panel	£43	£73	£86	£98		£299

<sup>1</sup> Holmes, L., McDermid, S., Padley, M. & Soper, J. (2012) *Exploration of the costs and impact of the Common Assessment Framework*, Department for Education, London.

<sup>2</sup> Holmes, L., McDermid, S. & Sempik, J. (2010) *The costs of short break provision*, Department for Children, Schools & Families, London.

<sup>3</sup> Holmes, L., and McDermid, S. (2012) *Understanding Costs and Outcomes in Child Welfare Services: A Comprehensive Costing Approach to Managing Your Resources*. London: Jessica Kingsley Publishers.

## 6.12 Costs of reunification

The Centre for Child and Family Research (CCFR) was commissioned by the National Society for the Prevention of Cruelty to Children (NSPCC) to estimate the costs to the public purse of providing services<sup>1</sup> to support successful reunification to all children and families following a care episode (Holmes, 2014).<sup>2</sup> This table provides the weighted average cost per case, based on estimates that 53 per cent of the children returning home (5,342) will require a high level of support, 16 per cent (1,613) will have medium levels of need, and 31 per cent (3,125) will have low levels of need. The cost for a high, medium and low need case are also included. Two types of costs have been provided here: the cost of providing additional support services for children and families following reunification, and the cost of Children in Need support to children and families when the child returns home. At 2014/15 prices, the weighted average cost was £5,736 per case.

The assumptions about the proportion of families with high, medium and low needs are adapted from the Farmer et al. (2011)<sup>3</sup> study which concluded that 28 per cent of returns were good quality, 14 per cent borderline, 49 per cent poor quality and 9 per cent were not clear. It is assumed that the poor quality returns represent high need, the borderline medium need, and the good quality returns low need. The 9 per cent where the quality of returns is unclear has been apportioned equally across the three categories. Hence, it has been assumed that 53 per cent of reunification cases have high support needs, 16 per cent have medium support needs and 31 per cent have low support needs.

The costs include the provision of parenting support, adult mental health, drug and alcohol and CAMHS services for those with medium and high needs. The proportion of families in each category receiving specific interventions, and the intensity of the interventions, are based on the research evidence (Wade et al., 2011<sup>4</sup>; Farmer et al., 2011<sup>3</sup>; Meltzer et al., 2003<sup>5</sup>). The cost estimations are based on national data. There will be variations between authorities in terms of the needs and costs of the families they are supporting.

The report acknowledges its limitations: for example, the exclusion of the costs incurred by other agencies to support vulnerable children and their families on reunification. It is also acknowledged that some of the assumptions and categorisations will mask some of the complexities of individual cases and the costs associated with supporting these families.

Services	2014/15 Cost per case	Notes
<b>High needs</b> Adult mental health (60%; fortnightly); Drug and alcohol services (50%, fortnightly); Parenting support (80%; weekly); CAMHS (45%, fortnightly).	£9,462	Based on Farmer et al. (2011) <sup>3</sup> and Meltzer et al. (2003) <sup>5</sup> . Based on Farmer et al. (2011) <sup>3</sup> and Meltzer et al. (2003) <sup>5</sup> Based on Farmer et al. (2011) <sup>3</sup> and costs for a family support worker (see table 11.8). Based on Farmer et al. (2011) <sup>3</sup> and Meltzer et al. (2003). <sup>5</sup>
<b>Medium needs</b> Parenting support CAMHS	£1,636	80 per cent of parents receive parenting support, fortnightly, for one year (Farmer et al., 2011). <sup>3</sup> Forty five per cent of children receive CAMHS services, monthly, for one year (Meltzer et al., 2003). <sup>5</sup>
<b>Low needs</b>		It has been assumed that any services to meet the needs of the families would have been provided prior to the child returning home and as part of routine service provision.
<b>Social care support</b>		
<b>High needs</b>	£3,856	Comprises 6 months at a high level (8 hours 15 minutes social worker time plus 50 minutes team manager per month); 3 months at medium level (5 hours and 45 minutes social worker time plus 50 minutes team manager per month) and 3 months at a low level (2 hours and 35 minutes social worker time plus 50 minutes team manager per month). <sup>6</sup>
<b>Medium needs</b>	£2,418	Comprises ongoing support for the family as an open Child in Need case for 9 months; 6 months at medium level followed by 3 months at a low level.
<b>Low needs</b>	£1,204	Comprises ongoing support as an open Child in Need case for 6 months at a low level.
<b>Unit costs available 2014/15</b>		
£5,736 average weighted cost per case.		

<sup>1</sup> Research indicates that much of this support is **not** currently provided. In cases where it is provided by local authorities, it will not represent additional spend. There are significant variations between authorities in terms of types and levels of social care support and services, so the degree of overestimation of the additional cost of these services will vary accordingly.

<sup>2</sup> Holmes, L. (2014) *Supporting children and families returning home from care*, Centre for Child and Family Research, Loughborough University.

<sup>3</sup> Farmer, E., Sturgess, W., O'Neill, T. & Wijedasa, D. (2011) *Achieving successful returns from care: what makes reunification work?* British Association for Adoption and Fostering, London.

<sup>4</sup> Wade, J., Biehal, N., Farrelly, N. & Sinclair, I. (2011) *Caring for abused and neglected children: making the right decisions for reunification or long-term care*, Jessica Kingsley Publishers, London.

<sup>5</sup> Meltzer, H., Gatward, R., Corbin, T., Goodman, R. & Ford, T. (2003) *The mental health of young people looked after by local authorities in England*, The Stationery Office, London.

<sup>6</sup> Holmes, L. & McDermaid, S. (2012) *Understanding costs and outcomes in child welfare services*, Jessica Kingsley Publishers, London.

## 6.13 Short-break provision for disabled children and their families

The Centre for Child and Family Research was commissioned by the Department for Education to calculate the costs incurred by children's services departments to provide short-break services.<sup>1</sup> The average cost of different types of short-break services was estimated, along with the costs of the routes by which families access provision, and the ongoing activity undertaken to support the child and family once in receipt of short-break services.<sup>1</sup> See Holmes & McDermid in Curtis (2010) for detailed information on methods.<sup>2</sup>

### The services

Short breaks can be delivered in the form of overnight stays, day, evening and weekend activities, and can take place in the child's own home, the home of an approved carer, or a residential or community setting.<sup>3</sup> A range of services were identified in this study.

**Table 1 Short break service costs**

Service type	Unit	Average cost 2014/15 value		Range 2014/15 value
		Mean cost	Median cost	
Residential	Per child per night (24-hour period)	£280	£307	£74-£431
Family-based overnight	Per child per night (24-hour period)	£182	£157	£149-£240
Day care	Per child per session (8 hours)	£139	£129	£105-£218
Home support	Per family per hour	£23	£23	£19-£27
Home sitting	Per family per hour	£20	£20	£11-£28
General groups	Per session	£354	£404	£103-£653
Afterschool clubs	Per session	£297	£289	£255-£352
Weekend clubs	Per session	£331	£332	£315-£344
Activity holidays	Per child per break	£1,364	£881	£120 <sup>a</sup> -£3,934 <sup>b</sup>

<sup>a</sup> Short break of two days

<sup>b</sup> Short break of seven days

### The social care processes

The study also calculated the costs of social care activity associated with providing short-break services to disabled children and their families. This included the routes by which families were able to access short-break provision, and any ongoing activity undertaken to support the child and family once in receipt of short-break services.

**Table 2 Social care process costs**

Process	Out of London cost 2014/15 value	London cost 2014/15 value
<b>Referral and assessment processes</b>		
Local Core Offer eligibility models <sup>4</sup>	Not available	£13
Common Assessment Framework	£198	Not available
Initial assessment	£357	£327
Core assessment	£536	£754
Resource panels for short-break services <sup>5</sup>	£101	£55
<b>Ongoing support</b>		
Ongoing support	£81	£105
Reviews	£206	£278

<sup>1</sup> Holmes, L., McDermid, S. & Sempik, J. (2009) *The costs of short break provision: report to the Department for Children, Schools & Families*, Centre for Child and Family Research, Loughborough University.

<sup>2</sup> Holmes, L. & McDermid, S. (2010) The costs of short break provision, in L. Curtis (ed.) *Unit Costs of Health and Social Care 2011*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>3</sup> Department for Children, Schools & Families (2008) *Aiming high for disabled children: short breaks implementation guidance*, Department for Children, Schools & Families, London.

<sup>4</sup> 'Local core offer eligibility model' refers to an access route whereby a local authority offers the provision of a standardised package of short-break services to a specific population of disabled children and young people who meet an identified set of eligibility criteria.

<sup>5</sup> Two of the three participating authorities used panels to decide how resources might be most usefully deployed to support families. The out of London authority held panels once a fortnight and the London authority held their panel monthly.

## 6.14 Local safeguarding children's boards

Research carried out by the Centre for Child and Family Research examined the cost of local safeguarding children's boards (LSCBs) as part of a wider study commissioned by the Department for Children, Schools & Families to explore the effectiveness of the boards in meeting their objectives.<sup>1</sup>

To understand the costs of the LSCB meetings, information was gathered from practitioners, managers and administrative staff on the time taken to complete activities before, during and after LSCB meetings. Board members were asked to complete a time use event record to indicate the time they spent on different LSCB activities in the month preceding the LSCB meeting. Activities included: travel to and from meetings, preparation for meetings and provision of feedback to their agency. Data were collected in relation to the main LSCB meetings and subgroup meetings. The activity times are outlined in the table below.

**Table 1 Average time spent by board members before and after LSCB meetings**

Activity	Average time spent per meeting <sup>a</sup>
Travel	0.89 hours
Preparation for meetings	3.07 hours
Feedback to own agency	1.33 hours
<b>Total</b>	<b>5.29 hours</b>

<sup>a</sup> Figures do not include the time spent in the meeting.

Unit costs are calculated by multiplying the number of hours carried out for each activity by each type of personnel by the relevant unit costs per hour. Unit costs per hour are based on average salaries for each staff type using national salary scales and applying oncosts and overheads as presented in this volume.

Six local authority areas contributed to the study. The structure and activities of the LSCBs in these six areas varied considerably. The costs in each area and the overall average cost are shown below, uprated to 2014/15 using the appropriate inflators. The least expensive area (area 2) had the lowest number of members and seniority was mixed. In area 3 (the most costly area), the LSCB met on a monthly basis, whereas the other Boards met less regularly.

**Table 2 The costs of local safeguarding children's boards**

LSCB	Infrastructure (staffing, including Chair) per year	Estimated costs of board member attendance at LSCB meetings		Cost of subgroups
		Estimated cost per meeting	Estimated cost per year	
Area one	£137,239	£11,779	£70,672	£68,473
Area two	£106,968	£7,363	£44,176	£22,448
Area three	£309,279	£17,842	£214,109	£150,349
Area four	£99,279*	£16,434	£65,735	£81,743
Area five	£116,388	£9,780	£58,680	Data not available
Area six	£201,513	£17,079	£68,318	Data not available
<b>Average cost</b>	<b>£161,777</b>	<b>£13,380</b>	<b>£86,949</b>	<b>£80,753</b>

\*Figure does not include the time spent in the meeting.

<sup>1</sup> France, A., Munro, E. & Waring, A. (2010) *The evaluation of arrangements for effective operation of the new local safeguarding children boards in England*, Final Report, Department for Education, London.

## 6.15 Parenting programmes for the prevention of persistent conduct disorder

The most successful parenting programmes targeted at parents of children with or at risk of developing conduct disorder are designed to improve parenting styles and parent-child relationships, in turn having positive effects on child behaviour. This table draws information from a study by Bonin & colleagues (2011)<sup>1</sup> which identified the average costs for group-based interventions and one-to-one delivery-based interventions. In turn these estimates drew on data collected between 2007 and 2009 by researchers at the National Academy for Parenting Research. Data on parenting programmes can be found at <http://www.education.gov.uk/commissioning-toolkit>. While there are many different parenting programmes, administered in a variety of formats, often they are group-based lasting between 1.5 and 2.0 hours per week over 8-12 weeks.

Tables 1 and 2 show the cost of delivering three parenting programmes for which there is evidence of effectiveness. According to NICE (2007),<sup>2</sup> about 80 per cent of parenting programmes can be delivered in a group format, and this figure is used to weight the median costs. The expected intervention cost based on 80 per cent group and 20 per cent individual provision used for the model is therefore £1,228 per participant. All costs have been updated to 2014/2015 using the appropriate inflators.

### 6.15.1 Group delivery (Triple P and Strengthening Families-Strengthening Communities)

	Median	Mean	Low	High
Total practitioner cost (includes time in session, preparation and supervision time)	£6,437	£6,273	£1,207	£11,008
Venue hire	£995	£942	£569	£1,209
Food and refreshment	£519	£492	£297	£631
Childcare	£590	£524	£202	£716
Translation services	£660	£587	£226	£802
Materials	£155	£147	£116	£162
Total cost per programme for training, supervision and materials	£9,356	£8,965	£2,617	£14,528
<b>Total per person assuming 10 per group</b>	<b>£937</b>	<b>£896</b>	<b>£262</b>	<b>£1,453</b>
Total costs of practitioners' training time and fees	£2,028	£2,338	£1,429	£3,869
Training/100 people (assuming 10 participants per group and 10 sessions delivered)	£20	£23	£14	£39
<b>Per person estimate including a component for training</b>	<b>£956</b>	<b>£920</b>	<b>£276</b>	<b>£1,491</b>
Hours of supervision needed x hourly cost of minimum recommended level of supervisor	£491	£491	£268	£713
Per person supervision estimate assuming: 10 per group; cost does not depend on number of practitioners; nor the number of programmes run at once	£49	£49	£27	£71
<b>Per person per programme estimate including a component for training and supervisor cost</b>	<b>£1,005</b>	<b>£969</b>	<b>£303</b>	<b>£1,563</b>

<sup>1</sup> Bonin, E., Stevens, M., Beecham, J., Byford, S. & Parsonage, M. (2011) Costs and longer-term savings of parenting programmes for the prevention of persistent conduct disorder: a modelling study, *BMC Public Health*, 11, 803, doi:10.1186/1471-2458-11-803.

<sup>2</sup> National Institute for Health and Clinical Excellence (2007) *Parent-training/education programmes in the management of children with conduct disorders*, National Institute for Health and Clinical Excellence, London.

### 6.15.2 One-to-one delivery (Triple P, Strengthening Families-Strengthening Communities and Helping the Noncompliant Child)

	<b>Median</b>	<b>Mean</b>	<b>Low</b>	<b>High</b>
Total staff cost (includes session, preparation and supervision time) for one lead practitioner	£1,904	£2,710	£758	£5,504
Total food	£52	£40	£0	£63
Childcare	£59	£42	£0	£71
Translation	£66	£47	£0	£81
Materials	£15	£12	£1	£16
<b>Total costs (including preparation, supervision, materials etc.)</b>	<b>£2,095</b>	<b>£2,851</b>	<b>£759</b>	<b>£5,735</b>
Training costs (lead practitioner)	£691	£677	£494	£865
Training fees	£645	£873	£144	£2,140
Total costs of lead practitioner's training time and fees	£1,337	£1,550	£638	£3,005
Per person training component (assuming 50 deliveries per training)	£27	£31	£13	£60
<b>Total including training component</b>	<b>£2,122</b>	<b>£2,882</b>	<b>£772</b>	<b>£5,795</b>
Hours of supervision needed x hourly cost of minimum recommended level of supervisor	384 hrs	452 hrs	256 hrs	680 hrs
Per person supervision estimate assuming: 10 one-to-one programmes delivered per supervisor term; cost does not depend on the number of practitioners	£38	£45	£26	£68
<b>Per person per programme estimates including training and supervisor cost</b>	<b>£2,160</b>	<b>£2,927</b>	<b>£797</b>	<b>£5,863</b>

## 6.16 Parent training interventions for parents of disabled children with sleep or behavioural problems

This table draws on work carried out by Beresford and colleagues (2012)<sup>1</sup> and provides the costs of five different parent training interventions for parents of disabled children with sleep or behavioural problems. Costs have been updated using current salaries and overhead information. The cost for each programme is an average cost.

Description of programme	Staff (Agenda for Change band/local authority band if provided) FTE unless otherwise noted	Staff sessions and hours (including preparation, delivery, debrief)	Average cost per programme (including programme and staff)
The <b>Ascend Programme</b> is a group-delivered parent-training programme for parents of children with Autistic Spectrum Conditions (ASC). Up to 20 participants per programme.	Clinical psychologist (7), learning disability nurse (7), S&L therapist (5), consultant clinical psychologist (8D), consultant psychiatrist (8DD), learning disability nurse (6), CAMHS therapist (6), social worker assistant, learning disability nurse (7), clinical psychologist (6)	Delivered in 10 weekly sessions of 2-2.5 hours plus final follow up session. In total 46.5 hours were delivered by staff across 4 programmes.	<b>Staff cost</b> £7,872 <b>Programme cost</b> £171 <b>Total</b> £8,042
The <b>Cygnnet programme</b> is a group-delivered parent-training programme for parents of children with Autistic Spectrum Conditions, age 7 to 18.	Cygnnet co-ordinator, Bradford and District Autistic Support Group (BADASG) co-ordinator, child psychologist (8B), consultant clinical psychologist (8D), clinical psychologist (7), social worker, teacher, administrator (level 3), senior CAMHS practitioner (7), 3 STARS workers and a student nurse.	Delivered in CAMHS and voluntary sector community facilities in 6-weekly 2.5 hour sessions. There is a reunion session at three months. In total 51.5 hours were delivered by staff across 6 programmes.	<b>Staff cost</b> £3,963 <b>Programme cost</b> £171 <b>Total</b> £4,134
The <b>Confident Parenting Programme</b> is a 6-week, group-delivered parent-training programme for parents of disabled children (aged 7 to 18 years). A maximum of 12 participants is recommended.	Consultant clinical psychologist (8C), 2 clinical psychologists (7 and 5), head teacher, assistant psychologist (6) and teacher.  There are typically 3 members of staff at each session.	The programme has 6-weekly sessions of 2 hours (+1 optional follow-up). In total 69 sessions (15 hours) were delivered by staff across 4 programmes. An additional 40 hours was required to set up the groups.	<b>Staff cost</b> £4,114 <b>Programme cost</b> £227 <b>Total cost</b> £4,341
<b>Riding the Rapids</b> is a group-delivered parent-training programme for parents of children with Autistic Spectrum Conditions and other disabilities (aged 4-10).	Clinical psychologist (8b), teaching assistant (TA4), S&L therapist, clinical psychologist, senior nurse, deputy head, community nurse (7), parent facilitator, 2 clinical psychologists, assistant psychologist and a community nurse.	The programme is delivered in 10-weekly sessions of 2 hours. In total 33.5 hours were delivered across 7 programmes.	<b>Staff cost</b> £3,210 <b>Programme cost</b> £255 <b>Total cost</b> £3,465
The <b>Promoting Better Sleep Programme</b> is a group-delivered intervention for parents of children with Autistic Spectrum Disorder and/or learning and/or sensory disabilities.	C & A learning disabilities team co-ordinator (7), community learning disability nurse (6), consultant clinical psychologist (8D), autistic spectrum link nurse (4). (Typically 2 members of staff at each session)	A manual-based programme in 4-weekly sessions of 3 hours over 5-6 weeks. In total 32 sessions (16.5 hours) were delivered across 4 programmes.	<b>Staff cost</b> £1,822 <b>Programme cost</b> £111 <b>Total cost</b> £1,932

<sup>1</sup> Beresford, B., Stuttard, L., Clarke, S., Maddison, J. & Beecham, J. (2012) *Managing behaviour and sleep problems in disabled children: an investigation into the effectiveness and costs of parent-training interventions*, Research Report DFE-RR204a, Department for Education, London.

## 6.17 Independent reviewing officer (IRO)

An independent reviewing officer (IRO) ensures that the care plan for a looked-after child clearly sets out the help, care and support that they need, and takes full account of their wishes and feelings. Local authorities are required by law to appoint an IRO for each looked-after child. Since 2011, IROs are responsible for chairing statutory reviews and also for monitoring children's care plans on an ongoing basis (Ofsted, 2013). The analysis of resources needed for the IRO service was conducted as part of the cost analysis carried out by the Centre for Child and Family Research (CCFR), Loughborough University (Jelicic et al., 2014).<sup>1</sup> Caseloads and time inputs have been based on suggested best practice and statutory guidance.<sup>2</sup>

Costs and unit estimation	2014/15 value	Notes
A. Salary	£39,220 per year	In line with IRO Guidance (Department for Children Schools & Families, 2010) <sup>2</sup> IROs are paid at the same level as a team manager. The average salary for a team manager was £35,410 for 2007/08. <sup>3</sup> As no new salary estimates are available, this has been inflated to reflect the pay increments for social workers reported in the Local Government Earnings Surveys 2009 to 2015. <sup>4</sup>
B. Salary oncosts	£12,158 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation. <sup>5</sup>
C. Qualifications	£26,143 per year	IROs are required to be registered social workers. Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>6</sup> Current cost information is drawn from research by Curtis et al. (2011). <sup>7</sup>
D. Ongoing training		IROs should have training to develop their observational skills for work with children under the age of four, communicate with disabled children and develop links with and awareness of support and services for disabled children. IROs have regular monthly or six-weekly supervision, and regular access to their managers for ad hoc consultation. <sup>2</sup>
E. Direct overheads	£14,890 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.
Indirect overheads	£8,220 per year	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>8</sup>
F. Capital overheads	£2,566 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. <sup>9,10</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
G. Travel		No information available on average mileage covered per review. For information see <i>Green Book: National Agreement on Pay and Conditions of Service</i> . <sup>11</sup>
Working time	41 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.2 days sickness leave have been assumed based on the median average sickness absence level in England for all authorities. <sup>9,12</sup> Unit costs are based on 1,516 hours per year.
Review	8.5 hours	Based on recommendations for a properly resourced IRO service, a standard case should take a total of between 7.5 and 9.5 hours. This includes preparation time (up to 1 hr) consultation with the child/young person, social worker, parents and foster carer/ keyworker/family or friends' carer, the review meeting (between 1.5 to 2 hrs) plus travel time, and up to two hrs for writing up the report. This work takes the midpoint (8.5 hours).
Ongoing monitoring	1 hour	Up to 1 hour is allocated between review meetings for standard cases. Up to 2 additional hours should be allocated if there are issues that need to be resolved, delays, poor practice or if the child is unhappy in their placement.
Case load	60	It is estimated that a caseload of 50-70 looked-after children for a full time equivalent IRO would represent good practice in the delivery of a quality service. <sup>2</sup> The midpoint has been taken. Results of a national survey show that overall the (mean) average caseload for a full-time equivalent IRO was 78 looked-after children.
London multiplier	1.10 x A 1.49 x F	Allows for higher costs associated with London compared to the national average cost. <sup>3,9,10</sup>
<b>Unit costs available 2014/15 (costs including qualifications given in brackets)</b>		
£51 (£68) per hour; £432 (£579) per review; £483 (£647) (including ongoing monitoring).		

<sup>1</sup> Jelicic, H., La Valle, I. & Hart, D. with Holmes, L. (2014) *The role of Independent Reviewing Officers (IROs) in England*, National Children's Bureau, London.

<sup>2</sup> Department for Children, Schools & Families (2010) *IRO Handbook, Statutory guidance for independent reviewing officers and local authorities on their functions in relation to case management and review for looked after children*, Department for Children, Schools & Families. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/273995/iro\\_statutory\\_guidance\\_iros\\_and\\_las\\_march\\_2010\\_tagged.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/273995/iro_statutory_guidance_iros_and_las_march_2010_tagged.pdf) (accessed 8 July 2014).

<sup>3</sup> Local Government Association Analysis and Research (2008) *Local government earnings survey 2007*, Local Government Analysis and Research, London.

<sup>4</sup> Local Government Association (2014) *Local government pay and workforce research*, <http://www.local.gov.uk/research-pay-and-workforce/> [accessed 16 October 2015].

<sup>5</sup> Thurley, D. (2011) *Local government pension scheme, 2010 onwards*, House of Commons, London.

<sup>6</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>7</sup> Curtis, L. Moriarty, J. & Netten, A. (2012) The costs of qualifying a social worker, *British Journal of Social Work*, 42, 4, 706-724.

<sup>8</sup> Based on information taken from Selwyn, J. et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>9</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>10</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>11</sup> Local Government Employers (2012) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London. [http://www.local.gov.uk/web/guest/workforce/-/journal\\_content/56/10180/3510601/ARTICLE/](http://www.local.gov.uk/web/guest/workforce/-/journal_content/56/10180/3510601/ARTICLE/) [accessed 9 October 2013].

<sup>12</sup> Local Government Association (2012) *Local government workforce survey 2011/12*, [http://www.local.gov.uk/local-government-intelligence/-/journal\\_content/56/10180/3328402/ARTICLE/](http://www.local.gov.uk/local-government-intelligence/-/journal_content/56/10180/3328402/ARTICLE/) [accessed 9 October 2013].



## 6.18 Early Years Teacher Classroom Management Programme

The *Teacher Classroom Management programme* is a prevention programme to strengthen teacher classroom management strategies, and promote children's prosocial behaviour and school readiness (reading skills). The programme is intended for group leaders who plan to work with groups of teachers to promote these skills. It is divided into 6 full-day workshops, with enough time between each workshop for teachers to practise the new skills they are learning. The *Teacher Classroom Management Programme* is useful for teachers, teacher aides, school psychologists and school counsellors <http://incredibleyears.com/programs/teacher/classroom-mgt-curriculum/>. See also Ford et al. (2012) for details on the cost-effectiveness of the programme.<sup>1</sup>

The following table provides the costs for two group leaders to deliver a 6 day workshop to 10 teachers. Excluded from this table are the costs of ongoing consultation by telephone or in person for new group leaders. The consultation fee is £120 per hour. Although not obligatory, group leaders are encouraged to apply for certification/accreditation (£270). Where costs on the Incredible Years website have been provided in dollars, they have been converted at a rate of \$1=£0.60 (2 June 2014). Based on 2013/14 costs and updated using the appropriate inflators.

Costs and unit estimation	2014/15 value	Notes
<b>Start-up costs</b>		
Group leader training	£1,443 per year	Based on the cost of £241 per person per day for a three-day training course. Training delivered by an Incredible Years certified trainer or mentor. (Costs exclude airfare from the USA and accommodation, which will vary and might be shared with other programmes).
Materials	£1,495 per year	This includes Incredible Years materials such as manuals, assorted books, tool box, wheel of fortune, puppets etc. Also, video cameras should be included if sessions are to be filmed
<b>Group leaders</b>		
Course planning	£13,232 per year	Based on the cost of £551 per day (includes salaries and overheads) for two group leaders for six days.
<b>Teachers attending programme</b>		
Supply cover	£9,623 per year	Supply cover provided for the 10 teachers attending the course at £160 per day for 6 days.
<b>Incredible Years professional</b>		
Supervision	£1,564 per year	Supervision provided by an Incredible Years professional for the 6 sessions. Based on a cost of £260.50 per session
Venue		Cost for venue is not known.
Course materials	£351 per year	Books and handouts at £35 per teacher for 10 teachers
Miscellaneous costs	£50 per annum £372 per annum	Incentives and materials Lunch and refreshments are based on a cost of £60 per session.
Certification/accreditation	£270 per annum	This promotes fidelity to the programme
<b>Unit Costs for 2014/15</b>		
Start-up costs £2,938 (excluding airfare and accommodation for Incredible Years trainer).		
Cost per programme for 10 teachers excluding start-up costs £25,461.		
Cost per teacher excluding start-up costs £2,546.		

<sup>1</sup> Ford, T., Edwards, V. Sharkey, S., Ukoumunne, O., Byford, S. Norwich, B. & Logan, S. (2012) Supporting teachers and children in schools: the effectiveness and cost-effectiveness of the incredible years teacher classroom management programme in primary school children: a cluster randomised controlled trial, with parallel economic and process evaluations, *BMC Public Health*, 12, 719, doi:10.1186/1471-2458-12-719.



## **7. Hospital and related services**

7.1 NHS reference costs for hospital services

7.2 NHS wheelchairs

7.3 Equipment and adaptations

7.4 Public health interventions

7.5 Hospice rapid response service

7.6 Specialist neuro-rehabilitation service



## 7.1 NHS reference costs for hospital services

We have drawn on the *NHS Trust and Primary Care Trusts combined* dataset to report the costs of selected adult health services.<sup>1</sup> All costs have been updated to 2014/15 levels using the HCHS pay & prices inflator.

Each reported unit cost includes:

- (a) direct costs – which can be easily identified with a particular activity (e.g. consultants and nurses)
- (b) indirect costs – which cannot be directly attributed to an activity but can usually be shared among a number of activities (e.g. laundry and lighting)
- (c) overheads – which relate to the overall running of the organisation (e.g. finance and human resources).

For information on the method used to allocate drugs to services, see reference cost guidance for 2012-2013.<sup>1</sup>

	National average	Lower quartile	Upper quartile
<b>Elective/non elective Health Care Resource Group (HRG) data, average cost per episode</b>			
Elective inpatient stays	£3,405	£2,440	£4,035
Elective inpatient stays (inc. carbon impact 708 kgCO <sub>2</sub> e) <sup>2</sup>	£3,435		
Non-elective inpatient stays (long stays)	£2,863	£2,084	£3,360
Non-elective inpatient stays (long stays) (inc. carbon 595 kgCO <sub>2</sub> e)	£2,888		
Non-elective inpatient stays (short stays)	£608	£412	£710
Non-elective inpatient stays (short stays) (inc. carbon 126 kgCO <sub>2</sub> e)	£615		
<b>Day cases HRG data (finished consultant episodes)</b>			
Weighted average of all stays	£704	£483	£844
Weighted average of all stays (inc. carbon 146 kgCO <sub>2</sub> e)	£710		
<b>Outpatient attendances</b>			
Weighted average of all outpatient attendances	£112		
Consultant led	£118		
Non-consultant led	£91		
<b>Weighted average of all outpatient attendances (inc. carbon 23 kgCO<sub>2</sub>e)</b>	£113		
<b>PALLIATIVE CARE</b>			
Inpatient – specialist palliative care (adults only), average cost per bed day	£371	£252	£500
Inpatient – hospital specialist palliative care support (adults and children)	£119	£40	£111
Outpatient – medical specialist palliative care attendance (adults and children)	£153	£1043	£151
Outpatient – non-medical specialist palliative care attendance (adults and children)	£96	£56	£160
<b>AMBULANCE SERVICES (Weighted average of attendances)</b>			
Calls	£7	£6	£8
Hear and treat and refer	£44	£37	£44
See and treat and refer	£180	£155	£188
See and treat and convey	£231	£206	£254
All Ambulance Services	£99	£87	£107

<sup>1</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>2</sup> Costs of carbon emissions provided by Imogen Tennison, Sustainable Development Unit. Contact [Imogen.tennison@nhs.net](mailto:Imogen.tennison@nhs.net) for more information. See Preface.

## 7.2 NHS wheelchairs

Information about wheelchair costs is based on the results of a study of six sites supplying wheelchairs to adults and older people.<sup>1</sup> The study information was supplemented with national data not available from the sites. Three main types are identified: those propelled by an attendant or self-propelled; a lighter type of chair especially designed for active users; and powered wheelchairs. (Active users are difficult to define, but generally refer to individuals who are permanently restricted to a wheelchair but are otherwise well and have high mobility needs.) The cost of modifications is included in the estimated capital value, but this is a very approximate mid-range figure so specific information should be used wherever possible. All costs have been updated using the retail price index.

Although no further studies have been carried out on wheelchairs, current price information suggests that powered wheelchairs range from £700-£3,000 and self- or attendant-propelled wheelchairs range from £100-£650.

Type of chair	Total value 2014/15	Annual cost 2014/15	Notes
Capital costs			
Self- or attendant-propelled	£287	£64	Capital value has been annuitised over five years at a discount rate of 3.5 per cent to allow for the expected life of a new chair. In practice, 50 per cent of wheelchairs supplied have been reconditioned, not having been worn out by the time their first users ceased to need them.
Active user	£716	£159	
Powered	£1,432	£317	
Revenue costs			
Maintenance			Revenue costs exclude therapists' time but include the staff costs of maintenance. The costs include all costs for pressure relief. The cost of reconditioning has not been included in the cost of maintenance.
- non-powered		£30	
- powered		£118	
Agency overheads			No estimate of management overhead costs is available. They are likely to be minimal.
<b>Unit costs available 2014/15</b>			
£94 per self or attendant propelled chair per year; £189 per active user per chair per year; £436 per powered chair per year.			

<sup>1</sup> Personal communication with Richard Murray, National Health Service Management Executive, 1995.

## 7.3 Equipment and adaptations

Community equipment refers to any items of equipment prescribed by occupational therapists, physiotherapists and other health staff, designed to help vulnerable or older people and those with disabilities or long-term health conditions to manage everyday tasks independently at home. For this schema, we have drawn from a study commissioned by PSSRU and undertaken by Astral/Foundations (<http://www.foundations.uk.com/about-home-improvement-agencies/>), one aim of which was to identify the process and resources used to supply equipment and adaptations. Information was received from 17 organisations (85% response rate) to support the research: ten local authorities, six Home Improvement Agencies (HIAs) and the British Association of Occupational Therapists. The research differentiated between the time taken to supply and install minor adaptations (generally those under £1,000) and also provided time inputs of the staff involved in administering the process and assessing clients. (See the Preface for forthcoming information.)

In tables 1-2, we have provided information on equipment and installation costs for major and minor adaptations, and in tables 3-4 staff preparation and assessment time are provided. Further work will be carried out for next year's volume to monetise the staff preparation and assessment time for both major and minor adaptations. Excluded from the research brief were items of equipment and systems commonly regarded as telecare or telehealth, as these types of equipment have been the focus of previous work (see Henderson & colleagues article in the 2013 edition of this report).

The period over which adaptations to housing should be annuitised is open to debate. Ideally they should be annuitised over the useful life of the aid or adaptation. In many cases this is linked to the length of time the person using the appliance is expected to remain at home. Where it is expected that the house would be occupied by someone else who would also make use of the equipment, a longer period would be appropriate. Clearly, this is difficult to do in practice. Following government guidelines on the discount rate, the items in the table below have been annuitised over 10 years at 3.5 per cent.<sup>1</sup> The costs have been uprated from 2013/14 using the Retail Prices Index.

**Table 1 Major adaptations, including installation costs**

	Sample size	Lowest cost	Highest cost	Mean (median) cost	Mean (median) annual equipment cost (3.5% discount)
Level access shower	21	£2,581	£12,390	£4,802 (£4,116)	£577 (£495)
Stair lift (straight)	21	£1,084	£2,920	£1,935 (£1,987)	£233 (£239)
Stair lift (more complex)	7	£2,375	£6,828	£4,712 (£4,749)	£566 (£571)
Convert room for downstairs WC /washroom	7	£2,891	£22,715	£10,176 (£10,192)	£1,223 (£1,225)
Build downstairs extension for WC/washroom	5	£12,390	£30,975	£23,296 (£25,812)	£2,800 (£3,103)
Build downstairs extension for bedroom	5	£12,390	£46,462	£26,582 (£26,582)	£3,315 (£3,195)
Build downstairs extension for bedroom and en suite facilities	6	£23,747	£46,462	£34,732 (£33,109)	£4,175 (£3,979)
<b>Total</b>	<b>52</b>				

<sup>1</sup> See [http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Aboutus/Procurementandproposals/Publicprivatepartnership/Privatefinanceinitiative/Changestotreasurygreenbook/DH\\_4016196](http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Aboutus/Procurementandproposals/Publicprivatepartnership/Privatefinanceinitiative/Changestotreasurygreenbook/DH_4016196).

**Table 2 Minor adaptations, including installation costs**

	Sample size	Lowest cost	Highest cost	Mean (median) cost	Mean (median) annual equipment cost (3.5% discount)
Fit handrail – external	8	£17	£102	£42 (28)	£5 (£3.40)
Fit handrail – internal	10	£10	£67	£28 (20)	£3.50 (£2.40)
Fit handrail to bath	8	£9	£29	£18 (20)	£2.20 (£2.40)
Fit over bath shower	6	£322	£1859	£108 (£1200)	£13 (£144)
Create step to front/back door	8	£21	£1549	£481 (£90)	£59 (£10.90)
Create ramp to front/back door	5	£122	£700	£316 (120)	£39 (£14)
Lay new path, per metre cost	3	£101	£124	114 (£120)	£14 (£14.40)
Widen doorway for wheelchair access	6	£301	£683	£536 (£660)	£66 (£79.30)
Install lighting to outside steps/path	5	£26	£620	£256 (£140)	£31 (£16.80)
Move bed to downstairs room	3	£31	£46	£40 (£45)	£5 (£5.40)
Raise electrical sockets/lower light switches	6	£41	£1520	£80 (£75)	£10 (£9.00)

**Table 3 Mean average time inputs for staff involved in the process of providing minor adaptations**

	Average time in minutes			
	Initial enquiry	OT	HIA administrator	Total time
Fit handrail – external	9.8	84	30	123.8 (2.06 hours)
Fit handrail – internal	9.8	72	30	111.8 (1.7 hours)
Fit handrail to bath	9.8	42	24	75.8 (1.1 hours)
Fit (handrail) over bath shower	9.8	84	42	135.8 (2.1 hours)
Create step to front/back door	9.8	132	30	171.8 (2.7 hours)
Create ramp to front/back door	9.8	360	30	399.8 (6.5 hours)
Lay new path, per metre cost	9.8	192	48	249.8 (4 hours)
Widen doorway for wheelchair access	9.8	456	42	507.8 (8.3 hours)
Install lighting to outside steps/path	9.8	318	12	339.8 (5.5 hours)
Move bed to downstairs room	9.8	78	42	129.8 (2 hours)
Raise electrical sockets/lower light switches	9.8	156	36	201.8 (3.2 hours)

**Table 4 Mean average time inputs for staff involved in providing major adaptations**

	Initial enquiry	Average minutes					Total time
		OT	LA grants officer	HIA technical officer	HIA caseworker	HIA administrator	
Level access shower	9.8	210	462	420	287	168	1,557 (26 hours)
Stairlift (straight)	9.8	72	186	120	474	120	982 (16.4 hours)
Stairlift (more complex)	9.8	156	756	306	96	120	1,444 (24.1 hours)
Convert room for downstairs WC/washroom	9.8	498	792	672	276	312	2,560 (42.7 hours)
Build downstairs extension for WC washroom	9.8	816	1,188	1,578	144	174	3,910 (65.2 hours)
Build downstairs extension for bedroom and en-suite facilities	9.8	1,068	1,356	1,272	372	234	4,312 (71.9 hours)



## 7.4 Public health interventions

These costs are drawn from two reports: *Prioritising investments in public health* (Matrix Evidence and Bazian, 2008),<sup>1</sup> commissioned by the Department of Health, and *A review of the cost-effectiveness of individual level behaviour change interventions* commissioned by the Health and Well-Being Alliance group (North West Public Health Observatory, 2011).<sup>2</sup> Here we present the costs of interventions for which the economic evidence originated in the UK. Further information can be found on Public Health Interventions in the Cost Effectiveness Database (PHICED) <http://www.yhpho.org.uk/PHICED/>. All costs have been taken directly from the reports and updated to 2014/2015 prices using the appropriate inflators. Further information on the specific research studies can be found in the reports named above.

### Reducing long-term absence in the workplace

The NICE public health guidance on *Management of long-term sickness and incapacity for work*<sup>3</sup> provides cost information for three types of intervention: physical activity and education (10 sessions of physiotherapy or physical activity and 10 sessions of cognitive behaviour therapy); workplace intervention (usual care, workplace assessment and work modifications and communication between occupational physician and GP to reach a consensus on return to work); and physical activity and education along with a workplace visit (sessions as before plus half a day of line manager's time).

**Table 1 Workplace interventions**

Intervention	Workplace intervention	Physiotherapy/ physical activity	Cognitive behaviour therapy	Workplace visit	Total
Physical activity and education		£179	£681		£860
Workplace intervention	£579				£579
Physical activity education and workplace visit		£179	£681	£51	£911

### Alcohol intervention

**Intervention: Brief interventions** have proven to be effective and have become increasingly valuable for the management of individuals with increasing and high-risk drinking, filling the gap between primary prevention efforts and more intensive treatment for persons with serious alcohol use disorders. The cost of delivering ten minutes' brief advice for alcohol ranges from £8 for a practice nurse to £38 for a GP (see tables 10.6 and 10.8c of this publication).

### Reducing the incidence of sexually transmitted infections (STIs) and teenage pregnancy

**Intervention: Individual risk counselling**, defined here as a one-to-one intervention, is delivered by a counsellor to at-risk groups with the aim of reducing incidence of STIs or risky behaviour. Individual risk counselling can be delivered through clinics (genitourinary medicine, abortion, or drug and alcohol misuse clinics), community health services, GPs and other community and non-health care settings. The review suggested that counselling interventions cost between £85 and £187 per person.

### Reducing smoking and the harms from smoking

**Intervention:** The review suggests that there is strong evidence that **mass media campaigns** for both young and adult populations cost between £0.30 and £2.02 per person. Estimates of cost are higher when the unit receiving the intervention is defined as those potentially exposed to the campaign (£26-£49).

**Intervention: Drug therapies for smoking cessation** can include nicotine replacement therapy (NRT) (such as nicotine patches and gum), nicotine receptor partial antagonists (such as varenicline), opioid antagonists (such as naltrexone), clonidine, lobeline, or antidepressants (such as bupropion). There is evidence that drug therapy (bupropion, nicotine replacement therapy and varenicline) has a moderate effect on smoking cessation, particularly in people motivated to quit.

<sup>1</sup> Matrix Evidence & Bazian (2008) *Prioritising investments in public health*, Department of Health, London.

<sup>2</sup> North West Public Health Observatory (2011) *A review of the cost-effectiveness of individual level behaviour change interventions*, Health and Wellbeing Alliance, Manchester. <https://www.ewin.nhs.uk/news/item/2011/changes-in-the-nhs> [accessed 9 October 2013].

<sup>3</sup> <https://www.nice.org.uk/guidance/ph19>

There is economic evidence from the UK on the cost of NRT (£47-£162 per person), bupropion (£89-£95 per person), and combinations of NRT and bupropion (£178-£184 per person).

**Intervention: A ten-minute opportunistic brief advice session** for smoking costs £36 for a GP and £7 for a practice nurse (see tables 10.6 and 10.8c of this publication).

### Well man services

Information has been drawn from the Liverpool Public Health Observatory Series<sup>1</sup> and provides the costs of 18 well man pilots in Scotland funded between June 2004 and March 2006, aimed to:

- Promote healthier lifestyles and attitudes among men;
- Provide men with an opportunity to undertake a health assessment and to obtain advice and support on health and lifestyle issues;
- Effectively engage all men and, in particular, those who were hardest to reach as a consequence of social exclusion or discrimination. They were also intended to identify what worked in promoting and sustaining health awareness and improvement in men.

Staff variation was the main factor in different session costs, and attendance rate was the main factor in cost per health assessment, particularly at drop-in services in community venues, where attendance was unpredictable. The costs did not include those incurred by patients.

**Table 2 Cost comparison of delivery modes – well man service pilots**

Location	Cost per session		Cost per assessment	
	Number	Range	Number	Range
Health clinics	9	£207-£914	9	£47-£311
Workplaces	2	£227-£241	3	£30-£113
Community venues (inc. pharmacies)	6	£110-£468	4	£69-£1,222

### Health action area – community programme

Within the Wirral health action area, specialist lifestyle advisory staff are co-located with health trainers and community health development staff. These teams work with individuals and groups and provide (or commission) a community programme of lifestyle activities including mental wellbeing. They work closely with employability programmes such as the Condition Management Programme and Wirral Working 4 Health. The teams are based in a variety of community venues including a children's centre, and they also work closely with a wide network of other partner agencies, particularly where there is a common interest, e.g. in accessing particular groups such as men aged over 50 or homeless people. This is a model of wellness which takes a network approach within a particular neighbourhood potentially involving all aspects of the wellbeing of an individual or family through joint working rather than a discrete wellness service.

An evaluation of the community programme showed the average cost per client is £36.

<sup>1</sup> Winters, L., Armitage, M., Stansfield, J. Scott-Samuel & Farrar, A. (2010) *Wellness services – evidence based review and examples of good practice*, Final Report, Liverpool Public Health Observatory.

## 7.5 Hospice Rapid Response Service

This table is based on a Rapid Response Service (RRS) introduced by Pilgrims Hospices in East Kent in 2010. RRSs provide intense care over relatively short periods when crises arise, and work alongside regular domiciliary services that offer longer-term support, to help avoid admission to hospice or hospital.<sup>1</sup> This team services three areas and has access to a service co-ordinator, medical advice and equipment that can be carried by car. The team responds rapidly 24/7 to crises in patients' own homes (including care homes); undertakes a robust assessment which takes account of patient and carer/family preferences, patient needs, and patient prognosis; provides hands-on care; and works in co-ordination with other community services. See *Setting up a new hospice at home service*<sup>2</sup> for further information. See also *National Survey of Patient Activity Data* for more information on specialist palliative care services.<sup>3</sup>

Costs and unit Estimation	2014/15 value	Notes
A. Wages/salary	£282,423 per year	Based on mean Agenda for Change (AfC) salaries for 18 band 3 health care assistants (HCAs) <sup>4</sup> who spend 85 per cent of their time on duties related to the RRS.
B. Salary oncosts	£61,715 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications		HCAs required NVQ 2/3 or equivalent and community end-of-life care experience.
D. Training		The HCAs were provided with an initial orientation training programme covering introduction to the hospice and clinical work on wards and in the community. They also attended a 5-day hospice palliative care course costing approximately £750. Staff have continued to access in-house development training, statutory and mandatory annual training.
E. Overheads		Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>5</sup> Hospice overheads are broadly similar to those applied to NHS staff.
Service co-ordinator and day to day co-ordinator	£70,650 per year	Supervision (40% of WTE) provided by Agenda for Change band 8 plus a day to day coordinator (80% of WTE) provided by Agenda for Change band 3.
Management, administration and estates staff	£22,069 per year	Includes estates and indirect care staff which are assumed to be approximately 5 per cent of direct care salary costs.
Non-staff	£131,461 per year	Non-staff costs were 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport and telephone, education and training, supplies and services (clinical and general), as well as utilities such as water, gas and electricity.
F. Capital overheads	£3,718 per year	Based on the new-build and land requirements of NHS facilities. <sup>6,7</sup> It is assumed that each HCA uses one-sixth of an office. Six HCAs are on duty at any one time. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
H. Travel	£122,606 per year	£12.10 per visit. Based on the average number of visits per patient in 2012 (16.6).
Caseload	610 per year	Number of patients
Hours and length of service		The service is available 24/7.
Ratio of indirect time to direct time		No estimates available for percentage of service time spent with patients. Travel time is high given the area covered by the service (approx 20% of total time).
Number of rapid response visits	16.6 per patient	Based on the average number of visits per patient in 2012 (610). Episodes vary according to need. The average number of referrals was 670 (multiple referrals for some people).
<b>Unit costs available 2014/15</b>		
Total annual costs £694,641; cost per hour of service £79; average cost per patient £1,139.		

<sup>1</sup> Butler, C., Holdsworth, L. Coulton, S. & Gage, H. (2012) Evaluation of a hospice rapid response community service: a controlled evaluation, *BMC Palliative Care*, 11, 11, doi:10.1186/1472-684X-11-11.

<sup>2</sup> Butler, C. & Holdsworth, L. (2013) Setting up a new evidence-based hospice-at-home service in England, *International Journal of Palliative Nursing*, 19(7), 355-359.

<sup>3</sup> National Survey of Patient Activity Data for Specialist Palliative Care Services (2014) National Survey of Patient Activity Data for Specialist Palliative Care Services, MDS Full Report for the year 2012-2013, Public Health England.

<sup>4</sup> Health & Social Care Information Centre (2014) NHS staff earnings estimates 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>5</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>6</sup> Building Cost Information Service (2015) Surveys of tender prices, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

## 7.6 Specialist neuro-rehabilitation services<sup>1</sup>

Specialist rehabilitation services play a vital role in management of patients admitted to hospital by ensuring that their immediate medical needs have been met, and supporting safe transition back to the community.<sup>2</sup> They are consultant-led and supported by a multi-professional team who have undergone recognised specialist training in rehabilitation.<sup>3,4</sup>

The following table provides the costs of two service models: tertiary 'specialised' rehabilitation services (level 1) and local (district) specialist rehabilitation services (level2). Also a new hyper acute specialist rehabilitation service has been introduced as a result of the development of the Major Trauma Networks.<sup>5</sup> To be designated and commissioned as a specialist rehabilitation service, all Level 1 and 2 services must be registered with UK Rehabilitation Outcomes Collaborative (UKROC).<sup>6</sup> Two costs are provided for each service: the mean cost per occupied bed day, calculated by taking the total annual costs and dividing by the number of patient bed days, and the mean cost per weighted occupied bed day which takes into account the number of days patients spend at five identified sub-levels of complexity. See <http://www.kcl.ac.uk/lsm/research/divisions/cicelysaunders/research/studies/ukroc/Commissioning-Tools.aspx> for more information on how the weighted costs have been calculated.

### 2014/15 mean costs per occupied bed day and weighted occupied bed day for each service level from participating UKROC Services

Service level	Mean cost (ranges) per occupied bed day (excluding MFF)	Mean cost (ranges) per weighted occupied bed day (excluding MFF)
<b>Level 1 - Tertiary 'specialised' rehabilitation services:</b> high cost / low volume services for patients with highly complex rehabilitation needs that are beyond the scope of their local and district specialist services. These are normally provided in co-ordinated service networks planned over a regional population of 1-5 million through specialised commissioning arrangements.		
<b>Level 1a</b> - for patients with high physical dependency	£534 (£464 - £613)	£400 (£344 - £440)
<b>Level 1b</b> - mixed dependency	£476 (£429 - £514)	£356 (£305 - £389)
<b>Level 1c</b> - mainly physically stable patients with cognitive/behavioural disabilities. <sup>a</sup>	£636 (£579 - £713)	£479 (£433 - £533)
<b>Level 2 – Local (district) specialist services:</b> typically planned over a district-level population of 350-500,000 providing advice and support for local general rehabilitation teams. As tertiary specialised rehabilitation services are thinly spread, in some areas of the UK where access is poor, local specialist rehabilitation services have extended to support a supra-district catchment of 750K -1m, and take a higher proportion (at least 50%) of patients with very complex needs.		
<b>Level 2a</b> - supra-district specialist rehabilitation services	£432 (£317 - £513)	£345 (£226 - £436)
<b>Level 2b</b> - local specialist rehabilitation services	£407 (£309 - £500)	£340 (£290 - £415)
<b>Hyper-acute:</b> These units are sited within acute care settings. They take patients at a very early stage in the rehabilitation pathway when they still have medical and surgical needs requiring continued active support from the trauma, neuroscience or acute medical services.		
	£655 (£623 - £686)	£409 (£386 - £432)

a. Based on only two services

<sup>1</sup> For more information contact: UKROC - UK Rehabilitation Outcomes Collaborative, St Marks Hospital, London North West Healthcare NHS Trust, Watford Road, Harrow HA1 3UJ. Email: [lnwh-tr.ukroc@nhs.net](mailto:lnwh-tr.ukroc@nhs.net).

<sup>2</sup> Department of Health (2005) *National service framework: long term conditions*, Department of Health, London. <https://www.gov.uk/government/publications/quality-standards-for-supporting-people-with-long-term-conditions> [accessed 10 November 2015]

<sup>3</sup> British Society of Rehabilitation Medicine (2015) *Specialised Neurorehabilitation Service Standards*, BSRM London.

<sup>4</sup> <http://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-d/d02/>

<sup>5</sup> British Society of Rehabilitation Medicine (2013) *Core standards and major trauma*, London: <http://www.bsrm.co.uk/Publications.html#BSRMstandards> [accessed 10 November 2015]

<sup>6</sup> Clinical Reference Group Specialist Services Specification (2012) *Specialist rehabilitation for patients with highly complex needs*, London <http://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-d/d02/> [accessed 10 November 2015]

## **8. Care packages**

- 8.1 Social care support for older people, people with intellectual disabilities, people with mental health problems and people with physical disabilities
- 8.2 Health care support received by people with mental health problems, older people (over 75) and other service users
- 8.3 Support for children and adults with autism
- 8.4 Services for children in care
- 8.5 Services for children in need
- 8.6 Common Assessment Framework
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- 8.8 Support care for children
- 8.9 Young adults with acquired brain injury in the UK
- 8.10 Palliative care for children and young people
- 8.11 Residential parenting assessments
- 8.12 Acute medical units
- 8.13 End-of-life care



## 8.1 Social care support for older people, people with learning disabilities, people with mental health problems and people with physical disabilities

The care packages described in the following tables (8.1.1-8.1.4) are drawn from the National Evaluation of the Individual Budgets Pilot Projects (IBSEN).<sup>1</sup> This study collected information on the social care service use of 1001 people across four client groups: older people, people with learning disabilities, people with mental health problems, and people with physical disabilities. For the study, the service users' needs were categorised as critical, substantial or moderate, and information was collected on a pre-specified set of services: the type of accommodation in which they usually lived, the number of hours of home care and day care received each week, and the social security benefits they received. The services were costed using information contained in this volume where possible (see details below); otherwise they have been taken from the Personal Social Services Expenditure return (PSS EX1, 2013/2014)<sup>2</sup> and uprated using the PSS pay & prices inflator. As no information was available on whether the services had been provided by the local authority or private organisations, we have used the weighted average price.

**Home care:** The cost per hour for a home care worker is £24, (face-to-face, see table 11.6). As the PSS EX1 return does not distinguish between client groups for home care, the cost of home care for adults and older people has been used for all client groups. This cost is likely to be an under-estimate for certain client groups.

**Day care:** To arrive at a cost per day care attendance, assumptions have to be made about the number of times service users attend per week. New research suggests that older people attend on average 2.49 times per week, people with mental health problems attend on average 2.88 times per week, people with physical disabilities attend on average 2.65 times per week, and that people with learning disabilities attend four times per week. Based on these assumptions, the mean cost per client attendance for older people is £60 per week, and for people with mental health problems (local authority and independent provision) is £30.<sup>2</sup> For people with learning disabilities the mean cost is £81 per session<sup>2</sup> and for people with physical disabilities the mean cost of a day care session is £71.<sup>2</sup>

**Benefit receipt:** All benefit receipt was costed using information taken from the Department for Work and Pensions (DWP)<sup>3</sup> and summed to provide a total for each service user. Benefits included long-term incapacity benefit (£104.10 per week), severe disability (single) benefit (£61.10 per week), disability care allowance (£54.45 per week), attendance allowance (lower/higher rate, £54.45/£81.30 per week) and carer's allowance (£61.35 per week).

**Accommodation:** Information was available on whether the service user lived in a registered care home, sheltered accommodation, supported living, flats, private accommodation or rented accommodation; whether the service user lived alone or in shared accommodation; and the number of bedrooms in the accommodation. No information is available on whether the service user lived in accommodation provided by the local authority or private organisations. We have taken the lower-cost assumption that the accommodation was provided by a private sector organisation. For each client group, the appropriate cost was taken from this volume or other national sources such as Rentright (<http://rentright.co.uk/>) a website which provides the average rental costs for England for each month, or the Halifax Price Index which provides average prices for privately-owned accommodation in England. Sometimes judgements were made about the type of accommodation according to the level of need of the service user. For example, for people with physical disabilities, where a care home was specified, it was assumed that this was a high dependency care home (see table 5.1 of the 2013 volume). Similarly, when a 'flat' was specified and the level of need was 'critical' or 'substantial', the cost of special needs flats were applied (see table 5.3 of the 2012 volume). When the accommodation type was 'supported living', where the level of need was 'critical', it was assumed that this also was a care home; otherwise the cost of 'extra care housing' was used. Costs for residential care and supported living for all client groups were taken from the relevant sections of this volume.

<sup>1</sup> Glendinning, C., Challis, D., Fernández, J., Jacobs, S., Jones, K., Knapp, M., Manthorpe, J., Moran, N., Netten, A., Stevens, M. & Wilberforce, M. (2008) *Evaluation of the individual budgets pilot programme: Final Report*, Social Policy Research Unit, University of York, York.

<sup>2</sup> Health & Social Care Information Centre (2015) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds

<sup>3</sup> See: <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 10 October 2015].

### 8.1.1 Social care support for older people

In the IBSEN study, 281 people were aged over 65 (28% of the whole sample): 39 had critical needs, 171 had substantial needs and 71 moderate needs. The average total cost for the whole sample was £284 per week, with 10 per cent incurring costs of less than £126 and 10 per cent more than £565.

Service/need group	Average weekly costs 2014/15	Number of users	Description
<b>Home care</b>			
Critical	£300	18 users	Forty-two per cent of the sample of older people reported the use of home care. The average weekly cost for critical needs users was £300 compared to £158 for those with moderate needs. The average weekly cost for all 118 service users was £178 (9 hours per week).
Substantial	£155	74 users	
Moderate	£158	26 users	
Average/total	£178	118 users	
<b>Day care</b>			
Critical	£153	4 users	Twelve per cent of the older participants reported the use of day care. The average weekly cost for all 35 users was £72.
Substantial	£97	24 users	
Moderate	£79	7 users	
Average/total	£72	35 users	
<b>Benefits</b>			
Critical	£126	15 users	Thirty-seven per cent reported receiving benefits. In total, the cost of benefits received by critical service users was £126 compared to £98 for moderate service users. The total average weekly cost for all 105 users was £93. <sup>1</sup>
Substantial	£87	66 users	
Moderate	£98	24 users	
Average/total	£96	105 users	
<b>Accommodation</b>			
Critical	£188	39 users	The cost of accommodation for those with moderate needs was 6 per cent higher than those with critical needs. The average weekly cost for accommodation was £167.
Substantial	£155	171 users	
Moderate	£199	71 users	
Average/total	£167	281 users	
<b>Total costs</b>			
Critical	£411	39 users	The average weekly cost for all service users was £284. Support costs for critical service users were 33 per cent higher than costs for moderate service users.
Substantial	£283	171 users	
Moderate	£307	71 users	
Average/total	£284	281 users	



### 8.1.2 Social care support for people with learning disabilities

In the IBSEN study, 260 people had learning disabilities (26% of the whole sample): 76 had critical needs, 159 had substantial needs and 25 moderate needs. The average cost for this sample was £324 per week, with 10 per cent incurring costs of less than £198 and 10 per cent more than £515.

Service/need group	Average weekly costs 2014/15	Number of users	Description
<b>Home care</b>			
Critical	£398	28 users	Forty-six per cent of the sample of people with learning disabilities reported the use of home care. Of those, the average weekly cost for critical users was £398 compared to £277 for those with moderate needs. The average weekly cost for all 77 service users was £391.
Substantial	£391	47 users	
Moderate	£277	2 users	
Average/total	£391	77 users	
<b>Day care</b>			
Critical	£369	18 users	Twenty-eight per cent of the whole sample of people with learning disabilities reported the use of day care. The average weekly cost was £60 across the 72 users.
Substantial	£54	51 users	
Moderate	£39	3 users	
Average/total	£60	72 users	
<b>Benefits</b>			
Critical	£144	68 users	Seventy-seven per cent reported receiving benefits. In total, the value of benefits received by critical service users was £144 compared to £150 for moderate service users. The total average weekly cost for all 199 users was £143.
Substantial	£142	119 users	
Moderate	£150	12 users	
Average/total	£143	199 users	
<b>Accommodation</b>			
Critical	£188	76 users	The cost of accommodation for those with critical needs was £188 compared to the cost of those with moderate needs of £68. The average weekly cost for the whole sample of people with learning disabilities was £162.
Substantial	£163	159 users	
Moderate	£68	25 users	
Average/total	£162	260 users	
<b>Total costs</b>			
Critical	£410	76 users	The average weekly cost for all service users was £324.
Substantial	£312	159 users	
Moderate	£171	25 users	
Average/total	£324	260 users	

### 8.1.3 Social care support for people with mental health problems

In the IBSEN study, 143 people had mental health problems (14% of the whole sample): 22 had critical needs, 96 had substantial needs and 25 moderate needs. The average cost for these 143 people was £468 per week, with 10 per cent incurring costs of less than £201 and 10 per cent incurring costs of more than £512 per week.

Service/need group	Average weekly costs 2014/15	Number of users	Description
<b>Home care</b>			
Critical	£104	4 users	Seven per cent of people with mental health problems were receiving home care. The average weekly cost for critical users was £104 compared to £79 for moderate users. The average weekly cost for all 10 service users was £178.
Substantial	£255	5 users	
Moderate	£79	1 user	
Average/total	£178	10 users	
<b>Day care</b>			
Critical	£73	5 users	Fourteen per cent of people with mental health problems were receiving day care. The average weekly cost was £76 across all users of day care.
Substantial	£77	13 users	
Moderate	£70	2 users	
Average/total	£76	20 users	
<b>Benefits</b>			
Critical	£148	17 users	Seventy-seven per cent service users were receiving benefits. In total, the value of benefits received by critical service users was £148 compared to £114 for moderate service users. The total average weekly cost for all 110 users was £149.
Substantial	£160	73 users	
Moderate	£114	20 users	
Average/total	£149	110 users	
<b>Accommodation</b>			
Critical	£204	22 users	The cost of accommodation for those with critical needs was £205 compared to the cost of those with moderate needs of £176. The average weekly cost across all users was £205.
Substantial	£218	96 users	
Moderate	£176	25 users	
Average/total	£205	143 users	
<b>Total costs</b>			
Critical	£335	22 users	The average weekly cost for all service users was £468. Support costs for critical users were 22 per cent higher than costs for moderate service users.
Substantial	£547	96 users	
Moderate	£274	25 users	
Average/total	£468	143 users	

### 8.1.4 Social care support for people with physical disabilities

In the IBSEN study, 317 people had physical disabilities (32% of the whole sample): 52 had critical needs, 245 had substantial needs and 20 moderate needs. The average cost for this group was £707 per week, with 10 per cent of service users incurring costs of less than £272 and 10 per cent more than £1,093.

Service/need group	Average weekly costs 2014/15	Number of users	Description
<b>Home care</b>			
Critical	£382	31 users	Fifty-six per cent of the total sample of people with physical disabilities received home care. The average weekly cost for users with critical needs was £379 compared to £126 for those with moderate needs. The average weekly cost for all users of home care (176 people) was £291.
Substantial	£283	136 users	
Moderate	£126	9 users	
Average/total	£291	176 users	
<b>Day care</b>			
Critical	£171	8 users	Twelve per cent of the people with physical disabilities were receiving day care. The value of day care received by moderate users was 56 per cent higher than critical users. The average weekly cost was £182 for all 37 users of day care.
Substantial	£180	27 users	
Moderate	£265	2 users	
Average/total	£182	37 users	
<b>Benefits</b>			
Critical	£132	72 users	Ninety-four per cent of service users were receiving benefits. In total, the cost of benefits received by critical service users was £132 per week compared to £180 for moderate service users. The total average weekly cost for all 297 service users was £181. <sup>1</sup>
Substantial	£180	230 users	
Moderate	£169	17 users	
Average/total	£181	297 users	
<b>Accommodation</b>			
Critical	£784	52 users	The average weekly cost of accommodation for those with critical needs was £784 compared to £247 for those with moderate needs. The average weekly cost was £335.
Substantial	£247	245 users	
Moderate	£247	20 users	
Average/total	£335	317 users	
<b>Total costs</b>			
Critical	£1,260	52 users	The average weekly care package cost for all service users was £707 per week. Support costs for critical users were 26 per cent higher than costs for moderate service users.
Substantial	£603	245 users	
Moderate	£488	20 users	
Average/total	£707	317 users	

## 8.2 Health care support received by people with mental health problems, older people (over 75) and other service users

Information for this table has been drawn from the *Evaluation of the Personal Health Budget Pilot Programme*<sup>1</sup> and provides information on the health service use of participants in the year before the study started. The information provided in the table below shows the total mean annual cost of health care received by all service users, which includes people with chronic obstructive pulmonary disease, diabetes, long-term neurological conditions, mental health, stroke and patients eligible for NHS Continuing Healthcare. It also provides this information separately for people with mental health problems and people over 75 with one of the above health conditions.

The information was collected in 2009 and has been updated using the appropriate inflators.

Health services received	Total mean annual cost	Number of patients	Range of costs
<b>All service users</b>			
Nursing and therapy	£219	1,278	£0-£14,216
Primary care	£865	2,028	£0-£10,716
Inpatient care	£4,119	1,771	£0-£108,401
Outpatient and A&E	£978	1,772	£0-£12,132
<b>People with mental health problems</b>			
Nursing and therapy	£157	180	£0-£3,895
Primary care	£554	344	£0-£2,427
Inpatient care	£4,380	358	£0-£108,401
Outpatient and A&E	£835	358	£0-£6,690
<b>People over 75</b>			
Nursing and therapy	£187	226	£0-£4,050
Primary care	£1,106	345	£0-£13,627
Inpatient care	£6,025	275	£0-£77,788
Outpatient and A&E	£1,050	275	£0-£6,990

<sup>1</sup> Forder, J., Jones, K., Glendinning, C., Caiels, J., Welch, E., Baxter, K., Davidson, J., Windle, K., Irvine, A., King, D. & Dolan, P. (2012) *Evaluation of the personal health budget pilot programme*, Department of Health, London.

## 8.3 Support for children and adults with autism

There is growing evidence on the economic burden of autism spectrum disorders (ASD). Autism has life-time consequences, with a range of impacts on the health, economic well-being, social integration and quality of life of individuals with the disorder, their families, and potentially the rest of society. Many of those impacts can be expressed as economic costs.

Interventions and services currently used to treat or support children and adults with ASD include those provided by medical practitioners, nurses, dietitians, psychologists, speech and language therapists, teachers and various providers of complementary and alternative medicine, such as music therapy, aromatherapy, homeopathic remedies, naturopathic remedies, manipulative body therapies and spiritual healing. These treatments, services and supports impose costs to the state, the voluntary sector or to the families of people with ASD who have to pay for them from their own pockets.

Here we present cost information taken from two research studies. The first focuses on pre-school children and provides the service and wider societal costs in the UK.<sup>1</sup> It looked at the services received by 152 pre-school children with autism, reported family out-of-pocket expenses and productivity losses, and explored the relationship between family characteristics and costs.

Service use data were collected using a modified version of the Child and Adolescent Service Use Schedule (CA-SUS) asking about the use of specialist accommodation such as foster and respite care, education or day care facilities attended, all medication prescribed for the individual child, all hospital contacts, and all community health, education and social care services, including non-statutory provision. School-based services were not recorded separately to avoid double-counting costs already included in the overall cost of the education facility, and because parents may not always be aware of their use. In addition, parents were asked to report details of time off work due to their child's illness, and expenditure on any specialist equipment or other extraordinary costs, such as home adaptations, conference or training attendance, and overseas travel that were a direct result of their child's autism. Information from this study is found in 8.3.1.

The second study provides the annual costs for children and adults with low-functioning and high-functioning ASD (i.e. with and without an intellectual disability). The research<sup>2,3</sup> estimated the full costs of autism spectrum disorders (ASDs) in the United Kingdom drawing on previous research, national surveys, expert advice and supplemented with service use data on 146 children and 91 adults. In the sample of children with autism, ages ranged from 3 to 17, with a mean of 10.28 years (standard deviation 3.17) and a median age of 10. The purpose of the study was to examine the service, family and other economic consequences of autism in the UK for children and adults with ASD. See tables 8.3.2 to 8.3.4 for costs from this study.

<sup>1</sup> Barrett, B., Byford, S., Sharac, J., Hudry, K., Leadbitter, K., Temple, K., Aldred, C., Slonims, V., Green, J. & the PACT Consortium (2012) Service and wider societal costs of very young children with autism, *Journal of Autism and Developmental Disorders*, 42, 5, 797-804.

<sup>2</sup> Knapp, M., Romeo, R. & Beecham, J. (2007) *The economic consequences of autism in the UK*, Report to the Foundation for People with Learning Disabilities, London.

<sup>3</sup> Knapp, M., Romeo, R. & Beecham, J. (2009) Economic cost of autism in the UK, *Autism*, 13, 3, May, 317-336.

### 8.3.1 Children with autism (pre-school)

Information for this table has been taken from Barrett et al. (2012).<sup>1</sup> All costs were originally estimated at 2006/2007 prices and have therefore been updated to 2014/2015 using the appropriate inflators.

This table reports the service and wider societal costs for the six months prior to interview for pre-school children with autism. The mean total service costs were £2,937, equivalent to £490 per month and over £5,875 per year. Almost half the costs (44%) were for education and childcare, 41 per cent were for community health and social services, and 12 per cent for hospital services. Total costs varied substantially between the children in the study (range £359 to £7,583 over six months). Box 1 below presents case studies of low- and high-cost cases.

On average, families spent an additional £302 as a result of their child's illness over the six months prior to interview (range £0 to £4,459). Fifty-one per cent of families reported taking some time off work due to their child's illness over the six months, associated with productivity losses of £311 per family. Total costs including all services, family costs and productivity losses were estimated at over £3,550 over six months, equivalent to over £592 per month.

#### Total costs per child for the six months prior to interview (£, n=152)

	Mean	SD	Total service cost %	Total cost %
Accommodation	£19	£240	0.65	0.54
Hospital-based health services	£353	£517	12.03	9.95
Community health and social services	£1,207	£1,011	41.09	33.99
Medication	£19	£97	0.66	0.54
Voluntary sector services	£34	£93	1.16	0.96
Education and child care	£1,304	£933	44.41	36.74
<b>Total service costs</b>	<b>£2,937</b>	<b>£1,412</b>	<b>100.00</b>	<b>82.72</b>
Out-of-pocket expenses	£302	£640		8.51
Productivity losses	£311	£680		8.77
<b>Total costs</b>	<b>£3,550</b>	<b>£1,891</b>		<b>100.00</b>

#### Box 1 Case studies of high and low cost cases

##### High cost — £7,583 over six months

Child H attends a mainstream nursery part-time and a specialist playgroup one day a week. He spent three nights in hospital following a grommet operation, and had two outpatient appointments with the ear, nose and throat specialist before and after the operation. Child H had monthly visits to his GP, regular contact with the practice nurse and his health visitor, and weekly contacts with a speech and language therapist at the local health centre. In addition, he had contact with a community paediatrician and a portage worker.

##### Low cost — £359 over six months

Child I does not attend any formal education or childcare, spending all his time at home with his mother. He had one visit to a paediatrician at the local hospital, but did not have any other hospital contacts or use any services in the community.

<sup>1</sup> Barrett, B., Byford, S., Sharac, J., Hudry, K., Leadbitter, K., Temple, K., Aldred, C., Slonims, V., Green, J. & the PACT consortium (2012) Service and wider societal costs of very young children with autism, *Journal of Autism and Developmental Disorders*, 42, 5, 797-804.

### 8.3.2 Children with low-functioning autism (ages 0-17)

The research carried out by Knapp et al. (2007, 2009)<sup>1,2</sup> estimated the full costs of autism spectrum disorders (ASDs) in the United Kingdom. Costs estimated for children used a combination of routinely collected and research data and a pooled dataset of 146 children.

The table below summarises the average cost per child with low-functioning ASD, whether living with their families or living in a residential or foster care placement. Costs are organised under a number of different service and support headings. Family expenses were also included and, where appropriate, costs were imputed for the lost employment of parents. The table distinguishes children in three different age groups. For the two older age groups, the largest contributors to these totals are the care placements themselves, and special education. The authors noted that, given the availability of data, residential special school costs may have been under estimated.

#### Average annual cost per child with low-functioning ASD

	Living in residential or foster care placement			Living in private households with family		
	Ages 0-3	Ages 4-11	Ages 12-17	Ages 0-3	Ages 4-11	Ages 12-17
Residential/foster care placement	£18,088	£26,047	£37,020	-	-	-
Hospital services	-	£999	£1,840	-	£999	£1,840
Other health and social services	£678	£8,010	£464	£678	£8,010	£464
Respite care	-	-	-	-	£3,277	£4,272
Special education	-	£10,600	£32,012	-	£10,600	£32,012
Education support	-	£1,373	£1,156	-	£1,373	£1,156
Treatments	-	£21	£17	-	£21	£17
Help from voluntary organisations	-	-	-	-	£977	£111
Benefits	-	-	-	£4,356	£4,638	£4,638
Lost employment (parents)	-	-	-	-	£2,419	£2,419
<b>Total annual cost (excluding benefits)</b>	<b>£18,766</b>	<b>£47,050</b>	<b>£72,510</b>	<b>£678</b>	<b>£27,676</b>	<b>£41,291</b>
<b>Total annual cost (including benefits)</b>	<b>£18,766</b>	<b>£47,050</b>	<b>£72,510</b>	<b>£5,035</b>	<b>£32,314</b>	<b>£46,929</b>

Note: Expenditure on social security/welfare benefits could partly double-count the costs of lost employment for parents, which is why two totals are provided above.

<sup>1</sup> Knapp, M., Romeo, R. & Beecham, J. (2007) *The economic consequences of autism in the UK*, Report to the Foundation for People with Learning Disabilities, London.

<sup>2</sup> Knapp, M., Romeo, R. & Beecham, J. (2009) Economic cost of autism in the UK, *Autism*, 13, 3, May, 317-336.

### 8.3.3 Children with high-functioning autism (ages 0-17)

The research carried out by Knapp et al. (2007, 2009)<sup>1,2</sup> estimated the full costs of autism spectrum disorders (ASDs) in the United Kingdom.

As in table 8.3.2, the table below distinguishes costs under a number of different service and support headings. The study assumed that all children with high-functioning ASD live with their parents.

#### Average annual cost per child with high functioning ASD

	Living in private household with family		
	Ages 0-3	Ages 4-11	Ages 12-17
Hospital services	-	£901	£901
Other health and social services	£1,408	£1,408	£1,408
Respite care	-	£7,548	£7,548
Special education	-	£13,543	£13,543
Education support	-	£632	£632
Treatments	-	£172	£172
Help from voluntary organisations	-	-	-
Benefits	£544	£544	£544
Lost employment (parents)	-	£250	£250
<b>Total annual cost (excluding benefits)</b>	<b>£1,408</b>	<b>£24,454</b>	<b>£24,454</b>
<b>Total annual cost (including benefits)</b>	<b>£1,951</b>	<b>£24,997</b>	<b>£24,997</b>

#### Notes

The costs for children aged 4-11 and aged 12-17 are the same.

Expenditure on social security/welfare benefits could partly double-count the costs of lost employment for parents, which is why two totals are provided above.

<sup>1</sup> Knapp, M., Romeo, R. & Beecham, J. (2007) *The economic consequences of autism in the UK*, Report to the Foundation for People with Learning Disabilities, London.

<sup>2</sup> Knapp, M., Romeo, R. & Beecham, J. (2009) Economic cost of autism in the UK, *Autism*, 13, 3, May, 317-336.



### 8.3.4 Adults with autism

The research carried out by Knapp et al. (2007, 2009)<sup>1,2</sup> estimated the full costs of autism spectrum disorders (ASDs) in the United Kingdom. The estimated annual costs for adults with high-and low-functioning ASD are presented below and were calculated from routinely-collected and research data and a pooled dataset of 185 individuals. Imputed costs for lost employment are included for both the individuals with ASD and for parents, where these are appropriate. Costs are arranged by place of residence.

A sizeable part (59%) of costs for an adult with high-functioning ASD living in a private household (with or without family) is the imputed cost of lost employment (and hence also lost productivity to the economy). Part of that (not separately identified here) would be lost tax revenue to the Exchequer. Costs for high-functioning adults in supported living settings or care homes are much higher (£98,939 and £102,084 per year respectively) and the proportion attributable to lost employment is lower. The largest cost element in each case is for accommodation, and includes the costs of staff employed in those settings or supporting the residents.

#### Average annual cost per adult with ASD

	Adults with high-functioning ASD			Adults with low-functioning ASD			
	Private household	Supporting people	Residential care	Private household	Supporting people	Residential care	Hospital
Accommodation	£1,725	£68,435	£71,580	-	£68,435	£71,580	-
Hospital services	£901	£901	£901	£101	£174	£39	£87,518
Other health and social services	£564	£564	£564	£820	£543	£671	-
Respite care	-	-	-	£1,781	-	-	-
Day services	£2,581	£2,581	£2,581	£4,350	£4,201	£961	-
Adult education	£3,346	£3,346	£3,346	£1,664	£987	£3,845	-
Employment support	-	-	-	£584	£1,267	-	-
Treatments	£172	£172	£172	£72	£72	£72	-
Family expenses	£2,193	-	-	£2,524	-	-	-
Lost employment (parents)	£4,272	-	-	£4,272	-	-	-
<b>Sub-total</b>	<b>£15,753</b>	<b>£75,999</b>	<b>£79,143</b>	<b>£16,168</b>	<b>£75,679</b>	<b>£77,169</b>	<b>£87,518</b>
Lost employment (person with ASD)	£22,941	£22,941	£22,941	£25,953	£25,953	£25,953	£25,953
<b>Total (excluding benefits)</b>	<b>£38,693</b>	<b>£98,939</b>	<b>£102,084</b>	<b>£42,121</b>	<b>£101,632</b>	<b>£103,122</b>	<b>£113,471</b>
Benefits	-	-	-	£7,772	£5,009	£5,009	£1,073
<b>Total (including benefits)</b>	<b>£38,693</b>	<b>£98,939</b>	<b>£102,084</b>	<b>£48,893</b>	<b>£106,641</b>	<b>£108,131</b>	<b>£114,544</b>

<sup>1</sup> Knapp, M., Romeo, R. & Beecham, J. (2007) *The economic consequences of autism in the UK*, Report to the Foundation for People with Learning Disabilities, London.

<sup>2</sup> Knapp, M., Romeo, R. & Beecham, J. (2009) Economic cost of autism in the UK, *Autism*, 13, 3, May, 317-336.

## 8.4 Services for children in care

The following tables present illustrative costs of children in care, reflecting a range of circumstances. Information from practitioners and managers, gathered in the course of developing unit costs for social work processes, indicated that some needs — or combinations of them — are likely to have an impact on the cost of placements: disabilities; emotional or behavioural difficulties; and offending behaviour.<sup>1</sup> Unaccompanied asylum-seeking children comprise a further group whose circumstances, rather than their attributes, engender a different pattern of costs. In any population of looked-after children, there will be some children who have none of these additional support needs. Authorities with a higher proportion of children without additional needs will incur lower average costs per looked-after child. However, in reality their overall expenditure on children's services may be greater, for such authorities may place a higher proportion of their whole population of children in need away from home than do those with better-developed family support services.

The study by Ward and colleagues identified different combinations of additional support needs. There were five 'simple' groups of children who display none or one of the attributes expected to affect costs, and six complex groups of children who display two or more additional support needs. In the sample of 478 children, 129 (27%) showed no evidence of additional support needs; 215 (45%) displayed one; 124 (26%) children displayed combinations of two; and a very small group of children (2%) displayed combinations of three or more.

The care package costs for children described in tables 8.4.1-8.4.4 illustrate an example of the support received by children in some of these groups, taken from the study sample. Costs relate to time periods stated in each table.

<sup>1</sup> Ward, H., Holmes, L. & Soper, J. (2008) *Costs and consequences of placing children in care*, Jessica Kingsley, London.

### 8.4.1 Children in care: low-cost — with no evidence of additional support needs

Child A is a boy aged 14 with no evidence of additional support needs. The table shows the total cost incurred by social services and other agencies from February 2005 to October 2006, uprated using the PSS pay & prices inflator. Child A became looked after at the age of six, as the result of neglect. A care order was obtained in 2002. Since then he has been placed with the same local authority foster carers, a placement that had lasted eight years by the start of the study. In June 2006, his case was transferred to the leaving care team. Reviews were held at six-monthly intervals and his care plan was updated every six months. He attended six-monthly dental appointments and an annual looked-after child medical. During the time period shown above, this young person attended weekly, hour-long physiotherapy sessions as a result of a neck injury. He completed his statutory schooling in summer 2008 and obtained seven GCSEs. He then progressed to further education to start an A level course.

Child A had a relatively inexpensive placement with local authority foster carers. He incurred some educational costs, in that he attended school, and some health care costs, but there was no exceptional expenditure. Please note that these figures have been rounded. Where appropriate, the original information has been adjusted to take account of Agenda for Change salaries.

Process	Cost to LA	Total	Cost to others	Total
Care planning	£251 x 3	£753	£179 x 3	£538
Maintaining the placement	£836 x 87 weeks minus £10,144 <sup>1</sup>	£62,589	£57 x 3	£172
Review	£647 x 3 + £20 <sup>2</sup>	£1,962		
Legal	£8 <sup>3</sup> x 87 weeks	£686	£13 <sup>4</sup> x 87 weeks	£1,116
Transition to leaving care	£1,930	£1,930		
<b>Cost of services</b>				
Mainstream schooling			£29 <sup>5</sup> per day	£8,159
FE college			£28 <sup>5</sup> per day	£850
Looked-after child medical			£37 <sup>6</sup>	£37
Physiotherapy (home visit)			£81 x 87 weeks <sup>7</sup>	£7,110
Dentist			£18.80 (Band 1 charge, see 10.12)	£18.80
<b>Total cost over 9 months</b>		<b>£67,920</b>		<b>£18,000.80</b>

<sup>1</sup> Cost includes payment made for the placement and all activity to support the placement. There is a reduction in cost as a result of reduced activity once the placement has lasted for more than one year.

<sup>2</sup> An additional cost is incurred for the first 16+ review.

<sup>3</sup> The cost of obtaining a care order has been divided over the total number of weeks between admission and the child's eighteenth birthday.

<sup>4</sup> Selwyn, J., Sturgess, W., Quinton, D. & Baxter, C. (2003) *Costs and outcomes of non-infant adoptions*, report to the Department of Health, Hadley Centre for Adoption and Foster Care Studies, University of Bristol.

<sup>5</sup> Based on the cost of a secondary school place. Calculated by dividing total secondary school expenditure by the total number of pupils on the roll, and by the total number of days of pupil contact (190). Department for Education (2011) *Section 251 data archive: Outturn data-detailed level 2008-09 onwards, outturn summary 2011-12*, Department for Education, London and table 1A 'All Schools: pupils with statements of special educational needs'.

<sup>6</sup> Based on the unit cost of a surgery consultation with a general practitioner (see table 10.8b).

<sup>7</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

### 8.4.2 Children in care: median cost — child with emotional or behavioural difficulties

Between February 2005 and April 2006, Child B was placed with local authority foster carers (within the area of the authority). She then moved to another placement with local authority foster carers within the area of the authority. A care order was obtained for this young person when she first became looked after. During the time-frame, three review meetings were held and her care plan was also updated on three occasions. Child B attended mainstream school from December 2005 until June 2006 where she received support from a personal teaching assistant for four hours a week. This young person attended six-monthly dental appointments and also her annual looked-after child medical. Child B also received speech therapy until July 2006. Following a self-harm incident she was taken to the accident and emergency department and was referred to a clinical psychologist and began weekly sessions in April 2005.

Costs to social services are relatively low, largely because she was placed with local authority foster carers within the authority area throughout the study period, and not considered difficult to place. There were relatively high costs to other agencies, designed to meet both her health and educational needs. Please note that these figures have been rounded. Where appropriate, the original information has been adjusted to take account of Agenda for Change salaries.

Process	Cost to LA		Cost to others	
	Unit costs	Total	Unit costs	Total
Care planning	£251 x 3	£753	£179 x 3	£538
Maintaining the placement	£732 x 59 weeks minus £6,147 <sup>1</sup>	£37,040	£57 x 3	£172
Finding subsequent placement	£325	£325		
Review	£647 x 3	£1,942		
Legal	£9.60 <sup>2</sup> x 59 weeks	£568	£12.80 <sup>3</sup> x 59	£757
<b>Cost of services</b>				
Mainstream schooling			£29 <sup>4</sup> per day (190 days)	£5,439
Looked-after child medical			£37 <sup>5</sup>	£37
Speech therapy			£89 x 60 weeks	£5,340
Clinical psychologist			£139 x 52 weeks	£7,228
Hospital accident and emergency visit (admitted)			£233	£233
Personal teaching assistant			£22 (4 hours per week for 25 weeks) <sup>6</sup>	£2,200
Dentist			£18.80 (Band 1 charge, see 10.12)	£18.80
<b>Total cost over 14 months</b>		<b>£40,628</b>		<b>£21,962.80</b>

<sup>1</sup> Cost includes payment made for the placement and all activity to support the placement. There is a reduction in cost as a result of reduced activity once the placement has lasted for more than one year.

<sup>2</sup> The cost of obtaining a care order has been divided over the total number of weeks between admission and the child's eighteenth birthday.

<sup>3</sup> Selwyn, J., Sturgess, W., Quinton, D. & Baxter, C. (2003) *Costs and outcomes of non-infant adoptions*, report to the Department of Health, Hadley Centre for Adoption and Foster Care Studies, University of Bristol.

<sup>4</sup> Based on the cost of a secondary school place. Calculated by dividing total secondary school expenditure by the total number of pupils on the roll, and by the total number of days of pupil contact (190). Department for Education (2012) *Section 251 data archive: Outturn data-detailed level 2008-09 onwards, outturn summary 2011-12*, Department for Education, London and table 1A 'All Schools: pupils with statements of special educational needs'.

<sup>5</sup> Based on the unit cost of a surgery consultation with a general practitioner (see table 10.8b).

<sup>6</sup> Based on the average salary of a teaching assistant, <http://www.tes.co.uk/article.aspx?storyCode=6168765/> [accessed 22 October 2013].

### 8.4.3 Children in care: high cost — children with emotional or behavioural difficulties and offending behaviour

Child C was aged 15 at the start of the study. He first became looked after at the age of 11, when his parents needed respite. Prior to the start of the study he was placed in secure accommodation on five separate occasions. He had also been placed in various residential homes, schools and foster placements, many of which had broken down. As a consequence, he had been classified as 'difficult to place'. During the study period (74 weeks), Child C experienced ten different placements. He also refused all statutory medical and dental appointments; furthermore, he refused any mental health support. Child C did not complete his statutory schooling as a result of numerous exclusions and non-attendance. Prior to the start of the study he had a history of offending: this continued throughout the study, with him committing ten further offences. He ceased being looked after in summer 2007 when he refused to return to any placement provided by the local authority.

The costs to social services were relatively high, both because of a number of out-of-authority, residential placements provided by independent sector agencies and due to nine changes of placement. There were substantial costs to other agencies (Youth Offending Team and the Police) as a result of his offending behaviour. No additional health care costs were incurred for this young man because of his refusal to engage in the services offered to him. Please note that these figures have been rounded. Where appropriate, the original information has been adjusted to take account of Agenda for Change salaries.

Process	Cost to LA	Total	Cost to others	Total
Care planning	£251 x 2	£502	£179 x 2	£358
Maintaining the placement	£371,612 <sup>1</sup>	£371,612	£57 x 74 weeks <sup>2</sup>	£4,218
Ceased being looked after	£434	£434		
Find subsequent placements	£10,689 <sup>3</sup>	£10,689		
Review	£1,942	£1,942	£208 x 2	£415
<b>Cost of services<sup>4</sup></b>				
YOT involvement/criminal costs			£1,110 <sup>5</sup> x 74 weeks	£82,140
<b>Total cost over 18.5 months</b>		<b>£385,179</b>		<b>£87,131</b>

<sup>1</sup> This cost includes the payment made for the placement and all activity to support the placements. There is an increase in cost in the first three months of a placement due to increased social worker activity.

<sup>2</sup> Child C ceased being looked after in July 2011, therefore the time period being costed is 74 weeks.

<sup>3</sup> Child C experienced nine changes of placement during the timeframe of the study.

<sup>4</sup> There are no additional education costs because these are included in the costs of the placements in process three.

<sup>5</sup> Liddle, M. (1998) *Wasted lives: counting the cost of juvenile offending*, National Association for the Care and Resettlement of Offenders (NACRO), London.

### 8.4.4 Children in care: very high cost — children with disabilities, emotional or behavioural difficulties plus offending behaviour

Child D experienced nine different placements from February 2006 to October 2007. Initially he was placed in an independent sector residential unit with education facilities. In March 2006, he was placed with independent sector foster carers, again out of area. He then experienced three further placements, all out of the local authority area and all provided by independent sector organisations: another residential unit, then another foster placement, then a third residential placement. In September 2006 he was placed overnight in a secure unit within the authority. He then had three independent sector placements: foster carers, a residential unit, and a specialised one-bedded residential unit in December 2006. This placement was also out of the area of the authority. Review meetings were held six-monthly and his care plan was also updated every six months. This young person attended the education provision in two different residential units until summer 2006, when he was permanently excluded. He then started sessions with a home tutor in October 2006. Over the 20 months he attended six-monthly dental appointments and his looked-after child medical. He also attended weekly sessions with a clinical psychologist from October 2006 onwards. In September 2006 he was accused of a criminal offence; the police were involved, but he was not convicted.

These costs are markedly higher than for the majority of other children in the sample. Child D had become difficult to place; and increasing amounts of social work time had to be spent on finding the rare placements that were prepared to accept him. The costs of changing placements were calculated at over £1,000 per move. Please note that these figures have been rounded. Where appropriate, the original information has been adjusted to take account of Agenda for Change salaries.

Process	Cost to LA	Total	Cost to others	Total
Care planning	£152 x 3	£456	£179 x 3	£537
Maintaining the placement	£710,458 plus £1,823 <sup>1</sup>	£712,281		
Finding subsequent placements	£21,052	£21,052	£98 x 8	£784
Review	£1,029 x 3	£3,087	£399 x 3	£1,197
Legal	£5.40 <sup>2</sup> x 87 weeks	£470	£6.20 <sup>3</sup> x 87 weeks	£539
Transition to leaving care	£1,930	£1,930		
<b>Cost of services</b>				
Home tuition			No current costs	
Permanent exclusion			No current costs <sup>4</sup>	
Looked-after child medical			£37 <sup>5</sup>	£37
Clinical psychologist			£139 per hour for 52 weeks	£7,228
Police costs for criminal offence (police statement and interview)			£330 <sup>6</sup>	£330
Dentist			£18.80 (Band 1 charge, see 10.12)	£18.80
<b>Total cost over 20 months</b>		<b>£739,276</b>		<b>£10,670.80</b>

<sup>1</sup> The cost includes the payment made for the placements and all activity to support the placements. There is an increase in cost in the first three months of a placement due to increased social worker activity.

<sup>2</sup> The cost of obtaining a care order has been divided over the total number of weeks between admission and the child's eighteenth birthday.

<sup>3</sup> Selwyn, J., Sturgess, W., Quinton, D. & Baxter, C. (2003) *Costs and outcomes of non-infant adoptions*, report to the Department of Health, Hadley Centre for Adoption and Foster Care Studies, University of Bristol.

<sup>4</sup> See Prince's Trust (2007) *The cost of exclusion*, Prince's Trust, London. <http://www.princes-trust.org.uk/PDF/Princes%20Trust%20Research%20Cost%20of%20Exclusion%20apr07.pdf> [accessed 9 October 2013].

<sup>5</sup> Based on the unit cost of a surgery consultation with a general practitioner (see table 10.8b).

<sup>6</sup> Bedfordshire Police (2012) *2012/13 Fees and charges handbook*, [http://www.bedfordshire.police.uk/PDF/bedfordshire\\_fees\\_and\\_charges.pdf](http://www.bedfordshire.police.uk/PDF/bedfordshire_fees_and_charges.pdf) [accessed 9 October 2013].

## 8.5 Services for children in need

The care package costs for children described in the tables (8.5.1-8.5.4) illustrate examples of the support received by children in need reflecting a range of circumstances. These costs have been drawn from a study undertaken by the Centre for Child and Family Research (CCFR) at Loughborough University in which the costs of key social care processes for children in need have been calculated in four local authorities, including initial and core assessments, children in need reviews, along with ongoing social care activity to support families.<sup>1</sup> The study used a bottom-up costing methodology,<sup>2</sup> which uses social care activity time data as the basis for building up unit costs. The unit costs per hour are based on average salaries for each staff type using national salary scales and applying oncosts and overheads as presented in this volume.

The costs provided were for 2008/09 and have been updated using the appropriate inflators.

### 8.5.1 Child A – no additional needs

Child A – No additional needs: out of London costs.

Child A, a boy aged 11 at the start of the study, was referred to social care in August 2007. Support was offered to his family, who had been assessed as being in need due to ‘family dysfunction’. Child A lived with his mother and had no siblings.

Concerns had been raised about the relationship between Child A and his mother, in particular the ability of his mother to deal with his tantrums and use appropriate levels of discipline.

In addition to the ongoing case management provided by the allocated social worker, a family support worker from the social care team had been allocated to the case to undertake some work around discipline and behaviour. A weekly visit was made by the family support worker. This work ceased in December 2008, three months into the data collection period. One Child in Need review was carried out during the study time period.

#### Total costs for Child A during the six-month data collection period<sup>a</sup>

<b>Social care activity costs (out of London costs)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
CiN 3 – ongoing support	6 months	£114	£684
CiN 6 – planning and review		£238	£238
<b>Cost of social care case management activity</b>			<b>£922</b>
<b>Additional services costs (out of London costs)</b>			
Family support	Once a week for 10 weeks <sup>a</sup>	£36	£360
<b>Cost of services</b>			<b>£360</b>
<b>Total cost incurred by children’s social care for Child A during the 6-month period</b>			<b>£1,282</b>

<sup>a</sup> There was no evidence of additional support services being provided by other agencies during the study timeframe.

<sup>1</sup> Holmes, L. & McDermid, S. (2012) *Understanding costs and outcomes in child welfare services*, Jessica Kingsley, London.

<sup>2</sup> Beecham, J. (2000) *Unit costs – not exactly child’s play: a guide to estimating unit costs for children’s social care*, Department of Health, Dartington Social Research Unit and the Personal Social Services Research Unit, University of Kent; Ward, H., Holmes, L. & Soper, J. (2008) *Costs and consequences of placing children in care*, Jessica Kingsley, London.

## 8.5.2 Child B – no additional needs, aged six and under

Child B – No additional needs, aged six and under: London costs.

Child B was referred to social care in June 2008, aged 14 months, due to concerns about her mother's mental health. Although both parents lived at home, Child B's mother was struggling to fulfil her caring duties because of her anxiety and depression. These difficulties were also putting a strain on the parents' relationship. Consequently, Child B was assessed as being in need under Section 17 of the Children Act 1989. The primary need code was recorded as 'family in acute distress' and no additional needs were identified.

During the study time period, the family was in receipt of a number of additional support services. Weekly one-to-one home visits were provided by a mental health social worker from multi-agency early intervention service. A mental health support worker was funded by the Primary Care Trust to support Child B's mother. Additional one-to-one support was offered to Child B's mother for an hour each week by the local authority family support team. The family also attended weekly group sessions at the local children's centre. There were two Child in Need reviews during the data-collection period.

### Total costs for child B during the six-month data collection period<sup>a</sup>

<b>Social care activity costs (London costs)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
CiN 3 – ongoing support	6 months	£247	£1,482
CiN 6 – planning and review	2	£268	£536
<b>Cost of social care case management activity</b>			<b>£2,018</b>
<b>Additional services costs (London costs)</b>			
<b>Social care services</b>			
Family support <sup>1</sup>	Once a week for 21 weeks	£46 <sup>1</sup>	£966
<b>Cost of service care provision</b>			<b>£966</b>
<b>Services from other agencies</b>			
Children's centre stay and play group provided by local authority, not social care <sup>2</sup>	Once a week for 21 weeks	£15 <sup>2</sup>	£315
One-to-one support from mental health social worker provided by the PCT <sup>3</sup>	Once a week for 21 weeks	£125 <sup>3</sup>	£2,625
<b>Cost of service provision from other providers</b>			<b>£2,940</b>
<b>Total cost incurred by children's social care for Child B during the 6-month period</b>			<b>£2,984</b>
<b>Total cost incurred for Child B during the 6-month period</b>			<b>£5,924</b>

<sup>a</sup> There was no evidence of additional support services being provided by social care during the study timeframe.

<sup>1</sup> Unit cost based on a one-hour visit and 40 minutes travel time.

<sup>2</sup> Tidmarsh, J. & Schneider, J. (2005) Typical costs of sure start local programmes, in L. Curtis (ed.) *Unit Costs of Health and Social Care 2005*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>3</sup> Curtis, L. (2011) *Unit Costs of Health and Social Care 2011*, Personal Social Services Research Unit, University of Kent, Canterbury. (Costs have been uprated to 2013 values.)



### 8.5.3 Child C – emotional or behavioural difficulties

Child C – Boy with emotional or behavioural difficulties: Out of London costs.

Child C was aged 14 at the time of the data collection and had been receiving support as a Child in Need since September 2008, as his family was 'in acute distress'.

Child C's mother had been subject to domestic abuse by her partner and, although he no longer lived in the family home, their relationship had continued to be chaotic. The family had been receiving family therapy, provided by a voluntary agency, twice a month, to help another sibling with obsessive compulsive disorder.

The family's circumstances were reviewed at a Child in Need Review in November 2008. At this review meeting Child C's teacher noted that he had also exhibited symptoms of low self-esteem. His school attendance had been low and his teacher was concerned that this might be a result of his anxieties around socialising with his peers.

The review meeting concluded that the family's situation had not improved and, because of the additional concerns raised by the teacher and social worker, a Core Assessment was recommended. This was carried out in December 2008.

Subsequently, Child C was referred to CAMHS for weekly sessions and his mother was offered women's aid support.

Total costs for Child C during the six-month data collection period<sup>a</sup>

<b>Social care activity costs (out of London costs)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
CiN 3 – ongoing support	6 months	£214	£1,284
CiN 6 – planning and review		£238	£238
CiN 5 – core assessment		£628	£628
<b>Cost of social care case management activity</b>			<b>£2,150</b>
Additional services from other agencies (out of London costs)			
Family therapy provided by voluntary agency	Twice a month for 6 months	£107 <sup>1</sup>	£1,128
Women's aid provided by voluntary agency	Weekly for 3 months	£67 <sup>2</sup>	£707
CAMHS provided by Primary Care Trust	Weekly for 3 months	£68 <sup>3</sup>	£811
<b>Cost of service provision from other providers</b>			<b>£2,646</b>
<b>Total cost incurred by children's social care for Child B during the 6-month period</b>			<b>£2,150</b>
<b>Total cost incurred for Child B during the 6-month period</b>			<b>£4,796</b>

<sup>a</sup> There was no evidence of additional support services being provided by social care during the study timeframe.

<sup>1</sup> Barlow, J., Davis, H., McIntosh, E., Jarrett, P., Mockford, C. & Stewart-Brown, S. (2006) Role of home visiting in improving parenting and health in families at risk of abuse and neglect: results of a multicentre randomised controlled trial and economic evaluation, *Archives of Disease in Childhood*, 92, 3, 229-233.

<sup>2</sup> McIntosh, E. & Barlow, J. (2006) The costs of an intensive home visiting intervention for vulnerable families, in A. Netten & L. Curtis (eds) *Unit Costs of Health and Social Care 2006*, PSSRU, University of Kent, Canterbury.

<sup>3</sup> Curtis, L. (2013) *Unit Costs of Health and Social Care 2013*, Personal Social Services Research Unit, University of Kent, Canterbury

### 8.5.4 Child D – became looked after during the data collection

Child D was first referred to social care in August 2007 and had been receiving support as part of a Child Protection Plan. Her parents were identified as regular drug users and this was felt to be impacting on their ability to care appropriately for her needs. In particular, her mother's chaotic lifestyle and regular drug use meant that she frequently failed to get Child D ready for school. The home environment was felt to be unsuitable for young children. Child D was five and a half at the start of the data collection. Child D lived with her mother, and had regular contact with her father who also misused drugs. Both parents were reluctant to engage with additional services, although Child D's father would occasionally attend a stay-and-play group at the local Sure Start children's centre with his daughter.

In early December 2008 the social worker was contacted by a child care worker at the children's centre who reported that Child D presented with bruises, allegedly caused by her mother's new partner. Along with concerns regarding the lack of improvements since the implementation of a Child Protection Plan, further investigation was instigated and the decision was taken for Child D to be placed in local authority foster care. A review was held 28 days after the child was placed and the Care Plan updated following that review. Child D remained on a Child Protection Plan whilst being looked after.

#### Total costs for Child D during the six-month data collection period<sup>a</sup>

<b>Social care activity costs (London costs)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
<b>Child in Need processes</b>			
CiN 3 – ongoing support	Two and a half months	£247	£618
Looked-after children processes <sup>1</sup>			
LAC1 – Decide child needs to be looked after		£1,142	£1,142
LAC3 – Maintaining the placement <sup>2</sup>	Three and a half months		
LAC2 – Care planning		£224	£224
LAC6 – Review			£702
<b>Cost of social care case management activity</b>			<b>£2,686</b>
Additional services from other agencies (London costs)			
Sure Start stay and play group provided by Local authority (not social care)	Twice during the data collection period	£15 <sup>3</sup>	£30
<b>Cost of service provision from other providers</b>			<b>£30</b>
<b>Total cost incurred by children's social care for Child D during the 6-month period</b>			<b>£2,686</b>
<b>Total cost incurred for Child B during the 6-month period</b>			<b>£2,716</b>

<sup>a</sup> There was no evidence of additional support services being provided by social care during the study timeframe.

<sup>1</sup> Ward, H., Holmes, L. & Soper, J. (2008) *Costs and consequences of placing children in care*, Jessica Kingsley, London.

<sup>2</sup> The costs of maintaining the placement also include the weekly fees and allowance of the child's placement.

<sup>3</sup> Tidmarsh, J. & Schneider, J. (2005) Typical costs of sure start local programmes in L. Curtis (ed.) *Unit Costs of Health and Social Care 2005*, Personal Social Services Research Unit, University of Kent, Canterbury.

## 8.6 Common Assessment Framework (CAF)

The Common Assessment Framework (CAF) is a standardised approach for assessing children and their families, to facilitate the early identification of additional needs and to promote a co-ordinated service response. CAF is underpinned by an integrated approach to support and has been designed for use by all professionals working with children and families with additional needs who do not meet the threshold for more intensive interventions such as those associated with children's social care or safeguarding.<sup>1</sup> Information for tables 8.6.1-8.6.3 has been provided by researchers from the Centre for Child and Family Research, Loughborough.<sup>1</sup>

The study used a bottom-up costing methodology,<sup>2</sup> which uses social care activity time data as the basis for building up unit unit costs. The unit costs per hour are based on average salaries for each staff type using national salary scales and applying oncosts and overheads as presented in this publication.

### 8.6.1 Family A: support from a lead professional (LP)

Family A live in London and consists of Jennifer, who has two sons, Ryan and Jack, aged 8 and 4 respectively. Jennifer and the boys' father had recently separated. Jennifer contacted CAMHS after discovering that Ryan had been self-harming.

CAHMS informed Jennifer that they had a six-month waiting list for assessments but referred their case onto 'Family Help', a voluntary organisation that supports vulnerable children and families. The service manager completed a CAF, although a pre-CAF checklist was not completed. A family support worker from Family Help was allocated to support their case and was identified as the lead professional for the child and family.

Following the completion of the CAF assessment, the support worker visited the child and family on a fortnightly basis. Team Around the Child (TAC) meetings were not held, and the support worker continued to support the child and family until a CAHMS assessment was offered. The child and family were not in receipt of other additional services at this time. Jennifer reported that the support they had received from Family Help had been extremely useful and that Ryan's self-harming behaviour had reduced. Jennifer reported that she thought that the CAF had helped her family.

### Total costs for family A during a six-month period

Social care activity costs (London costs)			
Process	Frequency	Unit cost	Sub-total
Process 2: CAF assessment completed by service manager		£347	£347
Process 4: ongoing support from the family support worker	Fortnightly visits for 6 months <sup>3</sup>	£52	£636
<b>Total cost of CAF support for Family A during the 6-month period</b>			<b>£983</b>

<sup>1</sup> Holmes, L., McDermid, S., Padley, M. & Soper, J. (2012) *Exploration of the costs and impact of the Common Assessment Framework* (Research Report DFE-RR210), Department for Education, London.

<sup>2</sup> Beecham, J. (2000) *Unit costs – not exactly child's play: a guide to estimating unit costs for children's social care*, Department of Health, Dartington Social Research Unit and the Personal Social Services Research Unit, University of Kent; Ward, H., Holmes, L. & Soper, J. (2008) *Costs and consequences of placing children in care*, Jessica Kingsley, London.

<sup>3</sup> Holmes, L. & McDermid, S. (2012) *Understanding costs and outcomes in child welfare services: a comprehensive costing approach to managing your resources*, Jessica Kingsley, London. (This suggests that the average time for a home visit is 1 hour 40 minutes, including travel time.)

### 8.6.2 Family B: support from a range of services

Mother, Michelle, lives with her daughter Sophie, aged 13. Michelle suffers with anxiety and depression and finds it very difficult to leave the house. Concerns were raised by Sophie's school about her behaviour and a reduction in attendance; subsequently they referred the child and family to a voluntary organisation, 'Family Help', after completing a pre-CAF checklist. A worker from Family Help completed a CAF assessment and decided that Michelle and her daughter would benefit from additional support, both to improve Sophie's behaviour and to support Michelle with her mental health difficulties and parenting. A family support worker was identified as the lead professional (LP). One Team Around the Child (TAC) meeting was held, which Michelle attended, along with the support worker and the school education welfare officer.

Michelle received one-to-one parenting support, once a week for 8 weeks, and then attended a parenting course over 8 weeks. Sophie received one-to-one support in school from a learning mentor. The LP continued to co-ordinate the support and provided a 12-week focused piece of family support, visiting Michelle and Sophie on a weekly basis.

Michelle said that the LP had been extremely supportive and thought that the other services provided as a result of the CAF had helped her and Sophie: she would have liked more of the intensive parenting support offered by the LP, and reported that Sophie's behaviour in school had improved.

#### Total costs for family B during the six-month period

<b>Social care activity costs (out of London costs)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
Process 1: pre-CAF checklist completed by education welfare officer	Once	£18	£18
Process 2: completion of the CAF assessment by family support worker	Once	£177	£177
Process 3: TAC meeting attended by family support worker	Once	£206	£206
Process 3: TAC meeting attended by education welfare officer	Once	£27	
Process 4: ongoing support of lead professional by family support worker	Over five and a half months	£168	£925
Cost of case management activity			<b>£1,326</b>
<b>Additional services (out of London costs)</b>			
Parenting course	Once a week for 8 weeks	£50 <sup>1</sup>	£343
One-to-one parenting support	Once a week for 8 weeks	£53	£425
Focused family support	Once a week for 12 weeks	£50	£604
<b>Total cost of additional support</b>			<b>£1,372</b>
<b>Total cost of CAF support incurred for Family B during the 6-month period</b>			<b>£2,698</b>

<sup>1</sup> Tidmarsh, J. & Schneider, J. (2005) Typical costs of sure start local programmes, in L. Curtis (ed.) *Unit Costs of Health and Social Care 2005*, Personal Social Services Research Unit, University of Kent, Canterbury.

### 8.6.3 Family C: CAF as a step up to social care

Kyle, aged 13, lives with his mother, Louise, and four year old brother, Robert. A CAF was initiated in January 2011 by the school due to concerns about Kyle's deteriorating behaviour at home and school. Kyle has long-standing mental health difficulties, anxieties about new situations and had difficulties making friends. Louise also had mental health difficulties and there were concerns about her capacity to maintain the children's food and drink intake. There were also some concerns about Louise's offending behaviour.

The CAF was undertaken by the school learning mentor, and a Team Around the Child (TAC) meeting was convened. The TAC was attended by the learning mentor, an educational psychologist, and a family support worker from Children's Services. Prior to the initial TAC meeting, Kyle had been permanently excluded from school after his behaviour became untenable and was placed at another school at the end of March 2011. A referral was also made to the children's social care emergency duty team by a hospital doctor following concerns about Louise's mental health. The social care team were aware that a CAF was in process and therefore no further action was taken.

A number of services were initiated to support the child and family; ADHD support was provided to both Kyle and Louise. They saw the ADHD nurse on a monthly basis. A family support worker was also identified to address some of Kyle's behavioural difficulties. The family support worker visited the family once a week for 8 weeks. Despite some improvements, the family suffered a number of setbacks and was referred to children's social care in July 2011. The CAF case was closed, and a child protection plan was initiated.

#### Total costs for family C during the six-month period

<b>Social care activity costs (out of London costs): CAF</b>			
Process	Frequency	Unit cost	Sub-total
Process 1: Pre-CAF checklist completed by learning mentor	Once	£14	£14
Process 2: Completion of the CAF assessment by learning mentor	Once	£167	£167
Process 3: TAC meeting attended by learning mentor	Once	£284	£284
Educational psychologist		£41	
Family support worker		£26	
Process 4: Ongoing support of lead professional by learning mentor	Five months	£159	£796
Process 5: Case closure			£92
Cost of case management activity for CAF			<b>£1,353</b>
<b>Social care activity costs (out of London): social care</b>			
CiN process 1: initial contact and referral with no further action			£225
CiN process 1: initial contact and referral			£202
CiN process 7: Section 47 enquiry			£555
Total cost of care management activity for social care			<b>£982</b>
<b>Additional services (out of London costs)</b>			
ADHD nurse	Once a month for 6 months	£47	£280
Family support worker	Once a week for 8 weeks	£43 <sup>1</sup>	£346
<b>Total cost of additional services</b>			<b>£626</b>
<b>Total cost of CAF support incurred for Family C during the 6-month period</b>			<b>£2,335</b>
<b>Total cost of support for Family C during the 6-month period</b>			<b>£2,961</b>

<sup>1</sup> Curtis, L. (2014) *Unit Costs of Health and Social Care*, Personal Social Services Research Unit, University of Kent, Canterbury.

## 8.7 Services for children returning home from care

A child is recorded as returning home from an episode of care if he or she ceases to be looked after by returning to live with parents or another person who has parental responsibility. This includes a child who returns to live with their adoptive parents but does not include a child who becomes the subject of an adoption order for the first time, nor a child who becomes the subject of a residence or special guardianship order.<sup>1</sup>

In light of the research findings about the lack of support leading to breakdown of reunification in some circumstances, the Department for Education has worked with Loughborough University to draw up a number of scenarios reflecting the costs of returning children home based on a range of ages, circumstances and placement types.

Information for tables 8.7.1 to 8.7.4 has been drawn from a study commissioned by the Childhood Wellbeing Research Centre and undertaken by the Centre for Child and Family Research (CCFR) at Loughborough University.<sup>1</sup> They make use of existing unit costs that have been estimated in previous research studies carried out by the CCFR.<sup>2,3,4</sup> The aim of this work was to provide a series of estimated unit cost trajectories for children returning home from care. The care illustrates examples of the support received by children between January 2012 and January 2013.

The unit costs used are based on estimates for the 2014/15 financial year. Where costs have been taken from research completed in previous years, they have been inflated to 2014/15. The unit costs of support foster care have been estimated for the Fostering Network, and have been included in these case studies with their permission.<sup>5</sup>

<sup>1</sup> Department for Education (2013) *Data pack: improving permanence for looked after children*, <http://www.education.gov.uk/a00227754/looked-after-children-data-pack/> [accessed 1 October 2013].

<sup>2</sup> Ward, H., Holmes, L. & Soper, J. (2008) *Costs and consequences of placing children in care*, Jessica Kingsley, London.

<sup>3</sup> Holmes, L., McDermid, S., Padley, M. & Soper, J. (2012) *Exploration of the costs and outcomes of the Common Assessment Framework*, Department of Health, London.

<sup>4</sup> Holmes, L. & McDermid, S. (2012) *Understanding costs and outcomes in child welfare services*, Jessica Kingsley, London.

<sup>5</sup> The Fostering Network and Holmes, L. (2013) *Unit Costs of Support Care*, The Fostering Network, London.

**8.7.1 Child A – low level of Child in Need support on return home from care**

Child A became looked after under Section 20 arrangements at the age of five. Child A was placed with grandparents out of the area of the local authority under kinship placement arrangements. The placement lasted for three months and, on return home, formal support was not provided; however, the grandmother provided ongoing informal support to the family. In October 2012 Child A became looked after again and returned to the care of the grandmother.

<b>Social care processes (case management)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
LAC 1 – became LAC (looked-after child)	Twice	£1,302	£2,604
LAC 2 – care plan	Once a fortnight	£246	£491
LAC 3 – ongoing placement support	Six months in total	£2,985	£17,910
LAC 4 – return home	Once	£424	£424
LAC 6 – review	Twice	£631	£1,262
<b>Total social care case management costs per year</b>			<b>£22,691</b>

### 8.7.2 Child B – high level of Child in Need support on return home from care

Child B first became looked after as a baby and was placed with local authority foster carers when an interim care order was obtained. In February 2011, Child B returned home and a high level of (Child in Need) support was provided to the family over the year and Child B's parent was provided with drug and alcohol treatment services.

<b>Social care processes (case management)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
CiN 3 – ongoing support	12 months	£204	£2,443
CiN 6 – planning and review	3 times	£234	£703
<b>Cost of social care case management activity</b>			<b>£3,146</b>
Additional services costs (out of London)			
Drug and alcohol treatment services	Once a fortnight	£123	£3,208
<b>Total social care case management costs per year</b>			<b>£6,354</b>



### 8.7.3 Child C – high level of Child in Need support and support foster care provided on return home from care

Child C was placed in a specialist therapeutic foster care community placement outside the area of the placing authority between September 2011 and October 2012. Prior to this placement, Child C had experienced two other placements and was accommodated under Section 20 arrangements.<sup>1</sup> Child C had emotional and behavioural problems, and was aged 11 at the start of the specialist placement included. On return home in October 2012, Child C was referred to receive support foster care. A support foster care family was identified, and respite care was provided by the carers for one overnight stay per week. The case also remained open as a CiN/support foster care case, and this support continued until March 2013.

<b>Social care processes (case management)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
LAC 2 – carer plan	Twice	£245	£489
LAC 3 – ongoing placement support	10 months	£12,189	£121,892
LAC 4 – return home	Once	£424	£424
LAC 6 – review	Twice	£631	£1,263
Support foster care – ongoing	2 months	£707	£1,415
Support foster care – referral	Once	£403	£403
<b>Total social care case management costs per year</b>			<b>£125,886</b>

<sup>1</sup> Department for Education (2012) *Children in care*, <http://www.education.gov.uk/childrenandyoungpeople/safeguardingchildren/a0068940/children-in-care/> [accessed 10 September 2013].

### 8.7.4 Child D – ongoing support provided by an independent fostering provider on return home from care

Child D was placed with Intensive Foster Placement (IFP) foster carers in June 2010, aged 16, after a care order was obtained. Child D had emotional and behavioural difficulties and remained in the placement until August 2011. On return home in March 2012. Child D continued to be supported by the IFP, and there was a good working relationship between the foster carers and birth family. The support continued until the end of March 2012. The timeline below shows the CiN support provided during the first three months of 2012.

<b>Social care processes (case management)</b>			
<b>Process</b>	<b>Frequency</b>	<b>Unit cost</b>	<b>Sub-total</b>
CiN 3 – ongoing support	3 months	£1,102	£3,306
CiN 4 – close case	Once	£101	£101
<b>Total social care case management costs per year</b>			<b>£3,407</b>

## 8.8 Support care for children

Support care is short-term preventative foster care aimed at families in crisis, with a view to avoiding a child being taken into care full-time and long-term. Support carers look after the child on a part-time basis, while at the same time a package of other support services is offered to the family, giving them space, guidance and help to work through their problems.

The information reproduced below has been drawn from the *Unit Costs of Support Care* (2013).<sup>1</sup> The report demonstrates that support care, including the accompanying support services for families, has a far lower unit cost than the foster care it replaces.

As well as helping struggling families stay together, support care also helps family and friends' carers such as grandparents, who report that they struggle when children are first placed with them. It can also help to prevent adoption breakdown, and be a breathing space for some families whose disabled children do not reach the criteria for short breaks but desperately need help.

Using a range of pre-existing process unit costs (for example, referrals, reviews and ongoing support),<sup>2</sup> the costs of support care, using individual case studies as illustrative examples, are presented in tables 8.8.1 and 8.8.2. Comparative costs if the local authority had been required to place them as looked-after children are also shown. Costs have been updated to current prices using the PSS pay & prices inflator.

The first case study (8.8.1) shows that, for Family A, the costs would have been much higher if the local authority had been required to place them as looked-after children. The cost to look after the three children in local authority foster care for one year is £131,151 which is nearly nine times higher than the estimated social care costs of providing support care for the same duration (£14,643).

The second case study (8.8.2) shows that the total estimated cost to look after Child B in local authority foster care for one year is £47,080 – four times higher than the estimated social care costs of providing support care for the same duration (£11,644).

<sup>1</sup> The Fostering Network and Holmes, L. (2013) *Unit costs of support care*, the Fostering Network, London.

<sup>2</sup> Taken from: Ward, H., Holmes, L. & Soper, J. (2009) *Costs and consequences of placing children in care*, Jessica Kingsley, London; Holmes, L. & McDermid, S. (2012) *Understanding costs and outcomes in child welfare services: a comprehensive costing approach to managing your resources*, Loughborough University; Holmes, L., McDermid, S., Padley, M. & Soper, J. (2012) *Exploration of the costs and impact of the Common Assessment Framework*, Department for Education, London.

### 8.8.1 Family A – support care for a sibling group

Family A were referred to support care following social work concerns about their living arrangements and the deterioration in family relationships. The family consisted of 11 children living with their mother and step-father in a small three-bedroom house. In addition to support care, the family were engaged with a housing support service, budgeting advice, parenting classes and ongoing social work support.

Support care was initially offered to three members of the family: Jack aged 15, Samantha aged 8 and Jordan aged 7. Different support carers were identified for each of the children and they were offered one overnight stay with support carers once a fortnight.

#### Family A: support care and annual social care costs

Process	Process unit cost	Social work cost	Fostering cost
1 Referral	£400	£250	£149
2 Ongoing support	(£231 x 12) and (£111 x 12)	£2,768	£1,330
2 Ongoing support	[(£150/7) x 26] x 3 + [(£432/7) x 26] x 3		£6,486
3 Review	£84 x 8 and £69 x 8	£669	£555
4 Case closure	£283	£249	£35
<b>Total</b>		<b>£3,936</b>	<b>£8,555</b>

#### Annual costs of other support or services provided alongside support care

Support or service	Frequency/duration	Unit cost	Sub-total
Parenting programme	One course – group	£510	£510
Housing support	Once a fortnight	£32	£821
Budgeting advice	Once a fortnight	£32	£821
<b>Total cost of other support or services</b>			<b>£2,152</b>

#### Family A: social care costs for looked-after children

These costs include the activity to find the first placement for the three siblings, to review the case (using statutory timeframes of 28 days, three-monthly and six-monthly intervals), update care plans and also support the children in their placements. The costs of these processes are detailed below:

Process	Cost
1: Decide children need to be looked after and find first placement	£984
2: Care plans: Updated three times following reviews for each of the children	£2,184
3: Maintain the placements: Support and placement costs (£804 per child per week)	£126,106
6: Review: Held on three occasions during the year	£1,877

### 8.8.2 Child B – Support care for a single child

Child B (aged six) was referred for support care as a result of housing and financial concerns. He was living with his father and step-mother, along with five other children, in a two-bedroom property throughout the week, and a further three children stayed at weekends. Space and overcrowding were key concerns, as were the financial pressures.

Child B was offered support care for one overnight stay per week at the weekend. Child B's father also agreed to attend support sessions for parenting and budgeting. Child B continued with weekly visits to his support carers for six months, until his family secured larger accommodation. He then continued to receive support care, on a fortnightly basis for three further months before being reduced to monthly stays. Child B and his family no longer required support care or other support services after 12 months.

#### Child B: support care and annual social care unit costs

Process	Process unit cost	Social work cost	Fostering cost
1.Referral	£394	£251	£149
2.Ongoing support	(£227 x 12) and (£108 x 12)	£2,765	£1,321
2.Ongoing support	[(£148/7) x 42] and [(£424/7) x 42]		£3,492
3.Review	(£82 x 8) and £68	£669	£561
4.Case closure	£279	£249	£35
<b>Total</b>		<b>£3,934</b>	<b>£5,558</b>

#### Annual costs of other support or services, provided alongside support care

Support or service	Frequency/duration	Unit cost	Sub-total
Parenting programme	Once course – group	£510	£510
Housing support	Six sessions	£32	£821
Budgeting advice	Once a fortnight	£32	£821
<b>Total cost of other support or services</b>			<b>£2,152</b>

#### Child B's: social care costs for looked-after children

The costs for child B would also have been much higher if the local authority had been required to place him as a looked-after child. The costs below include the activity to find the first placement for Child B, to review the case (using statutory timeframes of 28 days, three-monthly and six-monthly intervals), update his care plan and also support child B in his placement. The costs of these processes are detailed below:

Process	Cost
1. Decide child needs to be looked-after and find first placement	£984
2. Care plans: Updated three times following reviews	£2,184
3. Maintain the placements: Support and placement costs (£793 per week)	£42,035
6. Review: Held on three occasions during the year (3 x £614)	£1,878
<b>Total</b>	<b>£47,080</b>

## 8.9 Young adults with acquired brain injury in the UK

Acquired brain injury (ABI) is 'a non-degenerative injury to the brain occurring since birth', including both open and closed head injuries. ABI includes a range of diagnoses or causes, including strokes or tumours. Head injury through trauma is a common cause among young adults. ABI is not thought to affect life expectancy after the initial acute phase, so the prevalence of long-term brain damage is high at 100-150 per 100,000 population, implying a total of 60,000-90,000 people in the UK (<http://www.rhn.org.uk/>).

A study was undertaken by the Personal Social Services Research Unit to identify the health and social care services used by young adults aged 18-25 years with acquired brain injury (ABI) and the associated costs.<sup>1</sup> The study identified the annual incidence of ABI in this age group, and then tracked the young adults' likely progress through four support-related stages: trauma, stabilisation, rehabilitation and return to the community. By identifying the numbers using different treatment locations and services at each stage, a picture of service use and costs could be built up over a notional 12-month period following injury. All costs have been updated to 2014/2015 prices using the HCHS pay & prices Inflation.

Four broad groups of young people with ABI were identified by their location at the community care stage.

Group 1 comprises the largest proportion of those sustaining brain injuries and includes those who attend A&E with ABI or spend short periods in a hospital ward and then return home. A small proportion, perhaps just one in five, will have follow-up appointments arranged at an outpatient clinic or with their GP. This group will generally have had a mild head injury and no longer-term disability, although 20 per cent of this group may continue to have residual symptoms six months after injury.

**Group 1: Average cost per person = £306 per year.**

People in Group 2 are also likely to have returned to their own homes within a year, but are more seriously disabled and rely on personal care support provided by spouses, parents or other informal carers. This group may include those who are discharged home from longer-term residential rehabilitation (34% of patients discharged), from acute brain injury units (25%) and from neurosurgery units (23%). It is likely that at least 40 per cent of them will require at least part-time support or supervision from informal carers.

**Group 2: Average costs per person = £21,888 per year.**

The third group of young adults with ABI are those whose pathway towards the end of a year will see them living in supported accommodation with formal (paid) personal carers. Some will have been discharged straight from hospital and some will have stayed in a rehabilitation facility prior to moving to supported living. One in four of these young adults will need overnight supervision, and three in four will need at least part-time supervision during the day. The number of young adults may be quite high, but some will move on to more independent living. Others will need this type of support for many years to come. For cost estimates, it has been assumed this group will live in community-based housing with low staffing levels during the day and 'sleeping-in' staff at night. In addition to personal care, they are also likely to use outpatient clinics and community-based therapists. Personal care costs (estimated at an average of 8 hours overnight 'sleeping-in' and 6 hours during the day) would amount to £548 per week. Use of community-based therapy and health care services would add another £637 by the end of the notional 12-month period.

**Group 3: Average cost per person = £41,964 per year.**

The fourth group includes young adults who are likely to be among the most severely disabled. Although some will be supported at home, it is estimated that 310 will be resident in nursing homes for young adults, specialist ABI residential units, in longer-stay hospital wards or in mental health units. They are likely to have been the most severely injured. Some of the principal independent providers contacted for this research reported current prices for residential placements of up to £3,188 per week, often jointly funded by health and social services. Nursing homes and 'young disability units' are likely to be less costly. However, nursing home care may not be appropriate for people with severe ABI-related disability as there tend to be few qualified staff and low input from local community-based teams or specialist doctors.

**Group 4: Average cost per person = £43,240 per year.**

<sup>1</sup> Beecham, J., Perkins, M., Snell, T. & Knapp, M. (2009) Treatment paths and costs for young adults with acquired brain injury in the United Kingdom, *Brain Injury*, 23, 1, 30-38.

## 8.10 Palliative care for children and young people

The government's manifesto commitment to improve palliative care services in 2006<sup>1</sup> resulted in an independent review of children's palliative care services commissioned by the Secretary of State for Health.<sup>2</sup> This independent review was based on findings from a wide consultation with stakeholders, including children and young people and their families, commissioners and providers of services, along with commissioned research from Department of Health and the York Health Economics Consortium.

Information for this table has been drawn from the work carried out by the York Health Economics Consortium<sup>3</sup> which provides examples of illness trajectories and the resulting costs for children in need of palliative care. All costs have been updated using the appropriate inflators to provide current prices. See Lowson et al. (2007) for more information on the cost benefits of using community care instead of hospital services.

### 8.10.1 Short illness trajectory: cancer

This generic pathway was developed for a child with cancer from data provided by Sargent Cancer Care for Children and Cancer and Leukaemia in Childhood (CLIC Sargent). It was triangulated with information collected during focus groups which included two parents, both of whose children had died: one from a form of leukaemia, the second from bone cancer.

<b>A child with cancer</b>	<b>Cost per year</b>
<b>Health costs</b>	
During one year:	
Three inpatient stays	£7,485
One ward attendance per month	£706
One day care episode per fortnight	£4,129
One home visit per week, including intensive bereavement support	£8,870
<b>Sub-total</b>	<b>£21,190</b>
It was assumed that the child died at home with intensive community support and that there was no uptake of respite care. It was also assumed that there were no costs accruing to education and social services	
<b>Financial burden on the family</b>	
One family member gives up paid employment	£15,972
Significant financial cost to family	£7,965
<b>Sub-total</b>	<b>£23,937</b>
<b>Total costs (including financial burden on the family)</b>	<b>£45,127</b>

<sup>1</sup> Cochrane, H., Liyanage, S. & Nantambi, R. (2007) *Palliative care statistics for children and young adults*, Department of Health, London. [http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH\\_074701](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH_074701)

<sup>2</sup> Craft, A. & Killen, S. (2007) *Palliative care services for children and young people in England*, Department of Health, London. [http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_074459](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_074459)

<sup>3</sup> Lowson, K., Lowson, P. & Duffy, S. (2007) *Independent review of palliative care services for children and young people: economic study*, Final Report, York Health Economics Consortium, Department of Health Independent Review Team, London.

### 8.10.2 Longer life illness trajectories: cardiac care

This pathway has been developed for a typical child being treated by a community-based team. The information was provided by parents at a focus group.

<b>A child aged 15 months with a cardiac condition</b>	<b>Cost per year</b>
<b>Health costs</b>	
During one year	
Inpatient stay of 5 days in local hospital for respiratory infection	£2,495
Inpatient stay of 4 weeks in paediatric cardiac unit including 1 week in PICU	£50,666
Inpatient stay of 6 days in local hospital for viral infection	£2,495
Inpatient stay of 6 weeks in paediatric cardiac unit including 2 weeks in PICU	£78,901
One outpatient visit per month to local team	£2,117
One home visit per week by community team	£8,870
One telephone contact per week	£367
<b>Sub-total</b>	<b>£145,911</b>
<b>Social care costs</b>	
The child attends a pre-school special needs nursery	£3,788
Uses wheelchair and has home equipment	£6,895
<b>Sub-total</b>	<b>£10,683</b>
<b>Respite care costs</b>	
Assumptions re. respite care (based on focus groups and published evidence)	
15 days per year at hospice	£16,233
6 hours per week at home	£9,136
<b>Sub-total</b>	<b>£36,052</b>
<b>Financial burden on the family</b>	
Family in receipt of carer allowance	£0 <sup>1</sup>
One family member gives up paid employment	£15,972
Significant financial cost to family	£7,965
<b>Sub-total</b>	<b>£23,937</b>
<b>Total costs (including financial burden on the family)</b>	<b>£205,900</b>

<sup>1</sup> Expenditure on social security/welfare benefits could partly double-count the costs of lost employment for parents so have been estimated at £0.



**8.10.3 Longer life illness trajectories: cystic fibrosis**

This pathway has been developed for a typical child being treated by a community-based team. The information was provided by parents at a focus group.

<b>A child aged 5 years with cystic fibrosis</b>	<b>Cost per year</b>
<b>Health costs</b>	
During one year:	
Two inpatient stays in local hospital for receipt of intravenous antibiotics	£8,390
One outpatient visit per month to local team comprising consultant paediatrician and consultant respiratory paediatrician	£8,470
Four visits per year to speech and language therapist	£1,797
One home visit per fortnight by community team	£414
One telephone contact per week	£4,435
	£367
<b>Sub-total</b>	<b>23,872</b>
<b>Social care costs</b>	
The child attends mainstream school with support	£6,787
Uses wheelchair and has home equipment	£6,895
<b>Sub-total</b>	<b>£13,682</b>
<b>Respite care (based on focus groups and published evidence)</b>	
15 days per year at hospice	£16,233
6 hours per week at home	£9,136
<b>Sub-total</b>	<b>£24,632</b>
<b>Financial burden on family</b>	
One family member gives up paid employment	£15,972
Significant financial cost to family	£7,965
<b>Sub-total</b>	<b>£23,937</b>
<b>Total costs</b>	<b>£86,123</b>

**8.10.4 Longer life illness trajectories: child with multiple disabilities**

This pathway has been developed for a typical child being treated by a community-based team. The information was provided by parents at a focus group.

<b>An older child with complex and multiple needs.</b> The child has renal problems and seizures, with visual impairment and intellectual difficulties. The child and family are in contact with five specialities: paediatric endocrinology, paediatric gastroenterology, neurosurgery, ophthalmology, child psychiatry.	<b>Cost per year</b>
<b>Health costs</b> In one year: <ul style="list-style-type: none"> <li>One inpatient stay in tertiary centre for neurosurgery</li> <li>One inpatient stay for dental extraction</li> <li>One outpatient visit per week for blood tests</li> <li>One outpatient visit per month for specialist reviews</li> <li>Two CT scans</li> <li>Two MRI scans</li> <li>Three EEGs</li> <li>Four visits per year to clinical psychologist</li> <li>Four visits per year to speech and language therapist</li> <li>One face-to-face visit per month by community team</li> <li>One home visit per fortnight by community team</li> <li>One telephone contact per fortnight with community team</li> </ul>	£16,331 £1,179 £9,175 £2,117 £303 £790 £349 £1,797 £414 £2,047 £4,094 £184
<b>Sub-total</b>	<b>£38,781</b>
<b>Social care costs</b> <ul style="list-style-type: none"> <li>The child attends a school for children with special educational needs</li> <li>Uses wheelchair and has home equipment</li> </ul>	£3,645 £6,895
<b>Sub-total</b>	<b>£10,540</b>
<b>Respite care (based on focus groups and published evidence)</b> <ul style="list-style-type: none"> <li>15 days per year at hospice</li> <li>6 hours per week at home</li> </ul>	£16,233 £9,136
<b>Sub-total</b>	<b>£24,898</b>
<b>Financial burden on the family</b> <ul style="list-style-type: none"> <li>Family in receipt of carer allowance</li> <li>One family member gives up paid employment</li> <li>Significant financial cost to family</li> </ul>	£0 <sup>1</sup> £15,972 £7,965
<b>Sub-total</b>	<b>£23,937</b>
<b>Total costs (including financial burden on the family)</b>	<b>£98,246</b>

<sup>1</sup> Expenditure on social security/welfare benefits could partly double-count the costs of lost employment for parents so have been estimated at £0.

## 8.11 Residential parenting assessments

The following tables illustrate examples of the support given to families who are supported during a residential parenting assessment (RPA) from independent providers. These costs have been drawn from a study carried out by the Institute of Education, London and the Centre for Child and Family Research (CCFR) at Loughborough University, in which the use and costs of RPAs in local authorities was explored.<sup>1</sup> Three local authorities took part in an in-depth case analysis of 10 or 11 cases in which an RPA had been used. The unit costs of social care processes and support are based on previous research carried out by CCFR,<sup>2</sup> and the weekly cost of the RPA is the rate charged to the local authority by the independent RPA provider.

Three examples are presented in this table. Each illustrates different RPA support package and the outcome for the families over a 12-month period during 2011 and 2012, along with the variation of the costs incurred. We show the costs for relevant social care processes and other services provided.

<sup>1</sup> Munro, E., Hollingworth, K., Meetoo, V., Quay, K., McDermid, S., Trivedi, H. & Holmes, L. (2014) Residential parenting assessments: uses, costs and contributions to effective and timely decision-making in public law cases, Department for Education, London.

<sup>2</sup> Ward, H., Holmes, L., and Soper, J (2008) *The costs and consequences of placing children in care*. Jessica Kingsley Publishers, London; Holmes, L. & McDermid, S. (2012) *Understanding costs and outcomes of child welfare services: a comprehensive guide to managing your resources*, Jessica Kingsley, London. The costs have been inflated using the appropriate inflators.

## Family A

The mother of this family received methadone replacement treatment and had previously had a child removed from her care. A pre-birth assessment was completed in 2010 for the current child and a child protection plan initiated. In Spring 2012 a court directed a residential parenting assessment (RPA). The RPA lasted 20 weeks. As part of the assessment the mother was provided with parenting advice and support. In the final six weeks of the RPA both parents received relationship guidance counselling from the provider. A psychiatric assessment of the mother was completed by an additional agency. It was concluded that the mother was unable to provide consistently good care and meet the baby's needs. At the end of the RPA the baby was placed with foster carers, and a Placement Order was granted in summer 2012 when the baby was two years old.

Social process costs	Frequency/ length	Unit cost	Sub-total
CiN – 3 high level – (CPP) ongoing support (per month)	5 months	£438	£2,190
CiN – 5 core assessment	Once	£624	£624
CiN – 8 legal activity	Once	£2,389	£2,389
Cost of CiN social care case management activity			<b>£5,200</b>
LAC – 1 child becomes looked after	Once	£1,021	£1,021
LAC – 5 find subsequent placement	Once	£323	£323
LAC – 3 ongoing support, in RPA (per day)	143 days	£41 (per day)	£5,863
LAC – 3 ongoing support, first 3 months of placement (per day)	90 days	£8 (per day)	£720
LAC – 3 ongoing support, LA foster care (per day)	99 days	£53 (per day)	£5,247
LAC – 3 fee & allowance foster care in LA (per week)	14 weeks	£166 (per week)	£2,325
LAC – 6 review	Once	£650	£650
LAC – 2 care planning	Once	£252	£252
LAC – 7 legal activity	Once	£4,397	£4,397
<b>Cost of LAC social care case management activity</b>			<b>£20,798</b>
<b>Total cost of all social care case management activity</b>			<b>£26,001</b>
Service provision costs			
RPA, including parenting support and relationship counselling for parent.	12 weeks and 8 weeks	£3,395 (per week for the RPA) £3,395 (per week for the relationship counselling)	£67,911
Drug & rehab programme	20 weeks	£54	£1,074
Parent psychiatric assessment	Once	£136	£136
<b>Total cost of service provision</b>			<b>£69,121</b>
<b>Total costs of support for Family A</b>			<b>£95,122</b>

## Family B

In summer 2011 a court-directed RPA was to be initiated for Family B. The parents asked to be assessed as a couple. The parents and two children began the RPA that summer, during which time another baby was born. Due to aggressive incidences between the couple, the parents were separated into different facilities and assessed separately. During the period of the RPA the mother attended an intervention group for perpetrators of domestic abuse, completed a psychiatric assessment, and the children were also given a psychotherapy assessment. The father's individual RPA began with the two older children at the other facility. The mother's RPA with her new baby ended at the end of the summer due to her poor care skills and maltreatment of the baby. The baby was placed with the father and other siblings. A week of intensive parenting support to help him care for the young baby was provided by the RPA provider. The assessment was completed and the father was considered able to provide for the care needs of the children. The family was accommodated and a community assessment completed. The local authority concluded the father should be the primary carer, and in spring 2012 a Residence Order was granted for the three children and a Supervision Order for 12 months.

## Family C

Social process costs	Frequency/ length	Unit cost	Sub-total
CiN – 3 ongoing support	5 days	£14.60	£73
CiN – 8 legal activity	Once	£2,389	£2,389
Cost of CiN social care case management activity			<b>£2,462</b>
LAC – 1 child becomes looked after	Once	£631	£631
LAC – 3 ongoing support, in RPA	135 days	£33 (per day)	£4,455
LAC – 3 ongoing support, placed with parent	156 days	£33 (per day)	£5,148
LAC – 3 ongoing support, first 3months of placement	90 days	£7.90 (per day)	£708
LAC – 6 review	Once	£650	£650
LAC – 2 care planning	Once	£252	£252
LAC – 7 legal activity	Once	£4,397	£4,397
LAC – 4 ongoing support	Once	£426	£426
<b>Cost of LAC social care case management activity</b>			<b>£16,667</b>
<b>Total cost of all social care case management activity</b>			<b>£19,129</b>
<b>Service provision costs</b>			
RPA initiated	12 weeks	£1,344 (per week)	£16,126
2nd RPA initiated	17 weeks	£1,344 (per week)	£22,845
Consultant paediatrician	Twice	£174 (per consultation)	£349
LA parenting support	12 weeks	£29 (per week)	£353
Parenting support and visits	6 weeks	£1,306 (per week)	£7,836
Parent psychiatric assessment	Once	£136	£136
Child psychotherapy assessment	Twice	£68 (per visit)	£136
<b>Total cost of service provision</b>			<b>£47,781</b>
<b>Total costs of support for Family B</b>			<b>£66,910</b>

In this family, three children have previously been removed and adopted; when it was apparent the mother wanted to raise the baby, a referral was made to social care. This referral led to an initial assessment in autumn 2011. The mother has a

diagnosis of depression, and both parents have learning difficulties. A core assessment was completed in spring 2012 and an RPA followed. This was to give the parents an opportunity to show they could care for the needs of the baby. The RPA began from birth in late spring 2012. The RPA was planned for 12 weeks, but the parents terminated the assessment early by leaving the unit. The father was asked to leave due his aggressive behaviour with staff and other service users, and then the mother left with him. The RPA lasted 8 weeks, until summer 2012. The baby was placed in local authority foster care and an interim care order was granted in late summer 2012, and a care order and placement order in winter 2012. The baby was placed a year later with adoptive parents who had previously adopted one of the baby's siblings.

<b>Social process costs</b>	<b>Frequency/length</b>	<b>Unit cost</b>	<b>Sub-total</b>
CiN – 3 medium level – ongoing support	5.5 months	£204 (per month)	£1,127
CiN – 5 core assessment	Once	£624	£624
<b>Cost of CiN social care case management activity</b>			<b>£1,751</b>
LAC – 1 child becomes looked after	Once	£1,021	£1,021
LAC – 5 find subsequent placement	Once	£323	£323
LAC – 3 ongoing support, during RPA	62 days	£33 (per day)	£2,045
LAC – 3 ongoing support, LA foster care	157 days	£54 (per day)	£8,425
LAC – 3 ongoing support, first 3 months of placement	90 days	£8 (per day)	£708
LAC – 3 additional support for care order	55 days	£10 (per day)	£577
LAC – 3 fee & allowance foster care in LA	23 weeks	£166 (per week)	£3,821
LAC – 6 review	Twice	£649	£1,300
LAC – 2 care planning	Twice	£252	£505
LAC – 7 legal	Once	£4,397	£4,397
<b>Cost of LAC social care case management activity</b>			<b>£24,873</b>
<b>Total cost of all social care case management activity</b>			<b>£26,624</b>
RPA initiated	8 weeks	£1,344 per week	£10,751
<b>Total cost of service provision</b>			<b>£10,751</b>
<b>Total costs of support for Family C</b>			<b>£37,375</b>

## 8.12 Acute medical units (patient costs following discharge)

Acute medical units (AMU) are the first point of entry for patients who are admitted for urgent investigation or care by their GP, an outpatient clinic or the Emergency Department. They allow for those who need admission to be correctly identified, and for those who could be managed in ambulatory settings to be discharged. A study (The Acute Medicine Outcome Study - AMOS) carried out by Franklin et al. in 2009/10 found that service evaluations indicated that readmission rates for older people in the year following discharge from AMUs are high.<sup>1</sup> Further work was therefore carried out to identify the resource use of 644 people based in Nottingham and Leicester, aged over 70, who had been discharged from an acute medical unit within 72 hours of admission.

Data were taken from Electronic Administrative Record (EAR) systems on a range of health and social care services potentially used by all patients participating in the study, collected for three months post-AMU discharge (January 2009-February 2011). Resource-use was then combined with national unit costs to derive total patient costs, which have been updated to 2014/15 prices using the HCHS inflation index. The table below provides the secondary care and social care resource use and costs for 456 patients residing in Nottingham, and also for a subset of these patients (250) for which the primary care costs were also available. The mean cost for the 456 patients (excluding primary care) was £1,892 and £2,107 for the 250 patients for which all resource use was available (see Table 1).

**Table 1 Summary of patient resource use and costs over three months – costs have been updated using the HCHS inflator**

	No of service users, (mean number of events per service user) (a)	Mean (SD) cost (£) for 456 patients	Mean (SD) cost (£) per patient in the complete data subset (n = 250)
Hospital care	360 (4)	£1,660 (£3,311)	£1,584 (£3,068)
Inpatient care (b)	119 (2)	£1,140 (£3,101)	£1,041 (£2,862)
Day case care	71 (1)	£140 (£405)	£149 (£450)
Outpatient care	358 (3)	£372 (£396)	£379 (£356)
Critical care (c)	3 (1)	£8 (£97)	£14 (£131)
Ambulance service	17 (2)	£19 (£114)	£15 (£81)
Intermediate care	5 (Not applicable)	£11 (£162)	£3 (£41)
Mental health care	28 (4)	£40 (£190)	£46 (£187)
Social care	76 (4)	£162 (£753)	£220 (£921)
<b>Total costs (exc. primary care)</b>	<b>377 (5)</b>	<b>£1,892 (£3,523)</b>	<b>£1,869 (£3,369)</b>
Primary care (d)	243 (6)	-	£238 (£250)
Consultations	113 (3)	-	£31 (£45)
Home visits	42 (7)	-	£26 (£105)
Procedures	25 (3)	-	£4 (£21)
Other events (e)	202 (22)	-	£55 (£58)
Medication	232 (21)	-	£112 (£142)
Wound dressings	64 (4)	-	£11 (£34)
<b>Total costs including primary care (g)</b>	<b>248 (7)</b>	<b>-</b>	<b>£2,107 (£3,420)</b>

SD: standard deviation

a) Mean number of events for inpatient care is based on mean number of episodes, and not number of spells. Mean number of events for 'total' does not include primary care events classed as 'other events', 'medication' or 'wound dressing'.

b) Mean length of hospital stay for those patients with an inpatient admission over the trial period was 12 days.

c) Mean length of intensive care stay for those patients with an intensive care admission was 15 days.

d) Mean number of events for primary care service users only includes face-to-face contacts (i.e. consultations, home visits, and procedures)

e) 'Other events' includes all non face-to-face entries on the EAR system that require staff time to execute, i.e. administration, telephone calls etc. Entries that were electronic and external to the practice or created by an electronically automated system (i.e. did not require staff time to execute) were excluded from this analysis.

g) Mean number of events includes only face-to-face contacts across all services apart from mental health care (see also point (d))

<sup>1</sup> Franklin, M., Berdunov, V., Edmans, J., Conroy, S., Gladman, J., Tanajewski, L., Gkountouras, G. & Elliott, R. (2014) Identifying patient-level health and social care costs for older adults discharged from acute medical units in England, *Age and Ageing*, 43, 703-707. Contact Matthew Franklin: [Matthew.Franklin@sheffield.ac.uk](mailto:Matthew.Franklin@sheffield.ac.uk) for more information.

The figures presented in Table 2 are mean costs by service and mean total cost across services for patients described as high-cost patients. A high-cost patient represents the top 25 per cent of most costly patients, based on their overall health and social care cost (including primary care) for whom primary care data were available.

The mean cost for these high cost patients across all services excluding primary care was £6,059, and £6,435 when including primary care. These mean costs for high-cost patients are approximately three times higher than the mean cost estimates for all patient discharged from AMU in the complete data subset as presented in Table 1 (mean total cost excluding primary care: £6,059 versus £1,892; mean total cost including primary care: £6,435 versus £2,107).

**Table 2 High-cost patients discharged from AMU (top 25% of most costly patients - costs have been updated using the HCHS inflator)**

	No. of high-cost service users, (mean number of events per service user) (n = 63) (a)	Mean (SD) cost per high cost patient in the complete data subset (n = 63)
Hospital care	62 (6)	£5,113 (£4,504)
Inpatient care (b)	52 (3)	£3,972 (£4,594)
Day case care	24 (1)	£473 (£766)
Outpatient care	61 (4)	£611 (£368)
Critical care (c)	3 (1)	£57 (£258)
Ambulance service	5 (2)	£32 (£123)
Intermediate care	2 (not applicable)	£13 (£82)
Mental health care	12 (4)	£130 (£316)
Social care	27 (4)	£771 (£1,706)
<b>Total costs (excl. primary care)</b>	<b>63 (9)</b>	<b>£6,059 (£4,587)</b>
Primary care (d)	27 (11)	£376 (£382)
Consultations	26 (3)	£29 (£46)
Home visits	16 (12)	£64 (£192)
Procedures	4 (1)	£1 (£5)
Other events (e)	53 (28)	£82 (£77)
Medication	57 (32)	£181 (£203)
Wound dressings	22 (5)	£19 (£47)
<b>Total costs including primary care</b>	<b>63 (14)</b>	<b>£6,435 (£4,550)</b>

SD: standard deviation

a) Mean number of events for inpatient care is based on mean number of episodes, and not number of spells. Mean number of events for 'total' does not include primary care events classed as 'other events', 'medication' or 'wound dressing'.

b) Mean length of hospital stay for those patients with an inpatient admission over the trial period was 13 days.

c) Mean length of intensive care stay for those patients with an intensive care admission was 15 days.

d) Mean number of events for primary care service users only includes face-to-face contacts (i.e. consultations, home visits, and procedures)

e) 'Other events' includes all none face-to-face entries on the EAR system that requires staff time to execute, i.e. administration, telephone calls etc. Entries that were electronic and external to the practice or created by an electronically automated system (i.e. did not require staff time to execute) were excluded from this analysis.

g) Mean number of events includes only face-to-face contacts across all services apart from mental health care (see also point (d))



## 8.13 End-of-life care

Recent research carried out by the Nuffield Trust<sup>1</sup> on behalf of the National End of Life Care Intelligence Network has examined the health and social care service use patterns across seven local authorities for a cohort of 73,243 people who died.

Table 1 provides the total cost of care services received in the last twelve months of life and also the average cost per decedent and per user of each type of service. Estimated social care costs include only the most common types of services provided by local authorities. Hospital care accounted for 66 per cent of total care costs, and social care costs for 34 per cent of total costs.

Emergency hospital admissions were responsible for 71 per cent of all hospital costs in the final year of life and 46 per cent of total costs. Emergency admissions rose sharply in the final year such that, by the final month of death, costs had risen by a factor of 13 compared to 12 months earlier. They accounted for 85 per cent of hospital costs in the final month (£2,006 per decedent). Elective inpatient costs more than tripled in the same period (from £77 per decedent to £263 per decedent).

**Table 1: Estimated average cost of care services in the last twelve months of life**

	Total cost	Total cost per decedent	% total	No. of users	Total cost per user
Hospital care	£517	£7,055	66%	65,624	£7,874
Inpatient emergency	£367	£5,013	47%	54,577	£6,728
Inpatient non-emergency	£98	£1,337	12%	58,165	£1,684
Outpatient	£42	£575	5%	50,155	£840
A&R	£9	£129	1%	48,000	£197
<b>Social care</b>	<b>£265</b>	<b>£3,615</b>	<b>34%</b>	<b>20,330</b>	<b>£13,024</b>
Residential and nursing care	£212	£2,899	28%	10,896	£19,950
Home care	£41	£560	5%	10,970	£3,742
Other	£11	£156	1%	4,084	£2,798
<b>Total</b>	<b>£781</b>	<b>£10,670</b>	<b>100%</b>	<b>NA</b>	<b>NA</b>

One of the key findings of the research was that there were significant differences in the use of social care between groups of individuals with certain long-term conditions: people with dementia, falls and stroke were more likely to use social care services, while people with cancer were least likely to use social care (even when adjusted for age). Table 2 provides a breakdown of these groups, including prevalence rates and costs. A person may have more than one condition so the groups are not mutually exclusive, and the sum of individual rows exceeds the total. Hospital costs were higher for those with more than one long-term condition (as might be expected), and social care costs decreased with an increasing number of long-term conditions.

<sup>1</sup> Georghiou, T., Davies, S., Davies, A. & Bardsley, M. (2012) *Understanding patterns of health and social care at the end of life*, Nuffield Trust, London.

**Table 2 Cost of hospital and social care services by diagnostic group per decedent in the final year of life**

Diagnostic group	Average costs, final year, £ per person			
	Number	Hospital care	Social care	Hospital and social care
All people	73,243	£7,037	£3,616	£10,653
No diagnoses	22,118	£3,465	£4,443	£7,908
Any diagnosis	51,125	£8,582	£3,258	£11,840
Hypertension	21,241	£9,605	£2,989	£12,594
Cancer	19,934	£10,061	£1,396	£11,457
Injury	17,540	£10,365	£4,342	£14,707
Atrial fibrillation	13,567	£9,704	£3,540	£13,244
Ischaemic heart disease	13,213	£9,844	£3,016	£12,860
Respiratory infection	11,136	£10,772	£2,401	£13,173
Falls	10,560	£9,523	£5,497	£15,020
Congestive heart failure	10,474	£9,891	£3,425	£13,316
Chronic obstructive pulmonary disease	9,392	£9,662	£2,699	£12,362
Anaemia	9,210	£11,346	£3,255	£14,600
Diabetes	8,697	£9,875	£3,362	£13,237
Cerebrovascular disease	8,290	£9,724	£4,474	£14,198
Peripheral vascular disease	6,780	£11,204	£2,982	£14,186
Dementia	6,735	£8,111	£9,583	£17,694
Renal failure	6,570	£11,308	£3,441	£14,749
Angina	6,549	£10,574	£3,049	£13,623
Mental disorders, not dementia	4,814	£10,605	£3,874	£14,479
Iatrogenic conditions	4,190	£15,284	£2,716	£18,000
Asthma	3,480	£10,265	£2,662	£12,927
Alcoholism	2,437	£9,361	£1,243	£10,605
Non-rheumatic valve disorder	2,059	£11,525	£2,348	£13,873

## **II. COMMUNITY-BASED HEALTH CARE STAFF**



## 9. Scientific and professional staff

The table overleaf provides the unit costs for community-based allied health professionals, and replaces the individual schema usually found in this section. See Preface for more information on changes to the presentation of our estimates. Each Agenda for Change (AFC) band can be matched to professionals using the AFC generic profiles. <http://www.nhsemployers.org/your-workforce/pay-and-reward/pay/job-evaluation/national-job-profiles>. Examples of roles in each band are shown in chapter 18. Reference should also be made to the explanatory notes when interpreting the unit costs.

## 9. Scientific and professional staff

### A Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change bands 4-8b of the July 2014-June 2015 NHS staff earnings estimates for allied health professionals.<sup>1</sup> 12.7 per cent can be added to reflect payments for activity such as overtime, shift work and geographic allowances. See section V for further information on pay scales. The Electronic Staff Records (ESR) system shows that the mean basic salary for all physiotherapists is £32,944; hospital occupational therapists £31,928; speech and language therapists £33,544; dieticians £32,821; & radiographers (Diagnostic & Therapeutic) £32,818.

### B Salary oncosts

Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.

### C Qualification costs

See section V for detailed information on qualifications for each category of scientific and professional staff. These have been calculated using the method described in Netten et al. (1998).<sup>2</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE).<sup>3</sup> To calculate the cost per hour including qualifications for each profession, the expected annual cost shown in chapter 19 should be taken for the appropriate profession and then divided by the number of working hours. This can then be added to the cost per working hour.

### D Overheads

Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.

Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff. Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.

### E Capital overheads

Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of office space for administration, and recreational and changing facilities.<sup>4,5</sup> Please note that when calculating the costs for a community pharmacist, the capital cost provided should be replaced by £4,089.

### F Travel

No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used.<sup>6</sup>

### G Working time

Unit costs are based on 1,590 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups.<sup>7</sup>

### H Ratio of direct to patient-related time.

See Preface for forthcoming information and previous editions for time spent on patient-related activities. See also section V for information on a PSSRU survey carried out in 2014/15 providing estimates of time use for community staff.

### I London multiplier and non-London multiplier

Allows for the different costs associated with working in London/outside London.<sup>4,5,8</sup>

<sup>1</sup> Health & Social Care Information Centre (2014) NHS staff earnings estimates 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>2</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS*, Vols 1 & 2, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>3</sup> Personal Communication with the Department of Health and Health Education England (HEE), 2015.

<sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London

<sup>5</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>6</sup> NHS Employers (2015) *Mileage allowances – Section 17*, <http://nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 5 November 2015].

<sup>7</sup> Health & Social Care Information Centre, *NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15*, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-jan-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>8</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 9. Scientific and professional staff

This table provides the annual and unit costs for community-based scientific and professional staff. See Preface for commentary, and notes facing for assistance in interpreting each cost item. See chapter 18 for examples of roles in each band.

Refer to notes on facing page for references	Band 4	Band 5	Band 6	Band 7	Band 8a	Band 8b
A Wages/salary	£21,248	£23,284	£31,070	£38,525	£46,038	£55,276
B Salary oncosts	£4,809	£5,375	£7,540	£9,612	£11,701	£14,269
C Qualification	See note	See note	See note	See note	See note	See note
<b>D Overheads</b>						
Management, admin and estates staff	£6,384	£10,948	£9,459	£11,794	£14,146	£17,038
Non-staff	£9,954	£14,014	£14,749	£18,388	£22,056	£26,566
E Capital overheads	£4,370	£4,370	£4,370	£4,370	£4,370	£4,370
F Travel	See note	See note	See note	See note	See note	See note
<b>G Working time</b>	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week
H Ratio of direct to indirect time						
I London multiplier	1.55 x E	1.55 x E	1.55 x E	1.55 x E	1.55 x E	1.55 x E
Non-London multiplier	0.97 x E	0.97 x E	0.97 x E	0.97 x E	0.97 x E	0.97 x E
<b>Unit costs available 2014/2015</b>						
Cost per working hour	<b>£29</b>	<b>£36</b>	<b>£44</b>	<b>£52</b>	<b>£62</b>	<b>£74</b>





## **10. Nurses, doctors and dentists**

- 10.1 Community nurse (includes district nursing sister, district nurse)
- 10.2 Nurse (mental health)
- 10.3 Health visitor
- 10.4 Nurse specialist (community)
- 10.5 Clinical support worker nursing (community)
- 10.6 Nurse (GP practice)
- 10.7 Nurse advanced (includes lead specialist, clinical nurse specialist, senior specialist)
- 10.8a General practitioner—cost elements
- 10.8b General practitioner—unit costs
- 10.8c General practitioner—commentary
- 10.9 Telephone triage
- 10.10 Dentist – performer-only
- 10.11 Dentist – providing-performer
- 10.12 NHS dental charges



## 10.1 Community nurse (includes district nursing sister, district nurse)

Using data from the NHS reference costs,<sup>1</sup> the mean average cost for a face-to-face contact in district nursing services for 2014/2015 was estimated to be £38, with an interquartile range of £32 to £40. Costs have been updated using the HCHS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£31,914 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 6 of the July 2014-June 2015 NHS staff earnings estimates for nurses. <sup>2</sup> An additional 12.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all community nurses is £31,902. <sup>3</sup> See section V for further information on pay scales.
B. Salary oncosts	£7,774 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£10,619 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>4</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>5</sup> See table 19 for more details.
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£9,724 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£15161 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£3,718 per year	Based on the new-build and land requirements of community health facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>6,7</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used. <sup>8</sup>
Working time	41.7 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days, as reported for NHS staff groups. <sup>9</sup>
Ratio of direct to indirect time on: Patient-related work	1:0.33	Based on a study by Ball & Philippou (2013), <sup>10</sup> community nurses spent 43 per cent of their time on direct care and a further 18 per cent of their time on care planning, assessment and coordination. Nineteen per cent of time was spent on admin, 5 per cent on management, 14 per cent travelling with a further 1 per cent on other duties. See Ball & Philippou (2013) <sup>10</sup> for more detail and for information on other bands of nurses. Also see the McKinsey report, <sup>11</sup> for comparative purposes. The median number of visits per day carried out by district nurses was 5.6 in 2008. <sup>11</sup>
London multiplier	1.55 x E	Allows for the higher costs associated with working in London. <sup>6,7,12</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London. <sup>6,7</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£44 (£50) per hour; £58 (£67) per hour of patient-related work.		

<sup>1</sup> Department of Health (2015) *NHS reference costs 2014-2015*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2015.

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>8</sup> NHS Employers (2015) *Mileage allowances – Section 17*, <http://nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 5 November 2015].

<sup>9</sup> Health & Social Care Information Centre, *NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15*, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-jan-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>10</sup> Ball, J. & Philippou, J. with Pike, G. & Sethi, J., (2014) *Survey of district and community nurses in 2013*, Report to the Royal College of Nursing, King's College London.

<sup>11</sup> Department of Health (2010) *Achieving world class productivity in the NHS, 2009/10-2013/14: The McKinsey Report*, Department of Health, London.

<sup>12</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

**10.2 Nurse (mental health)**

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£25,764 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 of the July 2014-June 2015 NHS staff earnings estimates for nurses. <sup>1</sup> An additional 12.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>1</sup> See section V for further information on pay scales.
B. Salary oncosts	£6,064 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£10,619 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>2</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>3</sup> See table 19 for more details.
D. Overheads		
Management, admin and estates staff	£7,797 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£12,158 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff. Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£3,718 per year	Based on the new-build and land requirements of community health facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>4,5</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used. <sup>6</sup>
Working time	41.7 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>7</sup>
Ratio of direct to indirect time on patient-related work		No current information available. See previous editions of this volume for sources of information.
London multiplier	1.55 x E	Allows for the higher costs associated with working in London. <sup>4,5,8</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London. <sup>4,5</sup>
Unit costs available 2014/2015 (costs including qualifications given in brackets)		
£35 (£40) per hour; £67 (£75) per hour of face-to-face contact; £47 (£53) per hour of patient-related work.		

<sup>1</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>2</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>3</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>6</sup> NHS Employers (2015) *Mileage allowances – Section 17*, <http://nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 5 November 2015].

<sup>7</sup> Health & Social Care Information Centre, *NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15*, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-ian-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>8</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 10.3 Health visitor

Using data from the NHS reference costs,<sup>1</sup> the mean average cost for a face-to-face contact in health visiting services for 2014/2015 was estimated to be £54, with an interquartile range of £47 to £62. Costs have been updated using the HCHS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£31,914 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 6 of the July 2014-June 2015 NHS staff earnings estimates for nurses. <sup>2</sup> An additional 2.8 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all health visitors is £33,620. <sup>3</sup> See section V for further information on pay scales.
B. Salary oncosts	£7,774 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£10,619 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>4</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>5</sup> See table 19 for more details.
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£9,723 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£15,161 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£3,717 per year	Based on the new-build and land requirements of community health facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>6,7</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used. <sup>8</sup>
Working time	41.7 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>9</sup>
Ratio of direct to indirect time on:		No time use information is currently available for health visitors. However, assuming that a health visitor carries out the same number of home visits as a district nurse, a study by Ball & Philippou (2013) <sup>10</sup> reported that band 6 district nurses spent 34 per cent of their time on direct care and a further 21 per cent of their time on care planning, assessment and coordination. Nineteen per cent of time was spent on admin, 14 per cent on management, 11 per cent travelling, with a further 1 per cent on other duties. Based on the McKinsey report, <sup>11</sup> the median number of visits per day carried out by district nurses was 5.6 in 2008. No information is available on the duration of a visit.
Patient-related work	1:0.52	
London multiplier	1.55 x E	Allows for the higher costs associated with working in London. <sup>6,7,12</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London. <sup>6,7</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£44 (£50) per hour; £66 (£76) per hour of patient-related work.		

<sup>1</sup> Department of Health (2015) *NHS reference costs 2014-2015*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>8</sup> NHS Employers (2015) *Mileage allowances – Section 17*, <http://nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 5 November 2015].

<sup>9</sup> Health & Social Care Information Centre, *NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15*, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-jan-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>10</sup> Ball, J. & Philippou, J. with Pike, G. & Sethi, J., (2014) *Survey of district and community nurses in 2013*, Report to the Royal College of Nursing, King's College London.

<sup>11</sup> Department of Health (2010) *Achieving world class productivity in the NHS, 2009/10-2013/14: the McKinsey report*, Department of Health, London.

<sup>12</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 10.4 Nurse specialist (community)

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£31,914 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 6 of the July 2014-June 2015 NHS staff earnings estimates for nurses. <sup>1</sup> An additional 12.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>1</sup> See section V for further information on pay scales.
B. Salary oncosts	£7,774 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£10,619 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>2</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>3</sup> See table 19 for more details.
D. Overheads		<p>Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.</p> <p>Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.</p> <p>Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.</p>
E. Capital overheads	£3,717 per year	Based on the new-build and land requirements of community health facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>4,5</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used. <sup>6</sup>
Working time	41.7 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>7</sup>
Ratio of direct to indirect time on: Patient-related care	1:0.49	Based on a study by Ball & Philippou (2014) <sup>8</sup> of district and community nurses, specialist nurses spent 32 per cent of their time on direct care and a further 22 per cent of their time on care planning, assessment and coordination. Twenty per cent of time was spent on admin, 11 per cent on management, 13 per cent travelling, with a further 1 per cent on other duties. See Ball & Philippou (2014) <sup>8</sup> for more detail and for information on other bands of nurses.
Patient-related work	1.55 x E	Allows for the higher costs associated with working in London. <sup>4,5,9</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London. <sup>4,5</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£44 (£50) per hour; £65 (£75) per hour of patient-related work		

<sup>1</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>2</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>3</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>6</sup> NHS Employers (2015) *Mileage allowances – Section 17*, <http://nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 5 November 2015].

<sup>7</sup> Health & Social Care Information Centre, *NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15*, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-jan-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>8</sup> Ball, J. & Philippou, J. with Pike, G. & Sethi, J., (2014) *Survey of district and community nurses in 2013*, Report to the Royal College of Nursing, King's College London.

<sup>9</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 10.5 Clinical support worker nursing (community)

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£16,356 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 2 of the July 2014-June 2015 NHS staff earnings estimates for nurses. <sup>1</sup> An additional 12.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>1</sup> See section V for further information on pay scales.
B. Salary oncosts	£3,449 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£4,852 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs, and include administration and estates staff.
Non-staff	£7,566 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
D. Capital overheads	£1,246 per year	Based on the new-build and land requirements of community health facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>2,3</sup> It is assumed that an auxiliary nurse uses one-sixth of the treatment space used by a district nurse. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
E. Travel		No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used. <sup>4</sup>
Working time	42.7 weeks per year 37.5 hours per week	Unit costs are based on 1,600 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>5</sup>
Ratio of direct to indirect time on:		No time use information is currently available for clinical support workers.
London multiplier	1.55 x D	Allows for the higher costs associated with working in London. <sup>2,3,6</sup>
Non-London multiplier	0.97 x D	Allows for the lower costs associated with working outside London. <sup>2,3</sup>
<b>Unit costs available 2014/2015</b>		
£20 per hour.		

<sup>1</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>2</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>3</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>4</sup> NHS Employers (2015) *Mileage allowances – Section 17*, <http://nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 5 November 2015].

<sup>5</sup> Health & Social Care Information Centre, *NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15*, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-jan-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>6</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

**10.6 Nurse (GP practice)**

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£25,764 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 of the July 2014-June 2015 NHS staff earnings estimates for nurses. <sup>1</sup> An additional 12.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>1</sup> See section V for further information on pay scales.
B. Salary oncosts	£6,064 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£10,619 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>2</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>3</sup> See table 19 for more details.
D. Overheads		
Management and administration	£7,798 per year	Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information. No information available on management and administrative overheads for practice nurses. The same level of support has been assumed for practice nurses as for other NHS staff (24.5 per cent of direct care salary costs).
Office, general business and premises (including advertising and promotion)	£12,882 per year	No information available on overheads for a practice nurse. All information on office and general business expenses is drawn from the GP earnings and expenses report. <sup>4</sup> Office and general business, premises and other expenses calculated as the ratio of practice nurse salary costs to all GP employees' salary costs.
E. Capital overheads		
Buildings	£4,007 per year	Calculated as the ratio of GP practice nurse salary costs to net remuneration of GP salary and based on new-build and land requirements for a GP practitioner's suite and annuitised over 60 years at a discount rate of 3.5 per cent. <sup>5, 6</sup>
F. Travel	£3,250 per year	No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used. <sup>7</sup>
Working time	41.7 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for all NHS staff groups. <sup>8</sup>
Ratio of direct to indirect time on: face-to-face contacts	1:0.30	Based on proportion of time spent on surgery consultations (67.9%), phone consultations (5.2%), clinics (2.5%) and home and care home visits (1.2%). Patient direct to indirect contact ratios allocate all non-contact time to all contact time. Taken from the 2006/07 UK general practice workload survey. <sup>9</sup>
Duration of contact	15.5 minutes	Per surgery consultation. Based on the 2006/07 UK general practice survey. <sup>9</sup>
Patient contacts	60 per week	Average number of consultations per week. <sup>9</sup>
London multiplier		Allows for the higher costs associated with London compared to the national average cost. <sup>10</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£36 (£43) per hour; £47 (£56) per hour of face-to-face contact.		

<sup>1</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>2</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>3</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>4</sup> Health & Social Care Information Centre (2015) *GP earnings and expenses 2013/14*, Information Centre, Leeds. <http://data.gov.uk/dataset/gp-earnings-and-expenses/> [accessed 22 September 2015].

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>6</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>7</sup> NHS Employers (2015) *Mileage allowances – Section 17*, <http://nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 5 November 2015].

<sup>8</sup> Health & Social Care Information Centre, *NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15*, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-jan-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>9</sup> Information Centre (2007) *2006/07 UK general practice workload survey*, Primary Care Statistics, Information Centre, Leeds.

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].



## 10.7 Advanced nurse (includes lead specialist, clinical nurse specialist, senior specialist)<sup>1</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£38,332 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 7 of the July 2014-June 2015 NHS staff earnings estimates for nurses. <sup>2</sup> An additional 12.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> See section V for further information on pay scales.
B. Salary oncosts	£9,558 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£10,619 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>4</sup>
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£11,733 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs, and include administration and estates staff.
Non-staff	£18,294 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£3,717 per year	Based on the new-build and land requirements of community health facilities, but adjusted to reflect shared use of treatment and non-treatment space. <sup>5,6</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>7</sup>
Length of consultation:		Information provided by 27 nurse practitioners working in primary care contacted about duration of consultations. Venning et al. (2000) found that nurse practitioners spent a mean of 11.57 minutes face-to-face with patients (SD 5.79 mins) and an additional 1.33 minutes per patient in getting prescriptions signed. <sup>8</sup>
surgery	15 minutes	
home	25 minutes	
telephone	6 minutes	
Ratio of direct to indirect time on:		Information provided by 27 nurse practitioners on time use. <sup>9</sup> Surgery consultations 58 per cent, home visits 0.4 per cent and telephone consultations 6.4 per cent. Getting prescriptions signed 1.4 per cent. Travel time to home visits was negligible (0.1%). Another study found that 60 per cent of a nurse practitioner/clinical nurse specialist's time was spent on clinical activities. <sup>10</sup> Another study on the role of nurse specialists in epilepsy found that clinical activities accounted for 40 per cent of the time. <sup>11</sup>
face-to-face contacts	1:0.71	
patient contact (incl. telephone)	1:0.55	
London multiplier	1.55 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>5,6,12</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>5,6</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£52 (£59) per hour; £89 (£101) per hour in surgery; £81 (£91) per hour of client contact cost; £22 (£25) per surgery consultation.		

<sup>1</sup> A term for nurse practitioners specifically has not been developed due to the great variation in its use. Personal correspondence with the RCN NP Adviser has suggested that the best match is the Advanced Nurse profile (band 7).

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>6</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>7</sup> Health & Social Care Information Centre, *NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15*, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-jan-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>8</sup> Venning, P., Durie, A., Roland, M., Roberts, C. & Leese, B. (2000) Randomised controlled trial comparing cost effectiveness of general practitioners and nurse practitioners in primary care, *British Medical Journal*, 320, 1048-1053.

<sup>9</sup> Curtis, L. & Netten, A. (2007) *The costs of training a nurse practitioner in primary care: the importance of allowing for the cost of education and training when making decisions about changing the professional*, *Journal of Nursing Management*, 15, 4, 449-457.

<sup>10</sup> Ball, J. (2005) *Maxi Nurses. Advanced and specialist nursing roles, Results from a survey of RCN Members in advanced and specialist nursing roles*, Royal College of Nursing, London.

<sup>11</sup> Higgins, S., Lanfear, J. & Goodwin, M. (2006) Qualifying the role of nurse specialists in epilepsy: data from diaries and interviews, *British Journal of Neuroscience Nursing*, 2, 5, 239-245.

<sup>12</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

**10.8a General practitioner — cost elements**

Costs and unit estimation	2014/2015 value	Notes (for further clarification see Commentary)
A. Net remuneration	£101,900 per year	Average income before tax for GPMS contractor GPs for England. <sup>1</sup>
B. Practice expenses:		
Direct care staff	£20,133 per year	Ninety one per cent of FTE equivalent practitioners (excluding GP registrars & GP retainers) employed 0.51 FTE nurse (includes practice nurses, advanced level nurses and extended role and specialist nurses (includes salary and oncosts)). <sup>2,3</sup> Each FTE equivalent practitioner (excluding GP registrars & GP retainers) employed 1.29 FTE administrative and clerical staff <sup>1,2</sup> (includes salary and oncosts).  All office & general business, premises and other expenses including advertising, promotion and entertainment are based on expenditure taken from the GP earnings and expenses report. <sup>1</sup> Each GP employs 3.05 members of staff (including practice nurses, other patient care staff plus administrators and clerical staff). <sup>1,2</sup> Office & general business, premises, and other expenses calculated as the ratio of GP salary costs to all GP employees salary costs.  Based on information taken from the GP earnings and expenses report. <sup>1,2</sup>
Administrative and clerical staff	£35,225 per year	
Office & general business	£8,968 per year	
Premises	£13,395 per year	
Other: includes advertising, promotion and entertainment	£14,180 per year	
Car and travel	£1,200 per year	
C. Qualifications	£41,188 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>4</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>5</sup>
D. Ongoing training	£2,523 per year	This cost comprises an amount for the generic curriculum, the post-graduate centres' infrastructure, and study leave. Included also are the costs of the course organisers, administrative support, trainers' workshops, vocational training and internal courses for GP tutors. Excluded are the costs of running the library and post-graduate centres. <sup>6</sup>
E. Capital costs:		
Premises	£15,850 per year	Based on new-build and land requirements for a GP practitioner suite. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. <sup>7,8</sup>
Working time	43.5 weeks per year 41.7 hours per week	Based on information taken from the 7 <sup>th</sup> National GP Worklife Survey. <sup>9</sup> Respondents to this 2012 survey reported working an average of 41.7 hours per week and a mean number of 7.3 sessions. Twenty one per cent of respondents (240/1,160) reported undertaking out-of-hours work (median number of hours=4). Unit costs based on 1,814 hours per year.
Ratio of direct to indirect time:		Based on information taken from the 2013 UK general practice workload survey, <sup>10</sup> the proportion of time spent on surgery consultations was 44.5 per cent. Direct patient care (surgeries, clinics, telephone consultations & home visits) took 62.3 per cent of a GP's time. Indirect patient care (referral letters, arranging admissions) absorbed 19.3 per cent of time. General administration (practice management, PCO meetings etc.) formed 10.9 per cent of a time, with other activities (continuing education/development, research, teaching etc.) taking 7.5 per cent of a GP's time. No information on the percentage time allocated to out of surgery visits.
Face-to-face time (excludes travel time)	1:0.61	
Patient-related time	1:0.23	
<b>Consultations:</b>		Based on the 2006/07 UK general practice workload survey, <sup>11</sup> the time spent on a home visit includes only time spent in the patient's home. We assume an average of 12 minutes travel time per visit. This travel time has been allowed for in the estimation of the ratio of direct to indirect time spent on home visits. See commentary to table 10.8c.
Surgery	11.7 minutes	
Clinic	17.2 minutes	
Telephone	7.1 minutes	
Home visit	11.4 minutes	

**Unit costs for 2014/2015 are given in table 10.8b**

<sup>1</sup> Health & Social Care Information Centre (2015) *GP earnings and expenses 2013/14*, Information Centre, Leeds. <http://data.gov.uk/dataset/gp-earnings-and-expenses/> [accessed 22 September 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) *General practice staff 2014*, Information Centre, Leeds.

<sup>3</sup> Based on personal correspondence with the Chairman of the East Midlands Regional Council, British Medical Association.

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2015.

<sup>6</sup> Personal communication with the London Deanery, 2006.

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>9</sup> Hann, M., McDonald, J., Checkland, K., Coleman, A., Gravelle, H., Sibbald, B. & Sutton, M. (2013) *Seventh national GP worklife survey*, University of Manchester, Manchester.

<sup>10</sup> Health & Social Care Information Centre (2013) *2006/07 UK general practice workload survey, Primary Care Statistics*, Information Centre, Leeds. [http://www.dhsspsni.gov.uk/gp\\_workload\\_survey\\_2006\\_07.pdf](http://www.dhsspsni.gov.uk/gp_workload_survey_2006_07.pdf) [accessed 22 September 2015].

<sup>11</sup> Information Centre (2007) *2006/07 General Practice Workload Survey, Primary Care Statistics*, Information Centre, Leeds

**10.8b General practitioner — unit costs**

Unit cost 2014/2015	Including direct care staff costs		Excluding direct care staff costs	
	With qualification costs	Without qualification costs	With qualification costs	Without qualification costs
Annual (including travel)	£254,562	£213,373	£234,429	£193,240
Annual (excluding travel)	£253,362	£212,173	£233,229	£192,040
Per hour of GMS activity <sup>1</sup>	£140	£118	£129	£107
Per hour of patient contact <sup>1</sup>	£225	£189	£207	£171
Per minute of patient contact <sup>1</sup>	£3.8	£3.20	£3.50	£2.90
Per patient contact lasting 11.7 minutes <sup>1</sup>	£44	£37	£40	£33
Per patient contact lasting 17.2 minutes <sup>1</sup>	£65	£54	£59	£49
Per telephone consultation lasting 7.1 minutes <sup>1</sup>	£27	£22	£25	£20
Per patient contact lasting 11.7 minutes (including carbon emissions (6 KgCO <sub>2</sub> e) <sup>2</sup>	£45	£38	£41	£34
Prescription costs per consultation (net ingredient cost)	£23.30 <sup>3</sup>			
Prescription costs per consultation (actual cost)	£22.90 <sup>3</sup>			

<sup>1</sup> Excludes travel.

<sup>2</sup> Costs provided by Imogen Tennison, Sustainable Development Unit. Contact: [Imogen.tennison@nhs.net](mailto:Imogen.tennison@nhs.net) for more information. See Preface for more information.

<sup>3</sup> Personal communication with the Prescribing and Primary Care Group at the HSCIC, 2015; and information on consultations: taken from the Royal College of General Practitioners (2014) *34m patients will fail to get appointment with a GP in 2014*. <http://www.rcgp.org.uk/news/2014/february/34m-patients-will-fail-to-get-appointment-with-a-gp-in-2014.aspx>. [accessed 4 November 2015]

## 10.8c General practitioner — commentary

**General note about GP expenditure.** The General Medical Service contract (GMS),<sup>1</sup> introduced in 2003, was designed to improve the way that primary care services are funded, and to allow practices greater flexibility to determine the range of services they wish to provide, including opting out of additional services and out-of-hours care.

**Allowing for whole-time equivalence (FTE).** The NHS Health & Social Care Information Centre has estimated that the number of FTE practitioners (excluding GP registrars and GP retainers) has increased from 32,075 in 2013 to 32,628 in 2014.<sup>2</sup> FTE practice staff included 15,062 practice nurses (includes specialist nurses, advanced level nurses, 9,277 direct patient care staff, 62,194 administrative and clerical, and 1,863 other staff.<sup>2</sup> Assuming that administrative and clerical staff are shared equally between GP practitioners and direct patient care staff (including practice nurses), each FTE practitioner employs 1.06 FTE administrative and clerical staff (62,194/58,830).

**Direct care staff.** On average in 2015, approximately 91 per cent of FTE equivalent practitioners (excluding GP registrars & GP retainers)<sup>3</sup> employed 0.51 FTE nursing staff (15,062/29,691). All direct care staff have been costed at the same level as a band 6 GP practice nurse.

**Qualifications.** The equivalent annual cost of pre-registration and post-graduate medical education. The investment in training has been annuitised over the expected working life of the doctor.<sup>4</sup> Post-graduate education costs have been calculated using information provided by the Department of Health and the Health Education England.<sup>5</sup> This includes the cost of the two-year foundation programme, two years on a General Practice Vocational Training Scheme (GP-VTS) and a further year as a general practice registrar.<sup>6</sup>

**Environment costs.** The cost of carbon emissions from patient and staff travel, electricity and gas for the building along with embedded emissions in the goods and services used to provide the appointment. The embedded carbon in pharmaceuticals prescribed is also included here and accounts for 68 per cent of GP emissions. A carbon price of £43 per tonne of carbon dioxide emission has been used to value these externalities in line with HM Treasury Green Book <https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal>.

**Prescription costs.** Prescription costs per consultation are £23.30 (net ingredient cost (NIC)) and £22.30 (actual cost). NIC is the basic cost of the drug, while the actual cost is the NIC less the assumed average discount plus the container allowance (and plus on-cost for appliance contractors). The prescription cost per consultation has been calculated by first dividing the number of prescriptions per GP by the number of consultations per GP (30,627/10,714)<sup>7,8</sup> to give the number of prescriptions per GP consultation (2.86) and multiplying this by the actual cost per GP prescription (£7.80)<sup>8</sup> and the NIC per GP prescription (£8.15).<sup>8</sup> The total NIC and actual cost of GP prescriptions were £8,400,618,128 and £7,799,266,727 respectively.<sup>8</sup>

**Activity.** The 2006/07 UK general practice workload survey provides an overview of the entire workload and skill-mix of general practices in the UK in 2006/07. Staff in a representative sample of 329 practices across the UK completed diary sheets for one week in September or December. As the survey was targeted at work in the practice, it excludes work done elsewhere, as well as any work identified as out-of-hours not relating to the GMS/PMS/PCTMS practice contract.

<sup>1</sup> NHS Employers (2003) *General medical services contract*, NHS Employers, London.

<sup>2</sup> Health & Social Care Information Centre (2014) *General and Personal Medical Services in England 2004-2014*, Information Centre, Leeds.

<sup>3</sup> Based on personal correspondence with the Chairman of the East Midlands Regional Council, British Medical Association (2015).

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2015.

<sup>6</sup> NHS Employers (2006) *Modernising medical careers: a new era in medical training*, NHS Employers, London.

<sup>7</sup> Royal College of General Practitioners (2014) *34m patients will fail to get appointment with a GP in 2014*, <http://www.rcgp.org.uk/news/2014/february/34m-patients-will-fail-to-get-appointment-with-a-gp-in-2014.aspx>. [accessed 4 November 2015]

<sup>8</sup> Personal communication with the Prescribing and Primary Care Group at the Health & Social Care Information Centre, 2015

## 10.9 Telephone triage – GP-led and nurse-led

Telephone triage is increasingly used to manage workload in primary care. A study carried out between 1 March 2011 and 31 March 2013 by John Campbell & colleagues<sup>1,2</sup> aimed to assess the effectiveness and cost consequences of general practitioner GP-led and nurse-led triage compared with usual care for requests for same-day appointments. Based on a review of 5,567 clinician contact forms for GP-led triage and 5,535 forms for nurse-led triage, the study found that mean clinician contact times for interventions were 4 minutes (SD 2.83) for GP triage and 6.56 minutes (SD 3.83) for nurse triage. Using national cost estimates (see schema 10.6 and 10.8a), a detailed breakdown of the costs is provided below. Mean costs per intervention were £14 (including staff training) for GP-led triage and £7.90 (including staff training and computer decision support software) for nurse-led triage.

Costs and unit estimation	Nurse-led triage 2014/2015 value	Notes	GP-led triage 2014/2015 value	Notes
A. Wages/salary and oncosts	£31,828 per year	Based on the salary of a GP practice nurse (Agenda for Change band 5) plus oncosts (see 10.6)	£101,900	Average income before tax. See 10.8.
B. Overheads				
Staff overheads	£7,798 per year	See schema 10.6	£35,225	See schema 10.8 (excludes a cost for direct care staff)
Non-staff	£12,882 per year	See schema 10.6	£40,266	
C. Qualifications	£10,619 per year	See schema 10.6	£41,188	See schema 10.8
D. Capital	£4,007 per year	See schema 10.6	£15,850	See schema 10.8
E. Other costs				
Staff training	£5,616 per year	Taken from table 25 of Campbell & colleagues) <sup>2</sup> and uprated using the HCHS pay and prices inflator	£3,129	Taken from table 25 of Campbell & colleagues) <sup>2</sup> and uprated using the HCHS pay and prices inflator
Computer decision support software	£7,780 per year			
Working time	42 weeks per year 37.5 hours per week	Based on 1,565 hours per year	44 weeks per year 41.7 hours per week	Based on 1,814 hours per year
Ratio of direct to indirect time on: Face-to-face contact	1:0.30	See schema 10.6	1:0.61	See schema 10.8
Average time per intervention (minutes)	6.56 (SD 3.83)	See table 23 of Campbell & colleagues) <sup>2</sup>	4 (SD 2.83)	See table 23 of Campbell & colleagues) <sup>2</sup>
<b>Unit costs available 2014/15</b>				
Total annual costs excluding 'other costs' (E) (including other costs)	£67,135 (£80,530)		£234,429 (£237,557)	
Cost per hour of face-to-face contact excluding 'other costs' (E) (including set-up costs)	£55.80 (£72.50)		£207 (£210)	
Cost per intervention excluding 'other costs' (E) (inc other costs)	£6.10 (£7.90)		£13.80 (£14.00)	

<sup>1</sup> Campbell, J., Fletcher, E., Britten, N., Green, C., Holt, T., Lattimer, V., Richards, D., Richards, S., Salisbury, C., Calitri, R., Bowyer, V., Chaplin, K., Kandiyali, R., Murdoch, J., Roscoe, J., Varley, A., Warren, F., & Taylor, R. (2014) Telephone triage for management of same-day consultation requests in general practice (the ESTEEM trial): a cluster-randomised controlled trial and cost-consequence analysis, *Lancet*. Doi: 10.1016/S0140-6736(14)61058-8 [accessed 4 November 2015]

<sup>2</sup> Campbell, J., Fletcher, E., Britten, N., Green, C., Holt, V., Lattimer, V., Richards, D., Richards, S., Salisbury, C., Taylor, R., Calitri, R., Bowyer, V., Chaplin, K., Kandiyali, R., Murdoch, J., Price, L., Roscoe, J., Varley, A. & Warren, F. (2015) The clinical effectiveness and cost-effectiveness of telephone triage for managing same-day consultation requests in general practice: a cluster randomised controlled trial comparing general practitioner-led management systems with usual care (the ESTEEN trial), *Health Technology Assessment*. DOI 10.3310/hta 19130.

## 10.10 NHS dentist – performer-only

A performer-only dentist performs dental services but does not hold a contract with a local health body. See <http://www.hscic.gov.uk/catalogue/PUB14016/pres-dent-eng-2013-gui.pdf> for more details of contract types. In 2014/15, there were 19,909 performer-only dentists in England.<sup>1</sup> In 2015, a survey of dentists carried out by PSSRU in collaboration with the General Dental Council provided information to estimate practice staff overheads and equipment used by dentists working all or some of the time with NHS patients. In total, responses were received from 210 practices with some or all NHS activity. See Preface for more information.

Costs and unit estimation	2014/2015 value	Notes
A. Net remuneration	£60,600 per year	This is the average taxable income (average gross earnings less average total expenses) for self-employed primary care performer-only dentists in 2013/14. <sup>2</sup> It has not been possible to agree an inflator to provide estimated net remuneration for 2014/15.
B. Practice expenses: Employee expenses Office and general business expenses  Premises Car and travel Other	£6,700 per year £4,400 per year  £2,900 per year £900 per year £21,400 per year	Employee expenses are taken from the <i>Dental Earnings and Expenses</i> report. <sup>1</sup> All office and general business, premises and other expenses including advertising promotion and entertainment are based on expenditure taken from the <i>Dental Earnings and Expenses</i> report. <sup>1</sup>  'Other' includes a variety of expenses, including laboratory costs, materials costs, advertising, promotion and entertainment costs, which have been divided equally between the dental staff (dentists and nurses/hygienists). See page 23 of the <i>Dental Earnings and Expenses</i> <sup>3</sup> report for information on double-counting.
C. Qualifications	No costs available	See <a href="http://www.gdc-uk.org/Dentalprofessionals/Education/Pages/Dentist-qualifications.aspx">http://www.gdc-uk.org/Dentalprofessionals/Education/Pages/Dentist-qualifications.aspx</a> .
D. Ongoing training	No costs available	At least 250 hours of CPD are required every five years. At least 75 of these hours need to be 'verifiable' CPD. <sup>4</sup>
E. Capital costs	£ 7,846 per year	Based on the new-build and land requirements of a dentist surgery, but adjusted to reflect shared use of both treatment and non-treatment space. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. <sup>5</sup>
F. Equipment costs	£ 5,220 per year	Total equipment costs (e.g. dentist chairs, cabinetry and all dental technology) per practice with all or some NHS activity was valued at £139,760 or £43,430 per FTE dentist. Costs have been annuitised to reflect that ten years was the most frequently-cited replacement time. For dentists providing NHS dentistry alone (sample=30), equipment was valued at £64,633 per practice or £22,758 per FTE dentist (£2,736 when annuitised over ten years). (See Preface for PSSRU survey information.)
Working time	43.3 weeks per year 35.8 hours per week.	The average total number of weekly hours worked by performer-only dentists in 2013/14 was 35.8. <sup>6</sup> The average total number of weekly NHS hours worked was 26.7. On average, dentists took 2.9 days of sickness leave and 4.5 weeks annual leave. Unit costs are based on 1,550 hours. <sup>6</sup>
Ratio of direct to indirect time: clinical time	1:0.25	Based on information taken from the 2013/14 <i>Dental working hours</i> survey, performer-only dentists spent 80.2 per cent of their working time on clinical activities. <sup>6</sup>
<b>Unit costs available 2014/2015</b>		
£71 per hour; £88 per hour of patient contact, £72 per hour (with 17 kgCO <sub>2</sub> e) <sup>7</sup> ; £89 per hour of patient contact (with 21 kgCO <sub>2</sub> e). <sup>7</sup>		

<sup>1</sup> Health & Social Care Information Centre (2015) *NHS dental statistics for England: 2014/15*, <http://www.hscic.gov.uk/article/2021/Website-Search?productid=18507&q=NHS+dental+statistics+for+England&sort=Relevance&size=10&page=1&area=both#top> [accessed 7 October 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) *Dental earnings and expenses 2013/14*, <http://www.hscic.gov.uk/article/2021/Website-Search?q=Dental+Earnings+and+expenses&go=Go&area=both> [accessed 12 October 2015].

<sup>3</sup> The Information Centre (2013) *Dental earnings and expenses: England and Wales, 2011/12*, <http://www.hscic.gov.uk/catalogue/PUB11473/dent-earn-expe-eng-wale-2011-12-rep.pdf> [accessed 30 July 2014].

<sup>4</sup> General Dental Council (2013) *Continuing professional development for dental professionals*, <http://www.gdc-uk.org/Dentalprofessionals/CPD/Documents/GDC%20CPD%20booklet.pdf> [accessed 30 July 2014].

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>6</sup> Health & Social Care Information Centre (2014) *Dental working hours, 2012/13 & 2013/14*, [http://www.hscic.gov.uk/article/2021/Website-Search?q=title:"Dental+working+hours"&sort=Relevance&size=20&page=1&area=both#top](http://www.hscic.gov.uk/article/2021/Website-Search?q=title:) [accessed October 2015].

<sup>7</sup> Costs provided by Imogen Tennison, Sustainable Development Unit. See Preface and contact [imogen.tennison@nhs.net](mailto:imogen.tennison@nhs.net) for more information.

## 10.11 Dentist – providing-performer

The costs below relate to a providing-performer, which is a dentist who holds a contract and who also acts as a performer, delivering dental services themselves.<sup>1</sup> In 2014/15, there were 4,038 providing-performer dentists in England.<sup>2</sup> In 2015, a survey of dentists carried out by PSSRU in collaboration with the General Dental Council provided information to estimate practice staff overheads and equipment used by dentists working all or some of the time with NHS patients. In total, responses were received from 210 practices with some or all NHS activity. See Preface for more information.

Costs and unit estimation	2014/2015 value	Notes
A. Net remuneration	£116,700 per year	This is the average taxable income of self-employed primary care providing-performer dentists in 2013/14. <sup>3</sup> It has not been possible to agree an inflator to provide estimated net remuneration for 2014/15.
B. Practice expenses: Employee expenses	£62,642 per year	Staff overheads estimated using PSSRU survey information (see Preface for more information) were £62,642 per FTE dentist with some or all NHS activity. Each FTE dentist employs 1.50 of a dental nurse (AFC Band 4), 0.17 of a hygienist/dental therapist (AFC band 5), 0.24 of a practice manager (AFC band 6) and 0.50 of 'other' staff (AFC band 2) (e.g. receptionist, dental technician, cleaner). For NHS-only dentists, this cost is £50,274. Salary costs have been estimated using Agenda for Change bands taken from the NHS staff earnings estimates for July 2014-June 2015. <sup>4</sup>
Office and general business expenses	£20,500 per year	All office and general business, premises and other expenses including advertising promotion and entertainment are based on expenditure taken from the <i>Dental Earnings and Expenses report</i> . <sup>3</sup>
Premises	£22,000 per year	'Other' includes a variety of expenses, including laboratory costs, materials costs, advertising, promotion and entertainment costs, which have been divided equally between the dental staff (dentists and nurses/hygienists).
Car and travel	£1,800 per year	
Other	£28,488 per year	
C. Qualifications	No costs available	See <a href="http://www.gdc-uk.org/Dentalprofessionals/Education/Pages/Dentist-qualifications.aspx">http://www.gdc-uk.org/Dentalprofessionals/Education/Pages/Dentist-qualifications.aspx</a> .
D. Ongoing training	No costs available	At least 250 hours of CPD are required every five years. At least 75 of these hours need to be 'verifiable' CPD. <sup>5</sup>
E. Capital costs	£ 7,846 per year	Based on the new-build and land requirements of a dentist surgery, but adjusted to reflect shared use of both treatment and non-treatment space. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. <sup>6</sup>
F. Equipment costs	£ 5,220 per year	Total equipment costs (eg. dentist chairs, cabinetry and all dental technology) per practice with all or some NHS activity was valued at £139,760, or £43,430 per FTE dentist. Costs have been annuitised to reflect that ten years was the most frequently cited replacement time. For dentists providing NHS dentistry alone (sample=30), equipment was valued at £64,633 per practice or £22,758 per FTE dentist (£2,736 per year when annuitised over ten years). See Preface for PSSRU survey information.
Working time	43.4 weeks per year 41 hours per week.	The average total number of weekly hours worked by providing-performer dentists in 2013/14 was 41, with 25.7 hours devoted to NHS work. <sup>7</sup> On average dentists took 2.9 days of sickness leave and 4.2 weeks annual leave. Unit costs are based on 1,781 hours. <sup>7</sup>
Ratio of direct to indirect time: Clinical time	1:0.39	Based on information taken from the 2013/14 <i>Dental working hours survey</i> , <sup>7</sup> providing-performer dentists spent 72.1 per cent of their working time on clinical activities.
<b>Unit costs available 2014/2015</b>		
£147 per hour; £207 per hour of patient contact; £148 per hour (with 19 kgCO <sub>2</sub> e) <sup>8</sup> ; £208 per hour of patient contact (with 27 kgCO <sub>2</sub> e). <sup>7</sup>		

<sup>1</sup> Health & Social Care Information Centre (2015) *A guide to NHS dental publications*, [accessed 30 July 2014].

<sup>2</sup> Health & Social Care Information Centre (2015) *NHS dental statistics for England: 2014/15*, <http://www.hscic.gov.uk/catalogue/PUB14738> [accessed 12 October 2015].

<sup>3</sup> Health & Social Care Information Centre (2015) *Dental earnings and expenses 2013/14*, <http://www.hscic.gov.uk/article/2021/Website-Search?q=Dental+Earnings+and+expenses&go=Go&area=both> [accessed 12 October 2015].

<sup>4</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015* (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>5</sup> General Dental Council (2013) *Continuing professional development for dental professionals*, <http://www.gdc-uk.org/Dentalprofessionals/CPD/Documents/GDC%20CPD%20booklet.pdf> [accessed 30 July 2014].

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Health & Social Care Information Centre (2014) *Dental working hours, 2012/13 & 2013/14*, <http://www.hscic.gov.uk/catalogue/PUB14929> [accessed 3 October 2015].

<sup>8</sup> Costs provided by Imogen Tennison, Sustainable Development Unit. See Preface and contact [Imogen.tennison@nhs.net](mailto:Imogen.tennison@nhs.net) for more information.

## 10.12 NHS dental charges

Paying adults are charged according to the treatment band. 'Other' treatment incurs no charge. The table below shows the NHS dental charges applicable to paying adults from 1 April 2015.

Treatment Band	Charges from 1 April 2015	
Band 1	£18.80	Examination, diagnosis (including x-rays), advice on how to prevent future problems, a scale and polish if needed, and application of fluoride varnish or fissure sealant.
Band 2	£51.30	This covers everything listed in Band 1 above, plus any further treatment such as fillings, root canal work or removal of teeth.
Band 3	£222.50	This covers everything listed in Bands 1 and 2 above, plus crowns, dentures and bridges.

See: <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Lords/2015-03-11/HLWS346/> for further information on NHS dental charges.



### **III. COMMUNITY-BASED SOCIAL CARE**



## **11. Social care staff**

11.1 Social work team leader/senior practitioner/senior social worker

11.2 Social worker (adult services)

11.3 Social worker (children's services)

11.4 Social work assistant

11.5 Community occupational therapist (local authority)

11.6 Home care worker

11.7 Home care manager

11.8 Family support worker

11.9 Time banks



## 11.1 Social work team leader/senior practitioner/senior social worker

Costs and unit estimation	2014/2015 value	Notes
A. Salary	£39,220 per year	The average salary for a social work team leader was £35,410 for 2007/08. <sup>1</sup> As no new salary estimates are available, this has been inflated to reflect the pay increments for social workers reported in the Local Government Earnings Surveys 2009 to 2014. <sup>2</sup>
B. Salary oncosts	£12,158 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation. <sup>3</sup>
C. Qualifications	£26,130 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>4</sup> Current cost information is drawn from research by Curtis et al. (2011). <sup>5</sup>
D. Ongoing training		The General Social Care Council sets out a requirement that all social workers, as a condition of their three-yearly renewal of registration, should engage in development activity to meet a 'post registration teaching and learning' requirement of 15 days or 90 hours. <sup>5</sup> No costs are available.
E. Overheads		
Direct overheads	£14,900 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.
Indirect overheads	£8,220 per year	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>6</sup>
F. Capital overheads	£2,566 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. <sup>7,8</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
G. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . <sup>9</sup>
Working time	41 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.4 days sickness leave have been assumed based on the median average sickness absence level in England for all authorities. <sup>9,10</sup> Unit costs are based on 1,514 hours per year.
Ratios of direct to indirect time on: Client-related work	1:0.37	Ratios are estimated on the basis that 73 per cent of time is spent on client-related activities including direct contact (includes travel) (26%), case-related recording (22%), case-related work in own agency (12%) and case-related inter-agency work (13%). A further 27 per cent of time is spent on other inter agency and sundry work (non client-related). <sup>11</sup>
Duration of visit		It is not possible to estimate a cost per visit as there is no information available on the number or duration of visits.
London multiplier	1.10 x A 1.60 x F	Allows for the higher costs associated with London compared to the national average cost. <sup>2,7,8</sup>
Non-London multiplier	0.96 x A 0.96 x F	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>2,7,8</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£51 (£68) per hour; £71 (£95) per hour of client-related work.		

<sup>1</sup> Local Government Association Analysis and Research (2008) *Local government earnings survey 2007*, Local Government Analysis and Research, London.

<sup>2</sup> Local Government Association Analysis and Research (2015) *Local government earnings survey 2014/2015*, Local Government Association, London.

<sup>3</sup> Local Government Pension Scheme Advisory Board (2013) *Fund Valuations 2013*, LGPS Advisory Board, London.

<http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013> [accessed 12 November 2015]

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> British Association of Social Workers (2013) *Social Work Careers*, British Association of Social Workers. <http://www.basw.co.uk/social-work-careers/> [accessed 9 October 2013].

<sup>6</sup> Based on information taken from Selwyn, J. et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2014.

<sup>9</sup> Local Government Employers (2012) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London.

[http://www.local.gov.uk/web/guest/workforce/-/journal\\_content/56/10180/3510601/ARTICLE/](http://www.local.gov.uk/web/guest/workforce/-/journal_content/56/10180/3510601/ARTICLE/) [accessed 9 October 2013].

<sup>10</sup> Local Government Association (2015) *Local government workforce survey 2013/14*, <http://www.local.gov.uk/documents/10180/11535/Workforce+Survey+2013-14/0e22a2d1-8406-4343-a49b-83e01cd9813e> [accessed 12 November 2015].

<sup>11</sup> Baginsky, M., Moriarty, J., Manthorpe, J., Stevens, M., MacInnes, T. & Nagendran, T. (2010) *Social workers' workload survey*, Messages from the frontline, findings from the 2009 survey and interviews with senior managers, Children's Workforce Development Council, King's College, University of London, New Policy Institute.

## 11.2 Social worker (adult services)

Costs and unit estimation	2014/2015 value	Notes
A. Salary	£30,645 per year	Information taken from the Local Government Earnings Survey 2014 <sup>1</sup> showed that the mean basic salary for a social worker was £30,645. (The information provided does not distinguish between the salary of an adult or of a children's social worker).
B. Salary oncosts	£9,260 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation. <sup>2</sup>
C. Qualifications	£26,130 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information is drawn from research carried out by Curtis et al. (2011). <sup>4</sup>
D. Ongoing training		The General Social Care Council sets out a requirement that all social workers, as a condition of their three-yearly renewal of registration, should engage in development activity to meet a 'post registration teaching and learning' requirement of 15 days or 90 hours. <sup>5</sup> No costs are available.
E. Overheads		
Direct overheads	£11,572 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.
Indirect overheads	£6,385 per year	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>6</sup>
F. Capital overheads	£2,566 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. <sup>7,8</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
G. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . <sup>9</sup>
Working time	41 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. <sup>9</sup> Ten days for study/training and 8.4 days sickness leave have been assumed based on the median average sickness absence level in England for all authorities. <sup>10</sup> Unit costs are based on 1,514 hours per year.
Ratios of direct to indirect time on:		
Client-related work	1:0.39	Ratios are estimated on the basis that 72 per cent of time is spent on client-related activities including direct contact (includes travel) (25%), case-related recording (23%), case-related work in own agency (10%) and case-related inter-agency work (14%). A further 28 per cent of time is spent on other inter agency and sundry work (non client-related). <sup>11</sup>
Duration of visit		It is not possible to estimate a cost per visit as there is no information available on the number or duration of visits.
London multiplier	1.10 x A 1.60 x F	Allows for the higher costs associated with London compared to the national average cost. <sup>1,7,8</sup>
Non-London multiplier	0.96 x A 0.96 x F	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>7,8</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£40 (£57) per hour; £55 (£79) per hour of client-related work.		

<sup>1</sup> Local Government Association Analysis and Research (2013) *Local government earnings survey 2013/2014*, Local Government Association, London.

<sup>2</sup> Local Government Pension Scheme Advisory Board (2013) *Fund Valuations 2013*, LGPS Advisory Board, London.

<http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013> [accessed 12 November 2015]

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Curtis, L. Moriarty, J. & Netten, A. (2011) The costs of qualifying a social worker, *British Journal of Social Work*, doi: 10.1093/bjsw/bcr113.

<http://bjsw.oxfordjournals.org/content/early/2011/08/22/bjsw.bcr113.short?rss=1> [accessed 26 September 2013].

<sup>5</sup> British Association of Social Workers (2011) *Social work careers*, The British Association of Social Workers. [www.basw.co.uk/social-work-careers/](http://www.basw.co.uk/social-work-careers/) [accessed 9 October 2013].

<sup>6</sup> Based on information taken from Selwyn, J. et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2014.

<sup>9</sup> Local Government Employers (2012) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London.

[http://www.local.gov.uk/web/guest/workforce/-/journal\\_content/56/10180/3510601/ARTICLE/](http://www.local.gov.uk/web/guest/workforce/-/journal_content/56/10180/3510601/ARTICLE/) [accessed 9 October 2013].

<sup>10</sup> Local Government Association (2015) *Local government workforce survey 2013/14*,

<http://www.local.gov.uk/documents/10180/11535/Workforce+Survey+2013-14/Oe22a2d1-8406-4343-a49b-83e01cd9813e> [accessed 12 November 2015].

<sup>11</sup> Baginsky, M., Moriarty, J., Manthorpe, J., Stevens, M., MacInnes, T. & Nagendran, T. (2010) *Social workers' workload survey*, Messages from the frontline, findings from the 2009 survey and interviews with senior managers, Children's Workforce Development Council, King's College, University of London, New Policy Institute.

### 11.3 Social worker (children's services)

Costs and unit estimation	2014/2015 value	Notes
A. Salary	£30,645 per year	Information taken from the Local Government Earnings Survey 2014 <sup>1</sup> showed that the mean basic salary for a social worker was £30,831.
B. Salary oncosts	£9,620 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation. <sup>2</sup>
C. Qualifications	£26,130 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information is drawn from research carried out by Curtis et al. (2011). <sup>4</sup>
D. Ongoing training		The General Social Care Council sets out a requirement that all social workers, as a condition of their three-yearly renewal of registration, should engage in development activity to meet a 'post registration teaching and learning' requirement of 15 days or 90 hours. <sup>5</sup> No costs are available.
E. Overheads		
Direct overheads	£11,572 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.
Indirect overheads	£6,385 per year	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>6</sup>
F. Capital overheads	£2,566 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. <sup>7,8</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
G. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . <sup>9</sup>
Working time	41 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.4 days sickness leave have been assumed based on the median average sickness absence level in England for all authorities. <sup>10</sup> Unit costs are based on 1,516 hours per year.
Ratios of direct to indirect time on: Client-related work	1:0.39	Ratios are estimated on the basis that 72 per cent of time is spent on client-related activities including direct contact (includes travel) (26%), case-related recording (22%), case-related work in own agency (12%) and case-related inter-agency work (12%). A further 28 per cent of time is spent on other inter agency and sundry work (non-client-related). <sup>11</sup> See also Holmes et al. (2009). <sup>12</sup>
London multiplier	1.10 x A 1.60 x F	Allows for the higher costs associated with London compared to the national average cost. <sup>1,7,8</sup>
Non-London multiplier	0.96 x F	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>7,8</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£40 (£57) per hour; £55 (£79) per hour of client-related work.		

<sup>1</sup> Local Government Association Analysis and Research (2013) *Local government earnings survey 2013/2014*, Local Government Association, London.

<sup>2</sup> Local Government Pension Scheme Advisory Board (2013) *Fund Valuations 2013*, LGPS Advisory Board, London.  
<http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013> [accessed 12 November 2015]

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Curtis, L. Moriarty, J. & Netten, A. (2012) The costs of qualifying a social worker, *British Journal of Social Work*, 42, 4, 706-724.

<sup>5</sup> British Association of Social Workers (2011) *Social Work Careers*, The British Association of Social Workers <http://www.basw.co.uk/social-work-careers/> [accessed 9 October 2013].

<sup>6</sup> Based on information taken from Selwyn, J. et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2014.

<sup>9</sup> Local Government Employers (2012) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London.  
[http://www.local.gov.uk/web/guest/workforce/-/journal\\_content/56/10180/3510601/ARTICLE/](http://www.local.gov.uk/web/guest/workforce/-/journal_content/56/10180/3510601/ARTICLE/) [accessed 9 October 2013].

<sup>10</sup> Local Government Association (2015) *Local government workforce survey 2013/14*,  
<http://www.local.gov.uk/documents/10180/11535/Workforce+Survey+2013-14/0e22a2d1-8406-4343-a49b-83e01cd9813e> [accessed 12 November 2015].

<sup>11</sup> Baginsky, M., Moriarty, J., Manthorpe, J., Stevens, M., MacInnes, T. & Nagendran, T. (2010) *Social workers' workload survey*, Messages from the frontline, findings from the 2009 survey and interviews with senior managers, Children's Workforce Development Council, King's College, University of London, New Policy Institute.

<sup>12</sup> Holmes, L., McDermaid, S., Jones, A. & Ward, H. (2009) *Research report DCSF-RR087: How social workers spend their time - An analysis of the key issues that impact on practice pre- and post implementation of the integrated children's system*, London, Department for Children, Schools and Families.  
<http://www.dcsf.gov.uk/research/data/uploadfiles/DCSF-RR087%28R%29.pdf> [accessed 7 December 2015].

## 11.4 Social work assistant

Costs and unit estimation	2014/2015 value	Notes
A. Salary	£22,743 per year	The mean basic salary of a social work assistant was £22,715 in 2012/13. As no new salary estimates are available, this has been inflated to reflect changes in pay for social workers reported in the Local Government Earnings Survey 2014. <sup>1</sup> The uprated mean gross salary was £23,215.
B. Salary oncosts	£6,589 per year	Employer's national insurance is included plus 20 per cent of salary for contribution to superannuation. <sup>2</sup>
C. Overheads		
Direct overheads	£8,506 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.
Indirect overheads	£4,693 per year	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>3</sup>
D. Capital overheads	£2,566 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. <sup>4,5</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
E. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . <sup>6</sup>
Working time	40.7 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.4 days sickness leave have been assumed based on the median average sickness absence level in England for all authorities. <sup>7</sup> Unit costs are based on 1,509 hours per year.
Ratios of direct to indirect time on: Client-related work		No current information is available about the proportion of social work assistant time spent on client-related outputs. See previous editions of this volume for sources of information.
London multiplier	1.16 x A 1.60 x D	Allows for the higher costs associated with London compared to the national average cost. <sup>1,4,5</sup>
Non-London multiplier	0.96 x D	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>4,5</sup>
<b>Unit costs available 2014/2015</b>		
£30 per hour.		

<sup>1</sup> Local Government Association Analysis and Research (2013) *Local government earnings survey 2013/2014*, Local Government Association, London.

<sup>2</sup> Local Government Pension Scheme Advisory Board (2013) *Fund Valuations 2013*, LGPS Advisory Board, London.  
<http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013> [accessed 12 November 2015]

<sup>3</sup> Based on information taken from Selwyn, J. et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2014.

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>6</sup> Local Government Employers (2012) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London.  
[http://www.local.gov.uk/local-government-intelligence/-/journal\\_content/56/10180/3328402/ARTICLE/](http://www.local.gov.uk/local-government-intelligence/-/journal_content/56/10180/3328402/ARTICLE/) [accessed 9 October 2013].

<sup>7</sup> Local Government Association (2015) *Local government workforce survey 2013/14*,  
<http://www.local.gov.uk/documents/10180/11535/Workforce+Survey+2013-14/0e22a2d1-8406-4343-a49b-83e01cd9813e> [accessed 12 November 2015].



## 11.5 Community occupational therapist (local authority)

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£31,318 per year	Information taken from the Local Government Earnings Survey 2013 <sup>1</sup> showed that the mean basic salary for an occupational therapist was £31,293. The mean gross salary was £32,145.
B. Salary oncosts	£9,488 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation. <sup>2</sup>
C. Qualifications	£5,669 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and the Higher Education Funding Council for England (HEFCE). <sup>4</sup>
D. Overheads		
Direct overheads	£11,834 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity. <sup>5</sup>
Indirect overheads	£6,529 per year	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>5</sup>
E. Capital overheads	£2,566 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. <sup>6,7</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Working time	41 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.4 days sickness leave have been assumed based on average of all social work sectors for 2012/2013. <sup>8,9</sup> Unit costs are based on 1,516 hours per year.
Ratio of direct to indirect time on: Client-related work		No current information is available on the proportion of time spent with clients. See previous editions of this volume for sources of information.
London multiplier	1.09 x A 1.60 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>1,6,7</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>6,7</sup>
<b>Unit costs available 2014/2015 (costs including training given in brackets)</b>		
£41 (£44) per hour.		

<sup>1</sup> Local Government Association Analysis and Research (2013) *Local government earnings survey 2013/14*, Local Government Association, London.

<sup>2</sup> Local Government Pension Scheme Advisory Board (2013) *Fund Valuations 2013*, LGPS Advisory Board, London.  
<http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013> [accessed 12 November 2015]

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and the Higher Education Funding Council for England (HEFCE) Higher Education Funding Council for England (HEFCE), 2011.

<sup>5</sup> Based on information taken from Selwyn et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2014.

<sup>8</sup> Local Government Employers (2012) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London.  
[http://www.local.gov.uk/local-government-intelligence/-/journal\\_content/56/10180/3328402/ARTICLE/](http://www.local.gov.uk/local-government-intelligence/-/journal_content/56/10180/3328402/ARTICLE/) [accessed 9 October 2013].

<sup>9</sup> Local Government Association (2015) *Local government workforce survey 2013/14*,  
<http://www.local.gov.uk/documents/10180/11535/Workforce+Survey+2013-14/0e22a2d1-8406-4343-a49b-83e01cd9813e> [accessed 12 November 2015].

## 11.6 Home care worker

This table provides information on the costs of a home care worker. Salary information is taken from the National Minimum Dataset for Social Care (Skills for Care, 2014).<sup>1</sup> Based on PSS EX1 2013/2014,<sup>2</sup> the mean hourly cost of all home care including LA-funded and independent provision was £17, the mean hourly cost of LA home care was £37 and the mean hourly cost was £15 for independent sector provision. See Jones (2005) for findings on the costs of independently provided home care<sup>3</sup> and Mickelborough (2011)<sup>4</sup> for more information on the domiciliary care market.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£13,798 per year	The median annual salary for a public and independent sector care worker in August 2015 was £13,798 (£7 gross hourly salary). A senior home care worker would earn £17,000 per year (£7.79 gross hourly salary). <sup>1</sup>
B. Salary oncosts	£3,566 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation. <sup>5</sup>
C. Overheads		
Direct overheads	£5,036 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity. <sup>6</sup>
Indirect overheads	£2,778 per hour	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>6</sup>
D. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . <sup>7</sup>
Working time	41.9 weeks per year 37 hours per week	Includes 29 days annual leave, 8 days statutory leave, 8.4 days of sickness and 5 days for training. <sup>7,8</sup> The median number of hours worked by home care workers in 2008 (1,301). <sup>9</sup>
Ratios of direct to indirect time on: Face-to-face contact	1:0.25	No current information available on the proportion of time spent with clients. It is likely however that if 19 per cent of a home care worker's time is spent travelling (see duration of visit below) <sup>10</sup> the proportion of total time spent with clients is approximately 80 per cent.
Duration of visit		Just over half of local authority funded visits lasted 30 minutes. Sixteen per cent of visits were 15 minutes and 19 per cent of a home care worker's time was spent travelling. <sup>10</sup>
Service use	7 hours per week (364 hours per year)	On average, individual service users received 364 hours of home care in 2011/12 (7 hours per week). <sup>10</sup>
Price multipliers for unsocial hours <sup>4</sup>	1.00 1.086 1.035 1.093  1.036 1.031 1.039	Day-time weekly Day-time weekend ) Night-time weekday ) for an independent sector home care hour Night-time weekend ) provided for private purchasers  Day-time weekend ) Night-time weekday ) for an independent sector home care hour Night-time weekend ) provided for social services
<b>Unit costs available 2014/2015</b>		
<b>Based on the price multipliers for independent sector home care provided for private purchasers:</b> £19 per weekday hour (£21 per day-time weekend, £20 per night-time weekday, £21 per night-time weekend). <b>Face-to-face:</b> £24 per hour weekday (£26 per day-time weekend, £25 per night-time weekday, £26 per night-time weekend). <b>Based on the price multipliers for independent sector home care provided for social services:</b> £19 per weekday hour (£20 per day-time weekend, £20 per night-time weekday, £20 per night-time weekend). <b>Face-to-face:</b> £24 per hour weekday (£25 per day-time weekend, £25 per night-time weekday, £25 per night-time weekend).		

<sup>1</sup> Skills for Care (2014) *The national minimum dataset for social care (NMDS-SC) and data protection: guidance for employers*, Skills for Care. <https://www.nmds-sc-online.org.uk/research/researchdocs.aspx?id=10> [accessed 10 October 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>3</sup> Jones, K. (2005) The cost of providing home care, in L. Curtis & A. Netten (eds) *Unit costs of health and social care 2005*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Mickelborough, P. (2011) *Domiciliary care*, UK Market Report, Laing & Buisson, London.

<sup>5</sup> Local Government Pension Scheme Advisory Board (2013) *Fund Valuations 2013*, LGPS Advisory Board, London.

<http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013> [accessed 12 November 2015]

<sup>6</sup> Based on information taken from Selwyn, J. et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>7</sup> Local Government Employers (2012) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London.

[http://www.local.gov.uk/local-government-intelligence/-/journal\\_content/56/10180/3328402/ARTICLE/](http://www.local.gov.uk/local-government-intelligence/-/journal_content/56/10180/3328402/ARTICLE/) [accessed 9 October 2013].

<sup>8</sup> Local Government Association (2013) *Local government workforce survey 2012/13*, [http://www.local.gov.uk/local-government-intelligence/-/journal\\_content/56/10180/3328402/ARTICLE/](http://www.local.gov.uk/local-government-intelligence/-/journal_content/56/10180/3328402/ARTICLE/) [accessed 9 October 2013].

<sup>9</sup> Information Centre (2010) *Community care statistics 2008, home care services for adults, England*, Information Centre, Leeds.

<sup>10</sup> United Kingdom Home Care Association (UKHCA) (2013) *An overview of the UK domiciliary care sector*, Home Care Association Limited.

<http://www.ukhca.co.uk/pdfs/domiciliarycaresectoroverview.pdf> [accessed 4 November 2013].

## 11.7 Home care manager

Salary information in this table is taken from the National Minimum Dataset for Social Care (NMDS-SC)<sup>1</sup> and has been based on the salary of a registered manager.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£30,000 per year	Median salary for a home care manager has been taken from the National Minimum Dataset for Social Care (NMDS-SC). <sup>1</sup>
B. Salary oncosts	£9,042 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation. <sup>2</sup>
C. Qualifications		No information available.
D. Overheads:		
Direct	£11,322 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.
Indirect	£6,247 per year	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>3</sup>
E. Capital overheads	£2,566 per year	Based on the new-build and land requirements of a local office and shared facilities for waiting, interviews and clerical support. <sup>4,5</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . <sup>6</sup>
Working time	41 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.4 days sickness leave have been assumed based on average of all social work sectors for 2013/2014. <sup>7</sup> Unit costs are based on 1,515 hours per year.
Ratios of direct to indirect time on: Client-related work Face to-face contact		No current information is available on the proportion of time spent with clients. See previous editions of this volume for sources of information.
Frequency of visits		
Duration of visits		
Caseload per worker		
London multiplier	1.25 x A 1.49 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>1,4,5</sup>
Non-London multiplier	0.97 x E	Relative London costs are drawn from the same source as the base data for each cost element. <sup>4,5</sup>
<b>Unit costs available 2014/2015</b>		
£39 per hour.		

<sup>1</sup> Skills for Care (2014) *The national minimum dataset for social care (NMDS-SC) and data protection: guidance for employers*, Skills for Care. <https://www.nmds-sc-online.org.uk/research/researchdocs.aspx?id=10> [accessed 10 October 2015].

<sup>2</sup> Local Government Pension Scheme Advisory Board (2013) *Fund Valuations 2013*, LGPS Advisory Board, London. <http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013> [accessed 12 November 2015]

<sup>3</sup> Based on information taken from Selwyn, J. et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>6</sup> Local Government Employers (2012) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London. [http://www.local.gov.uk/local-government-intelligence/-/journal\\_content/56/10180/3328402/ARTICLE/](http://www.local.gov.uk/local-government-intelligence/-/journal_content/56/10180/3328402/ARTICLE/) [accessed 9 October 2013].

<sup>7</sup> Local Government Association (2015) *Local government workforce survey 2013/14*, <http://www.local.gov.uk/documents/10180/11535/Workforce+Survey+2013-14/0e22a2d1-8406-4343-a49b-83e01cd9813e> [accessed 12 November 2015].

## 11.8 Family support worker

Family support workers provide emotional and practical help and advice to families who are experiencing long- or short-term difficulties. A study carried out by the Centre for Child and Family Research (CCFR)<sup>1</sup> explored the costs of Intensive Family Support (IFS) services received by 43 families in two local authority areas (sites 1 and 2). In site 1, the average length of the intervention was just over one year (413 days) and ranged from seven months to twenty-one months. The average length of the intervention in Site 2 was just under one year (269 days) and ranged from two months to just under two years. The average cost of the IFS service per family in one local authority was £6,260 (£3,197-£10,095) and in the other £5,306 (£1,104-£14,479).<sup>2</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£23,314 per year	Information taken from the Local Government Earnings Survey 2008 showed that the mean salary for a family support worker was £21,296. <sup>3</sup> As no new salary estimates are available, this has been inflated to reflect the pay increments for social workers reported in the Local Government Earnings Surveys 2009 to 2014. <sup>4</sup>
B. Salary oncosts	£6,782 per year	Employer's national insurance is included plus employer's contribution to superannuation (20%). <sup>5</sup>
C. Training		No information available.
D. Overheads		
Direct overheads	£8,727 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity. <sup>4</sup>
Indirect overheads	£4,815 per year	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. <sup>6</sup>
E. Capital overheads	£2,566 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. <sup>7,8</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . <sup>9</sup>
Working time	41.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Five days for study/training and 8.4 days sickness leave have been assumed based on average of all social work sectors for 2012/2013. <sup>8,10</sup> Unit costs are based on 1,552 hours per year.
Ratios of direct to indirect time on: Client-related work		No current information is available on the proportion of time spent with clients. See previous editions of this volume for sources of information.
London multiplier	1.16 x A	Allows for the higher costs associated with London compared to the national average cost. <sup>2</sup>
<b>Unit costs available 2014/2015</b>		
£30 per hour; £51 per hour of client related work.		

<sup>1</sup> McDermaid, S. & Holmes, L. (2013) *The cost effectiveness of action for children's intensive family support services*, Final Report, Centre for Child and Family Research, Loughborough University. [http://socialwelfare.bl.uk/subject-areas/services-client-groups/families/actionforchildren/153741intensive-family-support-cost-effectiveness\\_full-report.pdf](http://socialwelfare.bl.uk/subject-areas/services-client-groups/families/actionforchildren/153741intensive-family-support-cost-effectiveness_full-report.pdf) [accessed 3 October 2013].

<sup>2</sup> Local Government Association Analysis and Research (2015) *Local government earnings survey 2014/2015*, Local Government Association, London.

<sup>3</sup> Local Government Association Analysis and Research (2008) *Local government earnings survey 2007*, Local Government Association, London.

<sup>4</sup> Local Government Association (2013) *Local government pay and workforce research*, <http://www.local.gov.uk/research-pay-and-workforce> [accessed 16 October 2013].

<sup>5</sup> Local Government Pension Scheme Advisory Board (2013) *Fund Valuations 2013*, LGPS Advisory Board, London. <http://www.lgpsboard.org/index.php/fund-actuarial-valuations-2013> [accessed 12 November 2015]

<sup>6</sup> Based on information taken from Selwyn, J. et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning, C. et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>8</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>9</sup> Local Government Employers (2013) *Green Book: national agreement on pay and conditions of service*, Local Government Association, London. [http://www.local.gov.uk/local-government-intelligence/-/journal\\_content/56/10180/3328402/ARTICLE/](http://www.local.gov.uk/local-government-intelligence/-/journal_content/56/10180/3328402/ARTICLE/) [accessed 9 October 2013].

<sup>10</sup> Local Government Association (2015) *Local government workforce survey 2013/14*, <http://www.local.gov.uk/documents/10180/11535/Workforce+Survey+2013-14/Oe22a2d1-8406-4343-a49b-83e01cd9813e> [accessed 12 November 2015].

## 11.9 Time banks

Rushey Green time bank is the first UK time bank to be based in a health care setting where it has established a reputation for pioneering work in this field. It services five hubs across Lewisham.<sup>1</sup> The time bank supports Time Banking UK and promotes a National Health and Wellbeing project from the Department of Health to reduce isolation and improve the health of older people. It also provides support and training to other Lewisham time banks, builds relationships with statutory and voluntary sector organisations, and also delivers consultancy services/workshops to raise funds for the time bank. Time banks use hours of time rather than pounds as a community currency, with participants contributing their own skills, practical help or resources in return for services provided by fellow time-bank members. They vary significantly in the way they are organised, including the way credits are exchanged, eligibility criteria, route of access, the administration of the database and ways of accessing it.<sup>2,3</sup>

Currently Rushey Green is serviced by a manager who is partly funded through the match funding programme (£11.09 per hour).<sup>4</sup> The detailed costs below are not actual costs but reflect a fully funded time-bank servicing 360 members.<sup>5</sup> Using the same prices, cost per member would then decrease from £312 to £224 (or from £287 to £206 using the match-funding voluntary rate). All costs have been updated to 2014/15 levels using the PSS inflators.

Costs and unit estimation	2014/2015 value	Notes
A. Salaries	£81,608 per year	In total, the service employs 1 full-time manager, 1 PT and 1 FT broker/co-ordinator. Salaries have been based on the midpoint of the NJC paycales <sup>6</sup> for a PO2-3 and 1 PT and 1 FT SO1 (Senior officers, 35 and 30 hours per week).
B. Oncosts	£12,078 per year	Employer's national insurance contribution is included plus 5 per cent employer's contribution to superannuation.
C. Overheads		
<b>Direct overheads</b>		
Telephone, internet, software	£1,806 per year	Other expenses not included are those relating to the use of a house/garden for members' parties and also those for attending funerals of members.
Printing, stationery, postage	£2,910 per year	
Volunteer expenses	£502 per year	
Events	£2,007 per year	
Training costs	£903 per year	This includes the training of staff, volunteers and board members.
Workshops/consultancy	£2,509 per year	
<b>Indirect overheads</b>	£3,011 per year	This includes human resources, legal, payroll and accounts.
D. Travel costs	£803 per year	Based on travel costs for staff and volunteers.
E. Capital costs		Based on the office costs for a practice nurse (see table 10.6).
Office costs	£3,770 per year	Includes computers and other office equipment. Office (equipment) costs have been annuitised over 60 (5) years and discounted at a rate of 3.5 per cent.
Equipment costs	£237 per year	
Working time		Opening hours for the time-bank vary. The office is usually manned 10-12 hours per day.
Number of members	360	Currently the time-bank has 360 members. It is aiming to increase its members to over 500 by March 2015
<b>Unit costs available 2014/2015</b>		
Total annual cost if fully funded (actual cost using voluntary match-funding rates) £112,145 (£104,316)		
Annual cost per member based on 360 members (actual cost using match-funding rate) £312 (£289)		

<sup>1</sup> See [http://www.rgtb.org.uk/extras/TBank\\_AReport\\_Final4.pdf](http://www.rgtb.org.uk/extras/TBank_AReport_Final4.pdf) and <http://www.cihm.leeds.ac.uk/new/wp-content/uploads/2009/05/Rushey-Green-Time-Bank.pdf/>.

<sup>2</sup> Bauer, A., Fernández, J.L., Knapp, M. & Anigbogu, B. (2013) *Economic Evaluation of an "Experts by Experience" Model in Basildon District*, [http://eprints.lse.ac.uk/29956/1/Internet\\_Use\\_and\\_Opinion\\_Formation\\_in\\_Countries\\_with\\_Different\\_ICT\\_Contexts.pdf](http://eprints.lse.ac.uk/29956/1/Internet_Use_and_Opinion_Formation_in_Countries_with_Different_ICT_Contexts.pdf). n.b. This work has been produced from research that forms part of a NIHR School of Social care Research funded project on the economic consequences for social care interventions. This paper presents independent research and the views expressed in this publication are those of the authors and not necessarily those of the NIHR School for Social Care Research or the Department of Health, NIHR or NHS.

<sup>3</sup> Knapp, M., Bauer, A., Perkins, M. & Snell, T. (2013) Building community capital in social care: is there an economic case? *Community Development Journal*, 48, 2, 213-331.

<sup>4</sup> Rushey Green Community Projects, Funding example, <http://rgcommunityprojects.wordpress.com/apply-for-funding/funding-example/>.

<sup>5</sup> Volunteering England (2014) Is there a way of measuring the economic value of the work our volunteers are doing?, <http://www.volunteering.org.uk/component/gpb/is-there-any-way-of-measuring-the-economic-value-of-the-work-our-volunteers-are-doing>.

<sup>6</sup> National Joint Council (NJC) Salary scales for Local Government Services, *NJC paycales 2014-15*, <http://www.nicva.org/article/njc-paycales-december-2014> [accessed 12 November 2015].



## **12. Health and social care teams**

- 12.1 NHS community mental health team (CMHT) for older people with mental health problems
- 12.2 Community mental health team for adults with mental health problems
- 12.3 Crisis resolution team for adults with mental health problems
- 12.4 Assertive outreach team for adults with mental health problems
- 12.5 Early intervention team for adults with mental health problems
- 12.6 Generic single disciplinary CAMHS team
- 12.7 Generic multi-disciplinary CAMHS team
- 12.8 Dedicated CAMHS team
- 12.9 Targeted CAMHS team
- 12.10 Transition services for children with complex needs when transferring to adulthood
- 12.11 Re-ablement service





## 12.1 NHS community mental health team (CMHT) for older people with mental health problems

Composed of professionals from a wide range of disciplines, community mental health teams (CMHTs) are intended to provide an effective local mental health service that prioritises those whose problems are severe and long-term.<sup>1,2</sup> Information has been taken from the mental health combined mapping website<sup>1</sup> and is based on data received from 787 service providers. NHS reference costs<sup>3</sup> report that the mean average weighted cost per face-to-face contact for all community mental health teams for older people was £133 per face-to-face contact. Costs have been updated to 2014/15 price levels using the HCHS pay and prices inflators. See also research articles for additional information on variations in case mix and service receipt.<sup>4,5</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£30,912 per year	Based on mean basic salaries for Agenda for Change (AfC) bands. <sup>6</sup> Weighted to reflect input of community nurses (43%), social workers/approved social workers (12%), consultants (6%) and others. Weighted average salaries for each type of worker were multiplied by the proportion of that type of worker in the team to produce a generic CMHT (OP) worker salary. <sup>1</sup> See section V for further information on pay scales.
B. Salary oncosts	£7,558 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£9,425 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£14,696 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
D. Capital overheads	£3,718 per year	Based on the new-build and land requirements of an NHS office and shared facilities for waiting, interviews and clerical support. <sup>7,8</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	41.7 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>9</sup>
Ratios of direct to indirect time		No current information on time use is available. See previous editions of this volume for sources of information.
Frequency of visits	8	Average number of visits per week per worker.
Duration of visits	60 minutes	Average duration of visits.
Length of time on caseloads	11.6 months	Average time on caseloads, based on information obtained for 1,396 people was 11.6 months. <sup>1</sup>
Caseload per CMHT	32 cases per care staff	Based on mental health combined mapping data. <sup>2</sup> In 2008/09 there was an average of 389 cases per service and 32 cases per year per generic CMHT.
London multiplier	1.55 x D	Allows for higher costs associated with working in London. <sup>7,8, 10</sup>
Non-London multiplier	0.97 x D	Allows for lower costs associated with working outside London. <sup>7,8</sup>
<b>Unit costs available 2014/2015</b>		
£42 per hour per team member; £66,309 annual cost of team member		

<sup>1</sup> Mental Health Strategies (2009) *2008/09 National survey of investment in adult mental health services*, Mental Health Strategies for the Department of Health, London.

<sup>2</sup> Lingard, J. & Milne, A. (2004) Commissioned by the children, older people & social care policy directorate, *Integrating Older People's Mental Health Services, Community Mental Health Teams for Older People*, <http://nmhdu.org.uk/silo/files/integrating-opmh-services.pdf> [accessed 9 October 2013].

<sup>3</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>4</sup> Tucker, S., Wilberforce, M., Brand, C., Abendstern, M., Crook, A., Jasper, R., Steward, K. & Challis, D. (2014) Community mental health teams for older people: variations in case mix and service receipt (1), *International Journal of Geriatric Psychiatry*, doi: 10.1002/gps.4191.

<sup>5</sup> Wilberforce, M., Tucker, S., Brand, C., Abendstern, M., Jasper, R., Steward, K. & Challis, D. (2014) Community mental health teams for older people: variations in case mix and service receipt (11), *International Journal of Geriatric Psychiatry*, doi: 10.1002/gps.4190.

<sup>6</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015*, Health & Social Care Information Centre, Leeds.

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>9</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>10</sup> Monitor (2013) *2014/15 National Tariff Payment System*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 12.2 Community mental health team for adults with mental health problems

Composed of professionals from a wide range of disciplines, community mental health teams (CMHTs) are intended to provide an effective local mental health service that prioritises those whose problems are severe and long-term.<sup>1</sup>

Information has been taken from the mental health combined mapping website<sup>1</sup> and is based on data received from 787 service providers. NHS reference costs<sup>2</sup> report that the mean average weighted cost per contact with a community mental health team specialist for adults with mental health problems was £189. Costs have been updated to 2014/15 price levels using the HCHS pay and prices inflators.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£26,917 per year	Based on mean basic salaries for Agenda for Change (AfC) bands. <sup>3</sup> Weighted to reflect input of community nurses (31%), social workers/approved social workers (18%), consultants (6%) OTs and physiotherapists (5%), carer support (5%) and others. Weighted average salaries for each type of worker were multiplied by the proportion of that type of worker in the team to produce a generic CMHT worker salary. <sup>1</sup> See section V for further information on pay scales.
B. Salary oncosts	£6,590 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications		Information not available for all care staff.
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£8,209 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£12,800 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£3,718 per year	Based on the new-build and land requirements of an NHS office and shared facilities for waiting, interviews and clerical support. <sup>4,5</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	41.7 weeks per year 37.5 hrs per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>6</sup>
Ratio of direct to indirect time		No current information on time use is available. See previous editions of this volume for sources of information.
Caseload per CMHT	24 cases per CMHT	Based on mental health combined mapping data. <sup>1</sup> In 2008/09, there was an average of 404 cases per service and 24 cases per year per generic CMHT.
London multiplier	1.55 x E	Allows for higher costs associated with working in London. <sup>4,5,7</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London. <sup>4,5</sup>
<b>Unit costs available 2014/2015</b>		
£37 per hour per team member; £58,234 annual cost of team member		

<sup>1</sup> Mental Health Strategies (2009) *2008/09 National survey of investment in adult mental health services*, Mental Health Strategies for the Department of Health, London.

<sup>2</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>3</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015*, Health & Social Care Information Centre, Leeds.

<sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>6</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhs-careers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>7</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 12.3 Crisis resolution team for adults with mental health problems

Crisis resolution is an alternative to inpatient hospital care for service users with serious mental illness, offering flexible, home-based care 24 hours a day, seven days a week. Information has been taken from the mental health combined mapping website<sup>1</sup> and is based on data received from 270 service providers. There were, on average, 17 care staff per team. NHS reference costs<sup>2</sup> report that the mean average cost for a crisis resolution team was £189 per team contact. Costs have been updated to 2014/15 price levels using the HCHS pay and prices inflators. See McCrone et al. (2008) for more information on Crisis Resolution Teams.<sup>3</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£27,992 per year	Based on mean salaries for Agenda for Change (AfC) bands. <sup>4</sup> Weighted average salaries for each type of worker were multiplied by the proportion of that type of worker in the team to produce a generic crisis resolution worker salary. Teams included medical staff, nurses, psychologists, social workers, social care and other therapists. <sup>1</sup> See section V for further information on pay scales.
B. Salary oncosts	£6,807 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Training		No costs available. Crisis resolution work involves a major re-orientation for staff who have been accustomed to working in different ways.
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£8,526 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£13,293 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£3,687 per year	Based on the new-build and land requirements of an NHS office and shared facilities for waiting, interviews and clerical support. <sup>5,6</sup> Costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working hours of team members	42 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>7</sup>
Service hours	24 hours per day 7 days per week	In general, the team should operate seven days a week, 24 hours per day throughout the year. This can be done if two shifts a day are scheduled for mornings and afternoons. <sup>8</sup>
Duration of episode	27 days	The National Survey reported that 27 days was the average duration of episode. The mean longest time that teams stay involved is 75.6 days. <sup>9</sup>
Caseload	36 cases per service 2 cases per care staff	Based on mental health combined mapping data <sup>1</sup> average caseloads for 2008/09 were 36 cases per service and two cases per year per crisis resolution team member.
London multiplier	1.55 x E	Allows for higher costs associated with working in London. <sup>5,6,10</sup>
Non-London multiplier	0.96 x E	Allows for lower costs associated with working outside London. <sup>5,6</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£39 per hour per team member; £60,335 annual cost of team member; £30,167 average cost per case		

<sup>1</sup> Mental Health Strategies (2009) *2008/09 National survey of investment in adult mental health services*, Mental Health Strategies for the Department of Health, London.

<sup>2</sup> Department of Health (2013) *NHS reference costs 2012-2013*, <https://www.gov.uk/government/publications/nhs-reference-costs-2012-to-2013> [accessed 2 October 2014].

<sup>3</sup> McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. & Lawton-Smith, S. (2008) *Paying the price, the cost of mental health care in England to 2026*, King's Fund, London.

<sup>4</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015*, Health & Social Care Information Centre, Leeds.

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>6</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>7</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhs.gov.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>8</sup> Sainsbury Centre for Mental Health (2010) *Mental health topics, crisis resolution*, [http://www.centreformentalhealth.org.uk/pdfs/crisis\\_resolution\\_mh\\_topics.pdf](http://www.centreformentalhealth.org.uk/pdfs/crisis_resolution_mh_topics.pdf) [accessed 9 October 2013].

<sup>9</sup> Onyett, S., Linde, K., Glover, G. et al (2007) *Crisis resolution and inpatient mental health care in England*, University of Durham.

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 12.4 Assertive outreach team for adults with mental health problems

Assertive outreach teams provide intensive support for people with severe mental illness who are 'difficult to engage' in more traditional services.<sup>1</sup> Information has been taken from the mental health combined mapping website<sup>2</sup> and is based on data received from 248 service providers McCrone et al. (2008) for more information on this service.<sup>3</sup> NHS reference costs<sup>4</sup> report the mean average cost for an assertive outreach team contact was £127. Costs have been updated to 2014/15 price levels using the HCHS pay and prices inflators.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£24,827 per year	Based on mean salaries for Agenda for Change (AfC) bands. <sup>5</sup> Weighted average salaries for each type of worker were multiplied by the proportion of that type of worker in the team to produce a generic Assertive Outreach Team worker salary. Teams included doctors, nurses, psychologists, social workers, social care, other therapists and volunteers. <sup>2</sup>
B. Salary oncosts	£6,056 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£7,567 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£11,798 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
D. Capital overheads	£3,718 per year	Based on the new-build and land requirements of an NHS office and shared facilities. <sup>6,7</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Ratio of direct contact to total contact time:		
Face-to-face contacts	1:0.48	Of the assertive outreach team contacts, 68 per cent were face-to-face with the patient, 13 per cent were by telephone, 11 per cent of all attempts at contact were unsuccessful and a further 6 per cent involved contact with the carer (face-to-face or by phone). Of the face-to-face contacts with patients, 63 per cent took place in the patient's home or neighbourhood, 27 per cent in service settings and 10 per cent in other settings. <sup>8</sup>
Working hours of team members	42 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>9</sup>
Service hours	24 hours per day	Working hours of most services are flexible, although 24-hour services are rare.
Duration of contact	30 minutes	Median duration of contact. Assertive outreach staff expect to see their clients frequently and to stay in contact, however difficult that may be. Typically studies have shown that at least 95 per cent of clients are still in contact with services even after 18 months. <sup>10</sup>
Caseload	72 cases per service 7 cases per care staff	Based on mental health combined mapping data, average caseloads for 2008/09 were 72 cases per service and seven cases per year per assertive outreach team member. <sup>2</sup>
London multiplier	1.55 x E	Allows for the higher costs associated with working in London. <sup>6,7,10</sup>
Non-London multiplier	0.96 x E	Allows for lower costs associated with working outside London. <sup>6,7</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£34 per hour per team member; £51 per hour of patient contact; £53,965 annual cost of team member; £7,709 average cost per case		

<sup>1</sup> Sainsbury Centre for Mental Health (2001) *Mental health topics, assertive outreach*, Sainsbury Centre for Mental Health (updated 2003), London.

<sup>2</sup> Mental Health Strategies (2009) *2008/09 National survey of investment in adult mental health services*, Mental Health Strategies for the Department of Health, London.

<sup>3</sup> McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. & Lawton-Smith, S. (2008) *Paying the price, the cost of mental health care in England to 2026, King's Fund*, London.

<sup>4</sup> Department of Health (2013) *NHS reference costs 2012-2013*, <https://www.gov.uk/government/publications/nhs-reference-costs-2012-to-2013> [accessed 2 October 2014].

<sup>5</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015*, Health & Social Care Information Centre, Leeds.

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>8</sup> Wright, C., Burns, T., James, P., Billings, J., Muijen, M., Priebe, S., Ryrice, I., Watts, J. & White, I. (2003) Assertive outreach teams in London: models of operation, *British Journal of Psychiatry*, 183, 2, 132-138.

<sup>9</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 12.5 Early intervention team for adults with mental health problems

Early intervention is a service for young people aged 14-35 during the first three years of a psychotic illness. They provide a range of services, including anti-psychotic medications and psycho-social interventions, tailored to the needs of young people with a view to facilitating recovery.<sup>7</sup> Staff and caseload information for this table has been taken from the mental health combined mapping website and is based on data received from 150 service providers.<sup>8</sup> NHS reference costs<sup>9</sup> report the mean average cost for an early intervention team contact was £180. Costs have been updated to 2014/15 price levels using the HCHS pay and prices inflators. See McCrone et al. (2008) for more information on early intervention teams.<sup>10</sup> See section V for further information on pay scales.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£27,972 per year	Based on median salaries for Agenda for Change (AfC) bands. <sup>1</sup> Weighted average salaries for each type of worker were multiplied by the proportion of that type of worker in the team to produce a generic assertive outreach team worker salary. Teams included doctors, nurses, psychologists, social workers, social care, other therapists and volunteers. <sup>2</sup> Loss of earnings based on the minimum wage has been assumed for volunteers. <sup>2</sup>
B. Salary oncosts	£6,849 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Training		
D. Overheads		Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information.
Management, administration and estates staff	£8,531 per year	Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£13,302 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£3,717 per year	Based on the new-build and land requirements of an NHS office and shared facilities. <sup>3,4</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time per staff member	42 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>5</sup>
Service hours		Teams tend to operate 9.00 a.m.-5.00 p.m. but some flexibility is planned.
Caseload	98 cases per service 9 cases per care staff	Based on mental health combined mapping data. <sup>2</sup> Caseload data for 2008/09 were 98 cases per service and nine cases per early intervention team member. <sup>2</sup>
Ratio of direct to indirect time		No information available
London multiplier	1.55 x E	Allows for higher costs associated with working in London. <sup>8,9,6</sup>
Non-London multiplier	0.96 x E	Allows for lower costs associated with working outside London. <sup>8,9</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£39 per hour; £60,372 annual cost of team member; £6,708 average cost per case		

<sup>1</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015*, Health & Social Care Information Centre, Leeds.

<sup>2</sup> Directgov (2014) The national minimum wage rates, <https://www.gov.uk/national-minimum-wage-rates/> [accessed 17 November 2014].

<sup>3</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>5</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>6</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

<sup>7</sup> Sainsbury Centre for Mental Health (2003) *A window of opportunity: a practical guide for developing early intervention in psychosis services, Briefing 23*, Sainsbury Centre for Mental Health, London.

<sup>8</sup> Mental Health Strategies (2009) 2008/09 national survey of investment in adult mental health services, Mental Health Strategies for the Department of Health, London.

<sup>9</sup> Department of Health (2014) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2012-to-2013> [accessed 2 October 2014].

<sup>10</sup> McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. & Lawton-Smith, S. (2008) *Paying the price, the cost of mental health care in England to 2026*, King's Fund, London.

## 12.6 Generic single-disciplinary CAMHS team

These teams provide services for children and young people with particular problems requiring particular types of intervention and within a defined geographical area.<sup>1</sup> Staff, caseload and cost information has been taken from the Child and Adolescent Mental Health Service (CAMHS)<sup>2,3</sup> mapping database, and is based on returns from 2,094 teams of which 60 were generic single-disciplinary teams. The staff in these teams are almost exclusively clinical psychologists, educational psychologists and other therapists. There are on average 4.13 wte per team (excluding administrative staff and managers). Costs have been updated to 2014/2015 price levels using the appropriate inflators.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary plus oncosts	£37,699 per year	Average salary for single generic team member based on national CAMHS cost data. <sup>2,3</sup>
B. Overheads		
Management, administration and estates staff	£ 9,236 per year	Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information. Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£14,401 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
C. Capital overheads	£3,718 per year	Based on the new-build and land requirements of an NHS office and shared facilities. <sup>4,5</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. Based on the assumption that each team has one shared office.
Working time	42 weeks per year 37.5 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>6</sup>
Ratio of direct to indirect time on:		Information taken from CAMHS mapping data. <sup>2</sup> Staff activity was reported at the team level by Strategic Health Authority (SHA) averaging as follows: education and training (9%), research and evaluation (5%), administration and management (23%), consultation and liaison (13%) and clinical (49%).
Patient-related work	1:0.63	
Face-to-face contact	1:1.06	
Duration of episode		26 per cent of cases lasted 4 weeks or less, 25 per cent for 13 weeks or less, 18 per cent for 26 weeks or less, 16 per cent for 52 weeks or less and 15 per cent for more than 52 weeks.
Caseload per team	60 cases per team	Based on 60 teams and a caseload of 3,604. <sup>2</sup>
London multiplier	1.55 x C	Allows for higher costs associated with working in London. <sup>4,5,7</sup>
Non-London multiplier	0.96 x C	Allows for lower costs associated with working outside London. <sup>4,5</sup>
<b>Unit costs available 2014/2015</b>		
£42 per hour per team member; £68 per hour per patient-related activity; £86 per hour per team member face-to-face contact; £65,054 annual cost of team member; £4,478 average cost per case		

<sup>1</sup> YoungMinds (2001) *Guidance for primary care trusts, child and adolescent mental health: its importance and how to commission a comprehensive service*, Appendix 3: Key Components, Professionals and Functions of Tiered Child and Adolescent Mental Health Services, Child and Adolescent Mental Health Services, [www.youngminds.org.uk/pctguidance/app3.php](http://www.youngminds.org.uk/pctguidance/app3.php) [accessed 9 October 2013].

<sup>2</sup> Child and Adolescent Mental Health Service (CAMHS) (2009) *Children's service mapping*, Durham University & Department of Health, <http://www.childrensmapping.org.uk/> [accessed 17 November 2013].

<sup>3</sup> The CAMHS mapping data are no longer being collected so information for this table has been updated.

<sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>6</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhs-careers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>7</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].



## 12.7 Generic multi-disciplinary CAMHS team

Staff mix, time use, caseload and cost information for this table has been taken from the Child and Adolescent Mental Health Service (CAMHS)<sup>1,2</sup> mapping database, and is based on returns from 2,094 teams of which 421 teams were generic multi-disciplinary. Generic teams provide the backbone of specialist CAMHS provision, ensuring a range of therapeutic interventions were available to children, young people and families locally. Multidisciplinary generic teams, as the name implies, were largely staffed by a range of mental health professionals. The average size of multidisciplinary teams was 10.9 wte (excluding administrative staff and managers). Costs have been updated to 2014/2015 price levels using the appropriate inflators.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary plus oncosts	£50,180 per year	Average salary for a multi-disciplinary CAMHS team based on national CAMHS cost data. <sup>1,2</sup>
B. Overheads		
Management, administration and estates staff	£12,294 per year	Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information. Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£19,169 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
C. Capital overheads	£3,718 per year	Based on the new-build and land requirements of an NHS office and shared facilities. <sup>3,4</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. Based on the assumption that each team has one shared office.
Working time	42 weeks per year 45.73 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>5</sup>
Ratio of direct to indirect time on:		Information taken from national CAMHS mapping data. <sup>1</sup> Staff activity was reported at the team level by Strategic Health Authority (SHA) averaging as follows: education and training (9%), research and evaluation (5%), admin and management (23%), consultation and liaison (13%) and clinical (49%).
Patient-related work	1:0.63	
Face-to-face contact	1:1.06	
Duration of episode (all CAMHS teams)		19 per cent of cases lasted for 4 weeks or less, 21 per cent for 13 weeks or less, 19 per cent for 26 weeks or less, 17 per cent for 52 weeks or less and 25 per cent for more than 52 weeks.
Caseload per team	191 cases per team	Based on 421 teams and 80,386 cases. <sup>1</sup>
London multiplier	1.55 x C	Allows for higher costs associated with working in London. <sup>3,4,6</sup>
Non-London multiplier	0.96 x C	Allows for lower costs associated with working outside London. <sup>3,4</sup>
<b>Unit costs available 2014/2015</b>		
£55 per hour per team member; £89 cost per hour per team member for patient-related activities; £113 cost per hour per team member for face-to-face contact; £4,871 average cost per case		

<sup>1</sup> Child and Adolescent Mental Health Service (CAMHS) mapping (2009), Durham University & Department of Health, <http://www.childrensmapping.org.uk/> [accessed 17 November 2013].

<sup>2</sup> The CAMHS mapping data are no longer being collected so information for this table has been updated.

<sup>3</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>5</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhs-careers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>6</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 12.8 Dedicated CAMHS team

Dedicated CAMHS workers are fully trained child and adolescent mental health professionals who are out-posted in teams that are not specialist CAMHS teams but have a wider function, such as a youth offending team or a generic social work children's team. The information for this table is based on national Child and Adolescent Mental Health Service (CAMHS) mapping staff-related and cost information from 2,094 teams, of which 133 were dedicated teams.<sup>1,2</sup> On average there are 2.2 wte per team (excluding administrative staff and managers). Costs have been updated to 2014/2015 price levels using the appropriate inflators.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary plus oncosts	£36,291 per year	Average salary plus oncosts for a team member working in a dedicated team based on national CAMHS data and on the 128 dedicated teams. <sup>1,2</sup>
B. Overheads		
Management, administration and estates staff	£8,891 per year	Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information. Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£13,863 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
C. Capital overheads	£3,718 per year	Based on the new-build and land requirements of an NHS office and shared facilities. <sup>3,4</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. Based on the assumption that each team has one shared office.
Working time	42 weeks per year 37.7 hours per week	Unit costs are based on 1,575 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>5</sup>
Ratio of direct to indirect time on:		Information taken from national CAMHS mapping data. <sup>1</sup> Staff activity was reported at the team level by Strategic Health Authority (SHA) averaging as follows: education and training (9%), research and evaluation (5%), admin and management (23%), consultation and liaison (13%) and clinical (49%).
Patient-related work	1:0.63	
Face-to-face contact	1:1.06	
Length of episode		30 per cent of cases lasted for 4 weeks or less, 30 per cent for 13 weeks or less, 19 per cent for 26 weeks or less, 11 per cent for 52 weeks or less and 10 per cent for more than 52 weeks.
Caseload	35 cases per team	Based on 133 teams and 4,596 cases. <sup>1</sup>
London multiplier	1.39 x C	Allows for higher costs associated with working in London. <sup>3,4,6</sup>
Non-London multiplier	0.96 x C	Allows for lower costs associated with working outside London. <sup>3,4</sup>
<b>Unit costs available 2014/2015</b>		
£40 per hour per team member; £65 per hour of patient-related activity; £83 per hour of face-to-face contact; £3,945 average cost per case		

<sup>1</sup> Child and Adolescent Mental Health Service (CAMHS) mapping (2009), Durham University & Department of Health, <http://www.childrensmapping.org.uk/> [accessed 17 November 2013].

<sup>2</sup> The CAMHS mapping data are no longer being collected so information for this table has been updated this year.

<sup>3</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>5</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>6</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].



## 12.9 Targeted CAMHS team

These teams provide services for children and young people with particular problems or for those requiring particular types of therapeutic interventions. The information for this table is based on national Child and Adolescent Mental Health Service (CAMHS) mapping data and returns from 2,094 teams, of which 335 were targeted teams.<sup>1,2</sup> On average there are 4.2 wte per team (excluding administrative staff and managers). Costs have been updated to 2014/2015 price levels using the appropriate inflators.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary plus oncosts	£39,398 per year	Average salary for a team based on national CAMHS data. <sup>1,2</sup>
B. Overheads		
Management, administration and estates staff	£9,652 per year	Taken from the 2013/14 financial accounts for 10 community trusts. See Preface for more information. Management and other non-care staff costs are 19.31 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£15,050 per year	Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
C. Capital overheads	£3,718 per year	Based on the new-build and land requirements of an NHS office and shared facilities. <sup>3,4</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. Based on the assumption that each team has one shared office.
Working time	42 weeks per year 37.9 hours per week	Unit costs are based on 1,565 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>5</sup>
Ratio of direct to indirect time on:		
Patient-related work	1:0.63	Information taken from national CAMHS mapping data. Staff activity was reported at the team level by Strategic Health Authority (SHA) averaging as follows: education and training (9%), research and evaluation (5%), admin and management (23%), consultation and liaison (13%) and clinical (49%).
Face-to-face contact	1:1.06	
Duration of episode		22 per cent of cases lasted for 4 weeks or less, 24 per cent for 13 weeks or less, 18 per cent for 26 weeks or less, 16 per cent for 52 weeks or less and 20 per cent for more than 52 weeks.
Caseload	47 cases per team	Based on 335 teams and 15,653 cases. <sup>1</sup>
London multiplier	1.55 x C	Allows for higher costs associated with working in London. <sup>3,4,6</sup>
Non-London multiplier	0.96 x C	Allows for lower costs associated with working in London. <sup>3,4</sup>
<b>Unit costs available 2014/2015</b>		
£43 per hour per team member; £71 cost per hour per team member for patient-related activities; £89 cost per hour per team member for face-to-face contact; £6,060 average cost per case		

<sup>1</sup> Child and Adolescent Mental Health Service (CAMHS) mapping (2009), Durham University & Department of Health, <http://www.childrensmapping.org.uk/> [accessed 17 November 2013].

<sup>2</sup> The CAMHS mapping data are no longer being collected so information for this table has been updated.

<sup>3</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>4</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>5</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhs.gov.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>6</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 12.10 Transition services for children with complex needs when transferring to adulthood

This table has been based on a study carried out by Sloper et al. (2010)<sup>1</sup> in which the costs for five transition services were studied in-depth. Three of the five transition services have been selected for inclusion here and represent low, median and high cost services (based on cost per case per year).

### 12.10.1 Transition services for children: medium cost

Relaunched in June 2007, the service was fully staffed for the first time just before the research interviews were undertaken. The team has no case-holding responsibilities or budget but works to co-ordinate transition for young people with very complex needs.

The team supports 184 young people. The average costs per working hour (including steering group) is £57 (£56) and the cost per case per year is £927 and £980 respectively. Time use: direct contact (7%), meetings with family (12%), liaison (45%) and report writing or assessments (36%). Costs have been updated from 2007/08 using the PSS inflators.

Staff member	Whole-time-equivalent (WTE) on transition	£ per year
Team manager/business support	2.0 wte	£84,893
Social worker/social work assistant	1.5 wte	£81,991
Other support and supervision	<0.1	£6,101
<b>Total for staff</b>		<b>£172,985</b>
Steering group	Total hours per year	£ per year
Managers: children's services	56	£2,805
Managers: adult services	42	£2,038
Managers: health	32	£1,934
Managers: education/training	60	£3,034
<b>Total for steering group</b>		<b>£9,812</b>
<b>TOTAL COST</b>		<b>£182,797</b>

<sup>1</sup> Sloper, P., Beecham, J., Clarke, S., Franklin, A., Moran, N. & Cusworth, L. (2010) *Models of multi-agency services for transition to adult services for disabled young people and those with complex health needs: impact and costs*, Social Policy Research Unit, University of York & Personal Social Services Research Unit, University of Kent, Canterbury.

**12.10.2 Transition services for children: low cost**

This service is based in a small unitary authority and was launched in June 2005. The co-ordinator works closely with other personnel in social services, health and education (including special schools) to ensure a smooth transition for disabled young people who have complex needs. The local voluntary sector organisation undertakes personal care planning and is in regular contact with the transition co-ordinator. This transition service has a complex 'cost picture' involving many people and agencies, and although much of the work planning transition support has been included, the cost of transition support has probably not been included.

The team supports 203 young people of whom 79 have complex needs and 124 have moderate intellectual disabilities. The cost per working hour for the team (including strategic management group) was £23 (£27) and cost per case per year £420 (£489). Time use: direct contact (40%), assessments and reports (10%), liaison (20%), travel (10%) and meetings (20%). Costs have been updated from 2007/08 using the PSS inflators.

<b>Staff member</b>	<b>Whole-time-equivalent (WTE) on transition</b>	<b>£ per year</b>
Transition co-ordinator	1.0	£46,959
Transition co-ordinator supervision	0.02	£1,057
<b>Some of the virtual team members</b>		
Social workers in children's team	0.35	£16,634
Practice managers in children's teams	0.05	£2,925
Social workers in adult team	0.28	£13,147
Connexions advisor	0.03	£1,801
Adult operational director	0.05	£3,537
Divisional manager	<0.01	£614
<b>Total</b>		<b>£86,676</b>
<b>Strategic Management Group (meets monthly)</b>	<b>Total hours per year</b>	<b>£ per year</b>
Managers: children's services	99	£3,798
Managers: adult services	77	£3,807
Managers: education/training	22	£1,122
Area managers: connexions	22	£873
Managers: health	88	£4,380
Subtotal for Strategic Management Group		<b>£13,980</b>
<b>Transition sub-groups</b>	<b>Total hours per year</b>	<b>£ per year</b>
(2 meet monthly, 1 meets each term)		
Managers: children's services	143.5	£5,796
Managers: adult services	116	£4,626
Managers: health	215.6	£8,865
Education services managers	235	£986
Connexions	22	£879
Voluntary organisations personnel	44	£1,138
<b>Subtotal for transition sub-groups</b>		<b>£22,292</b>
<b>TOTAL COST</b>		<b>£108969</b>

### 12.10.3 Transition services for children: high cost

This transition team is located in an education department within an integrated disabled children's service. The team was set up in November 2007 and the research interviews were undertaken in October 2008. There had been problems getting staff in place; many interviewees were involved in statutory duties as well and felt they had only just got to the point where transition work could begin.

The team supports 76 young people. The average costs per working hour (including steering group) is £39 (£40) and cost per case per year is £3,804 (£3,875). Time use: face-to-face contact (12%), telephone contact (17%); assessments and writing reports (28%); meetings with people and families (11%); liaison away from meetings (12%); travel (12% and general administration (10%). Costs have been uprated from 2007/08 using the PSS inflators.

Staff member	Whole-time-equivalent (WTE) on transition	£ per year
<b>Children's services</b>		
Manager transition team/administrator	0.50	£22,878
Social workers/key workers	0.75	£34,585
Nurse (cyp)/trainee psychologist	0.70	£35,256
Connexions TPAs	1.00	£40,599
<b>Adult services</b>		
Manager adult team	0.60	£34,717
Social worker (adult)	0.80	£37,565
Senior practitioner	0.75	£43,399
Nurse (adult)	0.80	£38,762
Supervision (various managers, not included above)	0.08	£5,354
<b>Subtotal for children's services</b>		<b>£293,119</b>
<b>Steering group and sub-groups</b>		
	<b>Total hours per year</b>	<b>£ per year</b>
Managers: children's services	33	£1,691
Managers: adult services	14	£712
Managers: education/training	12	£561
Services managers: local authority	42	£895
Connexions	22.5	£1,672
<b>Subtotal for steering group</b>		<b>£5,531</b>
<b>TOTAL COST</b>		<b>£298,650</b>

## 12.11 Re-ablement service

Adult social care services are increasingly establishing re-ablement services as part of their range of home care provision, sometimes alone, sometimes jointly with NHS partners. Typically, home care re-ablement is a short-term intervention, often provided to the user free of charge, and aims to maximise independent living skills. Information on the costs of re-ablement have been collected as part of an evaluation at the Personal Social Services Research Unit at the University of Kent, in collaboration with the Social Policy Research Unit, University of York.<sup>1</sup> The table below provides the average costs across four re-ablement services participating in the evaluation.<sup>2</sup> All the services were based out of London, and one service had occupational therapists (OTs) working closely with the team. Cost data were provided for 2008/09 and have been updated using the PSS inflators.

Costs per service user for the four sites ranged from £1,665 to £2,261 at 2014/2015 prices.

Costs and unit estimation	2014/2015 value	Notes
A. Salary plus oncosts	£2,410,191	Based on total salary costs ranging from £598,697 to £4,905,310 for re-ablement workers. Salary cost accounted for between 61 and 62 per cent of total costs. One site included OTs as well as re-ablement workers.
B. Direct overheads		
Administrative and management	£888,806	Administrative and management costs accounted for between 2 and 25 per cent of the total for the four sites.
Office and training costs	£47,866	The costs of uniforms and training costs are included here. These accounted for 1 per cent of the total.
C. Indirect overheads	£166,242	Indirect overheads include general management and support services such as finance and human resource departments. These were 4 per cent of total costs and ranged from 0.5 to 9 per cent.
D. Capital overheads		
Building and land costs	£7,019	Information supplied by the local authority and annuitised over 60 years at a discount rate of 3.5 per cent.
Equipment costs	£2,668	Based on information supplied by the local authority and costed following government guidelines.
E. Travel	£431,658	Average travel costs for the four local authorities were 10 per cent of total costs and ranged from 1 to 12 per cent.
Patient contact hours	49 hours	Average duration of episode for the four sites was 49 hours. Average episodes ranged from 35 to 55 hours.
Ratio of direct to indirect time on:		
Face-to-face contacts	1:0.94	Fifty-two per cent of time was spent in contact with service users. This was based on the average of 179,174 working hours and 92,566 contact hours.
Number of service users	1,886	The average number of service users for the four sites was 1,886 per year, ranging between 429 and 3,500 service users.
<b>Unit costs available 2014/2015</b>		
£22 per hour; £43 per hour of contact; £2,096 average cost per service user.		

<sup>1</sup> Glendinning, C., Jones, K., Baxter, K., Rabiee, P., Curtis, L., Wilde, A., Arksey, H. & Forder, J. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

<sup>2</sup> Although five sites participated in the evaluation, one of the sites had very different costs and did not provide complete information. The costs for this site have therefore been omitted. The costs contained in this table are considered to be typical of a re-ablement service.



## **IV. HOSPITAL-BASED HEALTH CARE STAFF**





## **13. Hospital-based scientific and professional staff**

13.1 Hospital physiotherapist

13.2 Hospital occupational therapist

13.3 Hospital speech and language therapist

13.4 Hospital dietitian

13.5 Hospital radiographer

13.6 Hospital pharmacist

13.7 Allied health professional support worker



## 13.1 Hospital physiotherapist

Using data from the NHS reference costs,<sup>1</sup> the mean average cost for a non-consultant-led (non-admitted) follow-up physiotherapy attendance in 2014/15 was estimated to be £34, with an interquartile range of £28 to £39. No later data available, so costs have been updated using the HCHS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£23,284 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 (for allied health professionals) of the July 2014-June 2015 NHS staff earnings estimates. <sup>2</sup> An additional 7.2 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all physiotherapists is £32,944. <sup>3</sup> See section V for further information on pay scales.
B. Salary oncosts	£5,375 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£5,660 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>4</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>5</sup>
D. Overheads		Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>6</sup> See Preface for more information.
Management, administration and estates staff	£5,990 per year	Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£14,014 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£6,179 per year	Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>7,8</sup> No allowance has been made for the cost of equipment. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		
Working time	42.4 weeks per year 37.5 hours per week	Unit costs are based on 1,591 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>9</sup>
Ratio of direct to indirect time		No current information available.
London multiplier	1.54 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>7,8,10</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>7,8,10</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£34 (£38) per hour.		

<sup>1</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015* (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>6</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>9</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London, <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds..

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 13.2 Hospital occupational therapist

Using data from the NHS reference costs,<sup>1</sup> the mean average cost for a non-consultant led (non-admitted) follow-up occupational therapy attendance in 2014/15 was estimated to be £53. Costs have been uprated using the HCHS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£23,284 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 (for allied health professionals) of the July 2014-June 2015 NHS staff earnings estimates. <sup>2</sup> An additional 7.2 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>3</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all occupational therapists is £31,928. <sup>4</sup> See section V for further information on pay scales.
B. Salary oncosts	£5,375 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£5,669 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>5</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>6</sup>
D. Overheads		
Management, administration and estates staff	£5,990 per year	Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>7</sup> See Preface for more information. Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£14,014 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£6,179 per year	Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>8,9</sup> No allowance has been made for the cost of equipment. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		
Working time	42.4 weeks per year 37.5 hours per week	Unit costs are based on 1,591 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>10</sup>
Ratio of direct to indirect time		No current information available.
London multiplier	1.54 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>8,9,11</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>8,9</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£34 (£38) per hour.		

<sup>1</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>5</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>6</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>7</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>8</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>9</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>10</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>11</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

### 13.3 Hospital speech and language therapist

Using data from the NHS reference costs,<sup>1</sup> the mean average cost for a non-consultant led (non-admitted) follow-up speech and language therapy attendance in 2014/15 was estimated to be £67, with an interquartile range of £35 to £80. Costs have been updated using the HCHS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£23,284 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 (for allied health professionals) of the July 2014-June 2015 NHS staff earnings estimates. <sup>2</sup> An additional 4.6 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>3</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all speech and language therapists is £33,544. <sup>4</sup> See section V for further information on pay scales.
B. Salary oncosts	£5,375 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£6,022 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>5</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>6</sup>
D. Overheads		
Management, administration and estates staff	£5,990 per year	Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>7</sup> See Preface for more information. Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£14,014 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£6,178 per year	Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>8,9</sup> No allowance has been made for the cost of equipment. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		
Working time	42.4 weeks per year 37.5 hours per week	Unit costs are based on 1,591 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>10</sup>
Ratio of direct to indirect time		No current information available.
London multiplier	1.54 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>8,9,11</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>8,9</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£34 (£38) per hour.		

<sup>1</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) *NHS staff earnings estimates to June 2015* (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>5</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>6</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>7</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>8</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>9</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>10</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhs.gov.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>11</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 13.4 Hospital dietitian

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£23,284 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 (for allied health professionals) of the July 2014-June 2015 NHS staff earnings estimates. <sup>1</sup> An additional 7.2 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all dietitians is £32,821. <sup>3</sup> See section V for further information on pay scales.
B. Salary oncosts	£5,375 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£5,881 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>4</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>5</sup>
D. Overheads		Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>6</sup> See Preface for more information.
Management, administration and estates staff	£5,990 per year	Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£14,014 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£6,179 per year	Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect share use of both treatment and non-treatment space. <sup>7,8</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		
Working time	42.4 weeks per year 37.5 hours per week	Unit costs are based on 1,591 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>9</sup>
Ratio of direct to indirect time		No current information available.
London multiplier	1.54 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>7,8,10</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>7,8</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£34 (£38) per hour.		

<sup>1</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>2</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>3</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>6</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>9</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 13.5 Hospital radiographer

Using data from the NHS reference costs,<sup>1</sup> the mean average cost for a radiotherapy inpatient was estimated to be £338 and for a regular day or night case £660. An outpatient contact was £105. No later data found so costs have been updated using the HCHS pay & prices inflator.

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£23,284 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 (for allied health professionals) of the July 2014-June 2015 NHS staff earnings estimates. <sup>2</sup> An additional 7.2 per cent can be added to reflect payments for overtime, shift work and geographic allowances for qualified therapeutic (diagnostic) radiography staff. <sup>3</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all Diagnostic and Therapeutic Radiologists is £32,818. <sup>4</sup> See section V for further information on pay scales.
B. Salary oncosts	£5,375 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£6,048 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>5</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>6</sup>
D. Overheads		
Management, administration and estates staff	£5,990 per year	Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>7</sup> See Preface for more information. Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£14,014 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£9,004 per year	Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>8,9</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42.4 weeks per year 37.5 hours per week	Unit costs are based on 1,591 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>10</sup>
Ratio of direct to indirect time		No current information available.
London multiplier	1.54 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>8,9,11</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>8,9</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£36 (£40) per hour.		

<sup>1</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014> [accessed 4 October 2015].

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>5</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>6</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>7</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>8</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>9</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>10</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>11</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 13.6 Hospital pharmacist

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£31,070 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 6 (for allied health professionals) of the July 2014-June 2015 NHS staff earnings estimates. <sup>1</sup> An additional 7.2 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all pharmacists is £40,983. <sup>3</sup> See section V for further information on pay scales.
B. Salary oncosts	£7,540 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£9,734 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>4</sup> Current cost information has been provided by the Department of Health. The cost of the clinical placement for pharmacists has been provided by Dr Lynne Bollington. See Bollington & John (2012) <sup>5</sup> for more information. These costs exclude external training courses that supplement work-based learning and may cover specific components of the General Pharmaceutical Council's performance standards and/or examination syllabus. See schema 19 for more details on training.
D. Overheads		
Management, administration and estates staff	£8,069 per year	Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>6</sup> See Preface for more information. Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£18,880 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£5,202 per year	Based on the new-build and land requirements of a pharmacy, plus additional space for shared facilities. <sup>7,8</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		
Working time	42.6 weeks per year 37.5 hours per week	Unit costs are based on 1,598 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>9</sup>
Ratio of direct to indirect time on:		No current information available.
Patient-related activities	1:0.43	
London multiplier	1.54 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>7,8,10</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>7,8</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£44 (£50) per hour; £88 (£100) per cost of direct clinical patient time (includes travel); £63 (£72) per cost of patient-related activities.		

<sup>1</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>2</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>3</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> Bollington, L. & John, D. (2012) *Pharmacy education and training in the hospital service in Wales: Identifying demand and developing capacity*. STS Publishing, Cardiff.

<sup>6</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>9</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhs.gov.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].



## 13.7 Allied health professional support worker

Allied health professional support workers provide vital assistance to health-care professionals in diagnosing, treating and caring for patients. They work in a variety of settings depending on their role, such as in patients' homes, a GP clinic or in a hospital department.<sup>1</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£16,356 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 2 (for allied health professionals) of the July 2014-June 2015 NHS staff earnings estimates. <sup>2</sup> An additional 7.2 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>3</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all health care support workers is £16,691. <sup>4</sup> See section V for further information on pay scales.
B. Salary oncosts	£3,449 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£0	Training costs are assumed to be zero, although many take NVQ courses.
D. Overheads		
Management, administration and estates staff	£4,139 per year	Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>5</sup> See Preface for more information. Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£9,685 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£4,022 per year	Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of both treatment and non-treatment space. <sup>6,7</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
F. Travel		
Working time	42 weeks per year 37.5 hours per week	Unit costs are based on 1,576 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>8</sup>
Ratio of direct to indirect time		No current information available.
London multiplier	1.34 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>6,7,9</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>6,7</sup>
<b>Unit costs available 2014/2015</b>		
£24 per hour.		

<sup>1</sup> NHS Careers (2011) *Clinical support staff*, National Health Service, London. <http://www.nhscareers.nhs.uk/explore-by-career/wider-healthcare-team/careers-in-the-wider-healthcare-team/clinical-support-staff/> [accessed 9 October 2013].

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Health & Social Care Information Centre (2015) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>4</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>5</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>8</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits*, National Health Service, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>9</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].



## **14. Hospital-based nurses**

The table overleaf provides the unit costs for hospital nurses bands 2-8 and replaces the individual schema usually found in this section. See Preface for more information on changes to the presentation of our estimates. Each Agenda for Change (AFC) band can be matched to professionals using the AFC generic profiles. <http://www.nhsemployers.org/your-workforce/pay-and-reward/pay/job-evaluation/national-job-profiles>. Reference should be made to the explanatory notes when interpreting the unit costs. See also chapter 18 for examples of roles in each band.

## 14. Hospital-based nurses

### A. Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change bands 2-8 of the July 2013-June 2014 NHS staff earnings estimates for nurses.<sup>1</sup> An additional 12.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. See section V for further information on pay scales. The Electronic Staff Records (ESR) system shows that the mean basic salary for a staff nurse is £29,618.

### B. Salary oncosts

Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.

### C. Qualification costs

These have been calculated using the method described in Netten et al. (1998).<sup>2</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE).<sup>3</sup> See section V for detailed information on qualifications.

### D. Overheads

Taken from NHS foundation trusts: Consolidated Accounts 2013/14.<sup>4</sup> See Preface for more information.

Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff. Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.

### E. Capital overheads

Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of office space for administration, and recreational and changing facilities<sup>5,6</sup>

### F. Working time

Unit costs are based on 1,590 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups.<sup>7</sup>

### G. Ratio of direct to patient-related time.

Taken from the McKinsey report commissioned by the Department of Health in 2009,<sup>8</sup> hospital nurses are estimated to spend 41 per cent of their time on patient care, with 59 per cent of their time spent on non-patient activities, such as paperwork and administration, handing over and co-ordination, discussion with other nurses, and preparing medication (away from patients). When the ratio of time spent on patient care to other activities is 1:1.44, each hour spent with a client requires 2.44 paid hours.

### H. London multiplier and non-London multiplier

Allows for the higher costs associated with working.<sup>5,6,9</sup>

<sup>1</sup> Health & Social Care Information Centre (2014) NHS staff earnings estimates 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>2</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS*, Vols 1 & 2, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>3</sup> Personal Communication with the Department of Health and Health Education England (HEE), 2015.

<sup>4</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015]

<sup>5</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London

<sup>6</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>7</sup> Health & Social Care Information Centre, NHS sickness absence rates: Jan to Mar 2015 and annual summary 2010/11 to 2014/15, <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-jan-to-mar-2015-and-annual-summary-2010/11-to-2014/15> [accessed 5 November 2015].

<sup>8</sup> Department of Health (2010) *Achieving world class productivity in the NHS, 2009/10-2013/14: the McKinsey report*, Department of Health, London.

<sup>9</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 14. Hospital-based nurses

This table provides the annual and unit costs for hospital-based nurses (see Preface for more information, and the notes facing for assistance in interpreting each cost item). See also chapter 18 for examples of roles in each band.

<b>Hospital-based nurses</b>							
<b>Refer to notes on facing page for references</b>	<b>Band 2</b>	<b>Band 3</b>	<b>Band 4</b>	<b>Band 5</b>	<b>Band 6</b>	<b>Band 7</b>	<b>Band 8a</b>
A Wages/salary	£16,356	£18,459	£20,167	£25,764	£31,914	£38,332	£45,240
B Salary oncosts	£3,449	£4,034	£4,509	£6,064	£7,774	£9,558	£11,479
C Qualifications	NA	NA	NA	£10,514	£10,514	£10,514	£10,514
<b>D Overheads</b>							
Management, admin and estates staff	£3,661	£4,701	£4,242	£6,173	£7,677	£9,257	£10,980
Non-staff	£8,565	£10,999	£10,359	£13,417	£16,687	£20,121	£23,865
E Capital overheads	£1,865	£1,865	£1,225	£3,687	£3,687	£3,687	£3,687
<b>F Working time</b>	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week
<b>G Ratio of direct to indirect time on :</b>							
Face to face contacts				1:1.44	1:1.44	1:1.44	
H London multiplier	1.57 x E	1.57 x E	1.57 x E	1.57 x E	1.57 x E	1.57 x E	1.57 x E
Non-London multiplier	0.96 x E	0.96 x E	0.96 x E	0.96 x E	0.96 x E	0.96 x E	0.96 x E
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>							
Cost per working hour (with qualifications)	£23	£25	£28	£36 (£43)	£45 (£51)	£54 (£60)	£63 (£70)
Cost per hour of patient contact (with qualifications)				£88 (£105)	£109 (£125)	£131 (£147)	£154 (£170)



## **15. Hospital-based doctors**

15.1 Foundation house officer 1

15.2 Foundation house officer 2

15.3 Registrar group

15.4 Associate specialist

15.5 Consultant: medical

15.6 Consultant: surgical

15.7 Consultant: psychiatric





## 15.1 Foundation house officer 1

The Foundation Programme is a two-year, general post-graduate medical training programme which is compulsory for all newly-qualified medical practitioners in the UK. The Foundation Programme forms the bridge between medical school and specialist/general practice training.<sup>1</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£22,870 per year	The mean basic salary for foundation officers (year 1) and house officers, taken from the July 2014-June 2015 Electronic Staff Record (ESR). <sup>2</sup> An additional 41.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> See section V for further information on pay scales.
B. Salary oncosts	£5,260 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£24,030 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>4</sup> For hospital doctors, post-graduate study consists of a two-year Foundation Programme. <sup>5</sup> During the first year, trainees hold only provisional registration with the General Medical Council, full registration being granted on successful completion of the first year.
D. Overheads		Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>6</sup> See Preface for more information.
Management, administration and estates staff	£5,879 per year	Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£13,765 per year	Non-staff costs were 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Ongoing training		Training is included in non-staff overheads and itemised in the NHS Foundation Trust: Consolidated Accounts. <sup>6</sup> See also: <a href="http://www.hfma.org.uk/download.ashx?type=infoservice&amp;id=252">http://www.hfma.org.uk/download.ashx?type=infoservice&amp;id=252</a> .
F. Capital overheads	£4,244 per year	Based on the new-build and land requirements of NHS hospital facilities. <sup>7,8</sup> Adjustments have been made to reflect shared use of administration and recreational facilities, including accommodation for night-time duties. Treatment space has not been included. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	44.4 weeks per year 48 hours per week	Unit costs are based on 2,133 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>9</sup> Under the European Working Time Directive (EWTD), the majority of foundation officers (Year 1) are working up to 48 hours per week, 19.7 per cent are working up to 56 hours and 11.3 per cent are working 40 hours. <sup>10</sup>
Ratio of direct to indirect time on: patient-related activity		No current information available on patient-related activity. See previous editions of this publication for sources of information.
London multiplier	1.14 x (A to B) 1.56 x F	Allows for the higher costs associated with London. <sup>7,8,11</sup>
Non-London multiplier	0.97 x F	Allows for the lower costs associated with working outside London. <sup>7,8</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£24 (£36) per hour, 48-hour week; £21 (£31) per hour, 56-hour week; £29 (£43) per hour, 40-hour week. (Includes A to F).		

<sup>1</sup> National Health Service (2011) *The foundation programme*, <http://www.foundationprogramme.nhs.uk/pages/home/> [accessed 9 October 2013].

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>5</sup> National Health Service (2008) *Modernising medical careers*, National Health Service, London.

<sup>6</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>7</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</sup> Based on Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>9</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>10</sup> Provided by the Department of Health, 2009.

<sup>11</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 15.2 Foundation house officer 2

The Foundation Programme is a two-year, general post-graduate medical training programme which is compulsory for all newly-qualified medical practitioners in the UK. The Foundation Programme forms the bridge between medical school and specialist/general practice training.<sup>1</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£28,054 per year	The mean basic salary for foundation officers (year 2), taken from the July 2014-June 2015 Electronic Staff Record (ESR). <sup>2</sup> An additional 41.7 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>3</sup> See section V for further information on pay scales.
B. Salary oncosts	£6,701 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£27,127 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>4</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>5</sup> For hospital doctors, post-graduate study consists of a two-year Foundation Programme. <sup>6</sup> During the first year, trainees hold only provisional registration with the General Medical Council, full registration being granted on successful completion of the first year.
D. Overheads		Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>7</sup> See Preface for more information.
Management, administration and estates staff	£7,264 per year	Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£16,995 per year	Non-staff costs were 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Ongoing training	£2,516 per year	Training is included in non-staff overheads and itemised in the NHS Foundation Trust: Consolidated Accounts. <sup>7</sup> See also: <a href="http://www.hfma.org.uk/download.ashx?type=infoservice&amp;id=252">http://www.hfma.org.uk/download.ashx?type=infoservice&amp;id=252</a> .
F. Capital overheads	£4,244 per year	Based on the new-build and land requirements of NHS hospital facilities. <sup>8,9</sup> Adjustments have been made to reflect shared use of administration and recreational facilities, including accommodation for night-time duties. Treatment space has not been included. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	44.4 weeks per year 48 hours per week	Unit costs are based on 2,133 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>10</sup> Under the European Working Time Directive (EWTD), the majority of foundation officers (Year 2) are working up to 48 hours per week. 22.3 per cent are working up to 56 hours and 13 per cent are working 40 hours. <sup>11</sup>
Ratio of direct to indirect time on: patient-related activity		No current information available on patient-related activity. See previous editions of this publication for sources of information.
London multiplier	1.14 x (A to B) 1.56 x F	Allows for the higher costs associated with London. <sup>8,9,12</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London. <sup>8,9</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£30 (£42) per hour, 48-hour week; £25, £36; per hour, 56-hour week; £36 (£51) per hour, 40-hour week. (Includes A to F).		

<sup>1</sup> National Health Service (2011) *The foundation programme*, [www.foundationprogramme.nhs.uk/pages/home/](http://www.foundationprogramme.nhs.uk/pages/home/) [accessed 9 October 2013].

<sup>2</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>3</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>4</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>6</sup> National Health Service (2008) *Modernising medical careers*, National Health Service, London.

<sup>7</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>8</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>9</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>10</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>11</sup> Provided by the Department of Health, 2009.

<sup>12</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 15.3 Registrar group

In terms of staff numbers, registrars comprise the largest group of doctors (registrars, senior registrars, specialist registrars (SpRs) and specialty registrars (STR).

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£37,329 per year	The mean basic salary for registrars, taken from the July 2014-June 2015 Electronic Staff Record (ESR). <sup>1</sup> An additional 46.5 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> See section V for further information on pay scales.
B. Salary oncosts	£9,279 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£38,423 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>4</sup> Specialty registrar training involves three years' full-time post-graduate training with at least two of the years in a specialty training programme. <sup>5,6</sup>
D. Overheads		Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>7</sup> See Preface for more information.
Management, administration and estates staff	£9,741 per year	Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£22,792 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Ongoing training		Training is included in non-staff overheads and itemised in the NHS Foundation Trust: Consolidated Accounts. <sup>7</sup> See also: <a href="http://www.hfma.org.uk/download.ashx?type=infoservice&amp;id=252">http://www.hfma.org.uk/download.ashx?type=infoservice&amp;id=252</a> .
F. Capital overheads	£4,244 per year	Based on the new-build and land requirements of NHS hospital facilities. <sup>8,9</sup> Adjustments have been made to reflect shared use of administration and recreational facilities, including accommodation for night-time duties. Treatment space has not been included. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42.4 weeks per year 48 hours per week	Unit costs are based on 2,037 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>10</sup> Under the European Working Time Directive (EWTd), the majority of specialist registrars are now working up to 48 hours per week. 34 per cent are working up to 56 hours and 3.9 per cent are working 40 hours. <sup>11</sup>
Ratio of direct to indirect time on: patient-related activity		No current information available on patient-related activity. See previous editions of this publication for sources of information.
London multiplier	1.14 x (A to B) 1.56 x F	Allows for the higher costs associated with London. <sup>8,9,12</sup>
Non-London multiplier	0.97 x F	Allows for the lower costs associated with working outside London. <sup>8,9</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£41 (£60) per hour, 48-hour week; £35 (£51) per hour, 56-hour week; £49 (£72) per hour, 40-hour week. (Includes A to F).		

<sup>1</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>5</sup> National Health Service (2008) *Modernising medical careers*, National Health Service, London.

<sup>6</sup> NHS Employers (2008) *Terms and conditions of service for specialty doctors – England (2008)*, NHS Employers, London.

<sup>7</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>8</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>9</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>10</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>11</sup> Provided by the Department of Health, 2009.

<sup>12</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 15.4 Associate specialist

An associate specialist is a doctor who has trained and gained experience in a medical or surgical specialty but has not become a consultant. These doctors usually work independently but will be attached to a clinical team led by a consultant in their specialty. Some of them are listed on the GMC's specialist register and are eligible to take on a consultant post. The reasons why they are not listed include: a wish to concentrate on clinical work and to avoid the administrative pressures of a consultant post; a desire to have a better work/life balance; and, in some cases, a lack of opportunity to access higher training posts. They do, however, take part in the full range of clinical work, including teaching junior doctors.<sup>1,2,3</sup>

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£78,217 per year	The mean basic salary for associate specialists, taken from the July 2014-June 2015 Electronic Staff Record (ESR). <sup>4</sup> An additional 46.5 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>4</sup> See section V for further information on pay scales.
B. Salary oncosts	£20,646 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£45,381 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>5</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>6</sup> Associate Specialist training involves at least four years' full-time post-graduate training, at least two of which will be in a specialty training programme. <sup>7</sup>
D. Overheads		Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>8</sup> See Preface for more information.
Management, administration and estates staff	£20,662 per year	Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£48,344 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Ongoing training		Training is included in non-staff overheads and itemised in the NHS Foundation Trust: Consolidated Accounts. <sup>8</sup> See also: <a href="http://www.hfma.org.uk/download.ashx?type=infoservice&amp;id=252">http://www.hfma.org.uk/download.ashx?type=infoservice&amp;id=252</a> .
F. Capital overheads	£4,244 per year	Based on the new-build and land requirements of NHS hospital facilities. <sup>9,10</sup> Adjustments have been made to reflect shared use of administration and recreational facilities, including accommodation for night-time duties. Treatment space has not been included. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42.4 weeks per year 40 hours per week	Unit costs are based on 1,698 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>11</sup> The 2011 associate specialist full time contract is based on 10 programmed activities (40 hours per week). <sup>12</sup>
Ratio of direct to indirect time on: patient-related activity		No current information available on patient-related activity. See previous editions of this publication for sources of information.
London multiplier	1.14 x (A to B) 1.56 x F	Allows for the higher costs associated with London. <sup>9,10,13</sup>
Non-London multiplier	0.97 x F	Allows for the lower costs associated with working outside London. <sup>9,10</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£101 (£128) per hour (40 hour week).		

<sup>1</sup> British Medical Association (2008) *Staff and associate specialists committee newsletter*.

<sup>2</sup> British Medical Association (2008) *Your contract, your decision*, BMA Staff and Associate Specialists Group.

<sup>3</sup> British Medical Association (2009) *Glossary of doctors*, [www.bma.org.uk/patients\\_public/whos\\_who\\_healthcare/glossdoctors.jsp](http://www.bma.org.uk/patients_public/whos_who_healthcare/glossdoctors.jsp)

<sup>4</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>5</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>6</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>7</sup> National Health Service (2008) *Modernising medical careers*, National Health Service, London.

<sup>8</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>9</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>10</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>11</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits*, National Health Service, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>12</sup> NHS Employers (2011) *Specialty and associate specialist contracts*, British Medical Association, London.

<http://www.nhsemployers.org/Aboutus/Publications/Documents/FAQs-Specialty-and-Associate-Specialist-Contracts.pdf> [accessed 9 October 2013].

<sup>13</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

**15.5 Consultant: medical**

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£87,229 per year	The mean basic salary for medical consultants, taken from the July 2014–June 2015 Electronic Staff Record (ESR). <sup>1</sup> An additional 33.5 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> See section V for further information on pay scales.
B. Salary oncosts	£23,152 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£58,351 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>4</sup> See schema 19 for more details. Consultants spend 2 years as a foundation house officer and 6 years as a specialty registrar in a hospital setting.
D. Overheads		
Management, administration and estates staff	£23,070 per year	Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>5</sup> See Preface for more information. Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£53,976 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£5,101 per year	Based on the new-build and land requirements of NHS hospital facilities. <sup>6,7</sup> Includes shared use of consultation and examination areas, and designated secretarial office space. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42.4 weeks per year 43.3 hours per week	Unit costs are based on 1,838 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>8</sup> The 2006 contract aimed to reduce the number of hours that consultants worked, including aligning with the Working Time Directive and based funding assumptions on consultants working an average 43.4 hour week. A typical contract is based on 10.83 programmed activities which are 4 hours in length. <sup>9</sup>
Ratio of direct to indirect time on: patient-related activity		No current information available on patient-related activity. See previous editions of this publication for sources of information.
London multiplier	1.14 x (A to B) 1.56 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>6,7,10</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>6,7</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£105 (£137) per contract hour.		

<sup>1</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>5</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Based on Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>8</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>9</sup> Information Centre (2006) *New consultant contract: implementation survey*, Information Centre, London.

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 15.6 Consultant: surgical

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£88,684 per year	The mean basic salary for surgical consultants, taken from the July 2014-June 2015 Electronic Staff Record (ESR). <sup>1</sup> An additional 33.5 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> See section V for further information on pay scales.
B. Salary oncosts	£23,556 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£58,351 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>4</sup> Consultants spend 2 years as a foundation house officer and 6 years as a specialty registrar in a hospital setting. <sup>4</sup> See schema 19 for more details.
D. Overheads		
Management, administration and estates staff	£23,458 per year	Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>5</sup> See Preface for more information. Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£54,885 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£5,101 per year	Based on the new-build and land requirements of NHS hospital facilities. <sup>6,7</sup> Includes shared use of consultation and examination areas, and designated secretarial office space. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42.4 weeks per year 43.3 hours per week	Unit costs are based on 1,838 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>8</sup> The 2006 contract aimed to reduce the number of hours that consultants worked, including aligning with the Working Time Directive and based funding assumptions on consultants working an average 43.4-hour week. A typical contract is based on 10.83 programmed activities which are 4 hours in length. <sup>9</sup>
Ratio of direct to indirect time on/in: Patient-related activity Operating theatre		No current information available on patient-related activity. See previous editions of this publication for sources of information.
London multiplier	1.14 x (A to B) 1.56 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>6,7,10</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>6,7</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£106 (£138) per contract hour.		

<sup>1</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>5</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>8</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>9</sup> Information Centre (2006) *New consultant contract: implementation survey*, Information Centre, London.

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].

## 15.7 Consultant: psychiatric

Costs and unit estimation	2014/2015 value	Notes
A. Wages/salary	£89,262 per year	The mean basic salary for psychiatric consultants, taken from the July 2014-June 2015 Electronic Staff Record (ESR). <sup>1</sup> An additional 33.5 per cent can be added to reflect payments for overtime, shift work and geographic allowances. <sup>2</sup> See section V for further information on pay scales.
B. Salary oncosts	£23,717 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£58,351 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE). <sup>4</sup> Consultants spend 2 years as a foundation house officer and 6 years as a specialty registrar in a hospital setting. <sup>4</sup> See schema 19 for more details.
D. Overheads		Taken from NHS Foundation Trusts: Consolidated Accounts 2013/14. <sup>5</sup> See Preface for more information.
Management, administration and estates staff	£23,613 per year	Management and other non-care staff costs are 20.9 per cent of direct care salary costs and include administration and estates staff.
Non-staff	£55,247 per year	Non-staff costs are 48.9 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
E. Capital overheads	£5,101 per year	Based on the new-build and land requirements of NHS hospital facilities. <sup>6,7</sup> Includes shared use of consultation and examination areas, and designated secretarial office space. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent.
Working time	42.4 weeks per year 43.3 hours per week	Unit costs are based on 1,838 hours per year: 225 working days minus sickness absence and training/study days as reported for NHS staff groups. <sup>8</sup> The 2006 contract aimed to reduce the number of hours that consultants worked, including aligning with the Working Time Directive and based funding assumptions on consultants working an average 43.3-hour week. A typical contract is based on 10.83 programmed activities which are 4 hours in length. <sup>9</sup>
Ratio of direct to indirect time on:  Face-to-face contacts  patient-related activity		No current information available on patient-related activity. See previous editions of this publication for sources of information.
London multiplier	1.14 x (A to B) 1.56 x E	Allows for the higher costs associated with London compared to the national average cost. <sup>6,7,10</sup>
Non-London multiplier	0.97 x E	Allows for the lower costs associated with working outside London compared to the national average cost. <sup>6,7</sup>
<b>Unit costs available 2014/2015 (costs including qualifications given in brackets)</b>		
£107 (£139) per contract hour.		

<sup>1</sup> Health & Social Care Information Centre (2014) Information prepared for PSSRU from the Electronic Staff Records (ESR).

<sup>2</sup> Health & Social Care Information Centre (2015) NHS staff earnings estimates to June 2015 (not publicly available), Health & Social Care Information Centre, Leeds.

<sup>3</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>4</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>5</sup> NHS Foundation Trusts: *Consolidated Accounts 2013/14*. <https://www.gov.uk/government/publications/nhs-foundation-trusts-consolidated-accounts-201314> [accessed 19 October 2015].

<sup>6</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>7</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>8</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits, National Health Service*, London. <http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2014]. Working days and sickness absence rates as reported in Health & Social Care Information Centre (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, Health & Social Care Information Centre, Leeds.

<sup>9</sup> Information Centre (2006) *New consultant contract: implementation survey*, Information Centre, London.

<sup>10</sup> Monitor (2013) *A guide to the Market Forces Factor*, <https://www.gov.uk/government/publications/guide-to-the-market-forces-factor-201415> [accessed 1 December 2015].





## **V. SOURCES OF INFORMATION**

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## 16. Inflation indices

### 16.1 The BCIS house rebuilding cost index and the retail price index

BCIS calculates the house rebuilding cost index for the Association of British Insurers (ABI). The index is based on an average of house types and cannot therefore reflect changes in all rates from the house rebuilding cost tables as regional trends, labour and materials contents differ.<sup>1</sup> The retail price index is a measure of [inflation](#) published monthly by the [Office for National Statistics](#). It measures the change in the cost of a basket of retail goods and services.<sup>2</sup>

Year	BCIS/ABI		Retail price	
	Rebuilding cost index (1988=100)	Annual % increases	Index (1986/87= 100)	Annual % increases
2003	183.8	4.1	180.0	2.8
2004	191.3	4.1	184.0	2.2
2005	206.1	7.7	188.2	2.3
2006	219.8	6.7	193.7	2.9
2007	228.7	4.0	199.9	3.2
2008	243.5	6.5	208.5	4.3
2009	236.9	-2.7	212.6	2.0
2010	239.5	1.1	222.7	4.8
2011	252.0	5.2	234.5	5.3
2012	Not available	0.4	242.0	3.2
2013	Not available	1.9	249.4	3.1
2014	Not available	6.6	257.5	3.25

### 16.2 Gross domestic product (GDP) deflator and the tender price index for public sector buildings

For non-staff revenue, Her Majesty's Treasury's (HMT) GDP deflator is a measure of general inflation in the domestic economy. HMT produces the GDP deflator from data provided by the ONS and extends the series to future years by applying forecasts of the inflation rate. The BCIS PUBSEC tender price index (PUBSEC) is used by the Office for National Statistics (ONS) to deflate capital expenditure in health and social care.

Year	Gross domestic product <sup>3</sup> annual % increases	Tender price index for public sector building (non-housing) (PUBSEC) <sup>1</sup>	
		Index (1995=100)	Annual % increases
2004/05	3.2	156	7.2
2005/06	2.8	166	6.4
2006/07	2.7	170	2.7
2007/08	2.9	187	9.8
2008/09	2.5	191	2.3
2009/10	2.6	172	-10.3
2010/11	2.8	169	-1.8
2011/12	1.8	176	4.2
2012/13	1.6	181	3.0
2013/14	2.1	191	5.5
2014/15	1.4	205	7.2 (E)

<sup>1</sup> Building Cost Information Service (2015) *Indices and forecasts*, Royal Institute of Chartered Surveyors, London <http://www.rics.org/uk/knowledge/bcis/about-bcis/rebuilding/bcis-house-rebuilding-cost-index/> [accessed 10 October 2015].

<sup>2</sup> <http://ons.gov.uk/ons/taxonomy/index.html?nsc1=Retail+Prices+Index#tab-data-tables> [accessed 24 November 2015].

<sup>3</sup> Provided by the Department of Health, 2015.

## 16.3 The hospital & community health services (HCHS) index

Hospital and community health services (HCHS) pay and price inflation is a weighted average of two separate inflation indices: the pay cost index (PCI) and the health service cost index (HSCI). The PCI measures pay inflation in the HCHS. The PCI is itself a weighted average of increases in unit staff costs for each of the staff groups within the HCHS sector. Pay cost inflation tends to be higher than pay settlement inflation because of an element of pay drift within each staff group. Pay drift is the tendency for there to be a gradual shift up the incremental scales, and is additional to settlement inflation. The estimate of pay inflator for the current year is based on information supplied by the Department of Health and on pay awards of NHS staff. The HSCI is calculated monthly to measure the price change for each of 40 sub-indices of goods and services purchased by the HCHS. The sub-indices are weighted together according to the proportion of total expenditure which they represent to give the overall HSCI value. The pay cost index and the health service cost index are weighted together according to the proportion of HCHS expenditure on each. This provides an HCHS combined pay & prices inflation figure.<sup>1</sup>

Year	Hospital & community health services (HCHS)		
	Pay & prices index (1987/8=100)	Annual % increases	
		Prices <sup>1</sup>	Pay <sup>1</sup>
2004/05	232.3	1.0	4.5
2005/06	240.9	1.9	4.7
2006/07	249.8	3.0	4.1
2007/08	257.0	1.8	3.5
2008/09	267.0	5.2	3.0
2009/10	268.6	-1.3	1.8
2010/11	276.7	2.8	3.1
2011/12	282.5	4.1	0.9
2012/13	287.3	3.1	0.9
2013/14	290.5	1.8	0.7
2014/15	293.1	1.7	0.3

## 16.4 The PSS pay & prices index

The data and methodology used to calculate the PSS pay & prices index have been extensively reviewed following changes in the collection and availability of pay and workforce data. Workforce data for the children's sector, which accounted for 11 per cent of the total whole time equivalent (WTE) workforce in 2010, are no longer collected, and the indices below are for the adult sector alone. This year, in the same way as last year, three indices have been produced, including one for the independent sector. No forecasts for this sector have been made prior to 2010/11.

The PSS pay annual percentage increases are calculated using data on rates of hourly pay change for each occupation group in the PSS sector from the Annual Survey of Hours and Earnings (ASHE), published by Office for National Statistics (ONS).<sup>2</sup> The following occupation groups are used for analysis: managers, social workers, nurses, occupational therapists, community and care workers. In addition, two support groups were identified: administrative/office and ancillary staff. As it was not possible to collect detailed data on all staff working in these two groups, it was assumed that their pay increases were in line with the average for England. Pay changes were weighted by the proportion of PSS staff in each group and the different pay levels of each group: i.e. that occupation group's share of the total PSS pay bill. Workforce data for 2014 from the National Minimum Data Set for Social Care (NMDS-SC), collected by Skills for Care (SfC), is used to calculate the proportion of PSS staff in each occupation group. This data source has replaced the NHS IC's SSDS001 return since 2010, but does not include the children's sector. Pay changes for 2014/15 are projected using an average of the pay changes in the past three years. This assumes that pay increases next year will be in line with the previous trend.

The PSS pay & prices (including capital) is calculated by taking the weighted sum of three indices - pay, capital and non-staff revenue - and the PSS pay & prices (excluding capital) is calculated by taking the weighted sum of two indices - pay and non-staff revenue.

<sup>1</sup> Provided by the Department of Health, 2015.

<sup>2</sup> This work contains statistical data from ONS which is Crown copyright and reproduced with the permission of the controller of HMSO and Queen's Printer for Scotland. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis.

**16.4.1 The PSS annual percentage increases for adult services (all sectors)**

Year	PSS all sectors, adults only <sup>1</sup>		
	Annual % increases		
	Pay & prices (excluding capital)	Pay & prices (including capital)	Pay
2004/05	3.2	4.2	3.9
2005/06	2.3	3.7	3.4
2006/07	3.4	4.5	5.1
2007/08	2.1	3.9	3.0
2008/09	1.6	2.4	2.4
2009/10	1.5	0.3	2.2
2010/11	-0.2	-0.3	-0.4
2011/12	0.1	0.7	0.1
2012/13	0.6	1.2	0.9
2013/14	0.7	1.7	1.0
2014/15	0.2 (E)	1.1 (E)	0.2 (E)

**16.4.2 The PSS annual percentage increases for adult local authority services**

Year	PSS local authority, adults only <sup>1</sup>		
	Annual % increases		
	Pay & prices (excluding capital)	Pay & prices (including capital)	Pay
2004/05	4.0	4.3	4.3
2005/06	3.0	3.7	3.6
2006/07	4.0	4.5	4.7
2007/08	2.7	3.5	3.2
2008/09	2.0	2.3	2.3
2009/10	1.6	1.4	1.9
2010/11	0.2	0.2	0.2
2011/12	-0.2	0.1	-0.2
2012/13	1.4	1.7	1.7
2013/14	0.9	1.2	1.0
2014/15	0.4 (E)	0.7 (E)	0.4 (E)

**16.4.3 The PSS annual percentage increases for adult independent services**

Year	PSS independent care, adults only <sup>1</sup>		
	Annual % increases		
	Pay & prices (excluding capital)	Pay & prices (including capital)	Pay
2010/11	-0.3	-0.4	-0.5
2011/12	0.1	0.9	0.1
2012/13	0.5	1.2	0.8
2013/14	0.7	1.8	1.0
2014/15	0.2 (E)	1.3 (E)	0.2 (E)

<sup>1</sup> Provided by the Department of Health, 2015.

## 17. NHS staff earnings estimates<sup>1</sup>

### 17.1 Mean annual basic pay per FTE for non-medical occupational groupings, NHS England

	Mean annual basic pay per FTE
Ambulance staff	£24,470
Administration and estates staff	£26,851
Healthcare assistants and other support staff	£16,691
Nursing, midwifery and health visiting staff	£28,694
Nursing, midwifery and health visiting learners	£21,560
Scientific, therapeutic and technical staff	£31,387
Healthcare scientists	£29,013

### 17.2 Mean annual basic pay per FTE for nursing, midwifery & health visiting staff by Agenda for Change band, NHS England

	Mean annual basic pay per FTE
Band 4	£20,167
Band 5	£25,764
Band 6	£31,914
Band 7	£38,332
Band 8a	£45,240
Band 8b	£54,216
Band 8c	£63,939
Band 8d	£75,310
Band 9	£90,903

### 17.3 Mean annual basic pay per FTE for allied health professionals staff by Agenda for Change band, NHS England

	Mean annual basic pay per FTE
Band 4	£21,248
Band 5	£23,284
Band 6	£31,070
Band 7	£38,525
Band 8a	£46,038
Band 8b	£55,276
Band 8c	£65,759
Band 8d	£79,583
Band 9	£96,356

<sup>1</sup> Salaries have been provided by the Health & Social Care Information Centre and more specific enquiries relating to pay by grade or staff group should be directed to them, [www.hscic.gov.uk](http://www.hscic.gov.uk). This year, where there appears to be a decrease from last year's salaries, this is largely due to the result of an adjustment to the method of calculation which has affected certain categories of professionals. Further information on this can be provided by the HSCIC.

## 17.4 Mean annual basic pay per FTE for administration and estates

	Mean annual basic pay per FTE
Band 1	£14,863
Band 2	£16,478
Band 3	£18,385
Band 4	£21,239
Band 5	£25,384
Band 6	£30,862
Band 7	£36,923
Band 8a	£44,559
Band 8b	£53,446
Band 8c	£63,866
Band 8d	£76,746
Band 9	£92,298

## 17.5 Mean annual basic pay per FTE by Agenda for Change band, NHS England

	Mean annual basic pay per FTE
Band 1	£14,970
Band 2	£16,356
Band 3	£18,459
Band 4	£21,120
Band 5	£25,488
Band 6	£31,548
Band 7	£37,931
Band 8a	£45,081
Band 8b	£54,043
Band 8c	£64,429
Band 8d	£77,456
Band 9	£92,867

## 17.6 Mean annual basic pay per FTE for NHS staff groups

	Mean basic salary per full-time equivalent
<b>All nurses, midwives and health visiting staff</b>	
Qualified	£30,786
Nursery nurses and nursing assistants	£17,939
<b>Science technical &amp; therapeutic staff (ST&amp;T): allied health professionals</b>	
Qualified	£33,327
Unqualified	£18,727
<b>ST&amp;T staff: other</b>	
Qualified	£35,715
Unqualified	£18,727
<b>Ambulance staff</b>	
Qualified	£27,056
Unqualified	£18,351
<b>Former pay negotiating council groups</b>	
Senior managers	£78,543
Managers	£48,728
Administrative & clerical	£22,270
Maintenance & works	£21,814

Source of tables 17.1-17.6: Health & Social Care Information Centre (2015) *NHS staff earnings estimates, 12 month period July 2014 to June 2014*.

Processed using data taken from the Electronic Staff Record Data Warehouse, as at September 2014. Copyright © 2014, Re-used with the permission of The Health & Social Care Information Centre. All rights reserved.

### General notes

Inspection of data suggests that discretionary point payments are sometimes included with basic pay for consultants.

These figures represent payments made using the Electronic Staff Record to NHS Staff who are directly paid by NHS organisations. It does not include, for example, elements of pay for clinical staff which are paid to the individual by universities, or other non-NHS organisations providing NHS care.

Figures rounded to the nearest £100.

Figures based on data from all NHS organisations who are using ESR (two Foundation Trusts have not taken up ESR).

## 18. Examples of roles in each Agenda for Change band

### Allied health professionals

#### Physiotherapist

Band 2	Clinical support worker (Physiotherapy)
Band 3	Clinical support worker higher level (Physiotherapy)
Band 5	Physiotherapist
Band 6	Physiotherapist specialist
Band 7	Physiotherapist advanced, Specialist physiotherapist, Physiotherapy team manager
Band 8a	Physiotherapist principal
Bands 8a-b	Physiotherapist consultant

#### Occupational therapist

Band 2	Clinical support worker (Occupational therapy)
Band 3	Clinical support worker higher level (Occupational therapy)
Band 4	Occupational therapy technician
Band 5	Occupational therapist
Band 6	Occupational therapist specialist
Band 7	Occupational therapist advanced/team manager
Band 8a	Occupational therapist principal
Bands 8a-b	Occupational therapist consultant

#### Speech and language therapist

Band 2	Clinical support worker (Speech and language therapy)
Band 3	Clinical support worker higher level (Speech and language therapy)
Band 4	Speech and language therapy assistant/associate practitioner
Band 5	Speech and language therapist
Band 6	Speech and language therapist specialist
Band 7	Speech and language therapist advanced
Band 8a	Speech and language therapist principal
Bands 8a-c	Speech and language therapist consultant

#### Chiropodist/Podiatrist

Band 2	Clinical support worker (Podiatry)
Band 3	Clinical support worker higher level (Podiatry)
Band 4	Podiatry technician
Band 5	Podiatrist
Band 6	Podiatrist specialist
Band 7	Podiatrist advanced/team manager
Band 8a	Podiatrist principal
Bands 8a-b	Podiatric registrar
Bands 8c-d	Podiatric consultant
Band 9	Podiatric consultant



**Psychologist**

Band 4	Clinical psychology assistant practitioner
Band 5	Clinical psychology assistant practitioner higher level, Counsellor entry level
Band 6	Clinical psychology trainee, Counsellor
Band 7	Clinical psychologist, Counsellor specialist
Bands 8a-b	Clinical psychologist principal
Bands 8a-c	Counsellor professional manager/consultant
Bands 8c-d	Clinical psychologist consultant
Bands 8d & 9	Professional lead/Head of psychology services

**Pharmacist**

Band 2	Pharmacy support worker
Band 3	Pharmacy support worker higher level
Band 4	Pharmacy technician
Band 5	Pharmacy technician higher level/Pharmacist entry level
Band 6	Pharmacist
Band 7	Pharmacist specialist
Bands 8a-b	Pharmacist advanced
Bands 8b-c	Pharmacist team manager
Bands 8b-d	Pharmacist consultant
Bands 8c-Band 9	Professional manager pharmaceutical services

**Nurse**

Band 2	Clinical support worker nursing (hospital)
Band 3	Clinical support worker higher level nursing (hospital/mental health)
Band 4	Nurse associate practitioner acute, Nursery nurse (neonatal)
Band 5	Nurse, Nurse (mental health)
Band 6	Nurse specialist/team leader
Band 7	Nurse advanced/team manager
Band 8a	Modern matron
Bands 8a-c	Nurse consultant
Bands 8c-8d & 9	Nurse/Midwife consultant higher level

## 19. Training costs of health and social care professionals

Tables 19.1 and 19.2 provide a breakdown of the training costs incurred using standard estimation approaches.<sup>1</sup> The investment costs of education should be included when evaluating the cost-effectiveness of different approaches to using health service staff so that all the costs implicit in changing the professional mix are considered. For the most part, these investment costs are borne by the wider NHS and individuals undertaking the training, rather than trusts. The tables show details of the total investment incurred during the working life of the professional **after allowing for the distribution of the costs over time**. The expected working life of the professional based on previous research carried out at PSSRU has been noted in brackets in 19.1 after the title of the professional group.

The components of the cost of training health service professionals are for pre-registration and post-graduate training. They include the costs of tuition; infrastructure costs (such as libraries); costs or benefits from clinical placement activities; and lost production costs during the period of training where staff are away from their posts. Although further training is available to all professionals to enable them to progress to higher grades, the cost of post-graduate training is only known for doctors. Each year after registration a substantial proportion of the salary (100% or 60% depending on the level of seniority) can be attributed to the investment costs of training for subsequent stages in the doctor's career. This cost, together with additional expenditure representing infrastructure costs for maintaining post-graduate medical education, is taken as the total training cost for that year. During training Health Education England pays 50 per cent of the professional's salary plus oncosts to the trust.

### 19.1 Training costs of health and social care professionals, excluding doctors

<i>Professional (working life in years)</i>	Pre-registration			Totals	
	Tuition	Living expenses/lost production costs <sup>2</sup>	Clinical placement	Total investment	Expected annual cost discounted at 3.5%
<b>Scientific and professional</b>					
Physiotherapist (24.3)	£25,454	£38,966	£4,741	£69,161	£5,660
Occupational therapist (23.5)	£25,454	£38,966	£4,741	£69,161	£5,669
Speech and language therapist (24.7)	£27,995	£38,966	£4,741	£71,663	£6,022
Dietitian (23.3)	£25,454	£38,966	£4,741	£69,161	£5,881
Radiographer (24.3)	£30,499	£38,966	£4,741	£74,206	£6,048
Hospital pharmacist (27.6)	£36,549	£50,029	£36,947	£123,526	£9,734
Community pharmacist (27.6)	£36,549	£50,029	£28,274	£113,930	£8,978
<b>Nurses (15.7)</b>	£24,111	£51,955	£4,741	£80,807	£10,619
<b>Social workers (8) (degree)</b>	£24,430	£6,829	£38,966	£70,225	£26,130

<sup>1</sup> Netten, A., Knight, J., Dennett, J., Cooley, R. & Slight, A. (1998) *Development of a ready reckoner for staff costs in the NHS, Vols 1 & 2*, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>2</sup> See [http://www.nhsbsa.nhs.uk/Students/Documents/Students/Student\\_Services\\_Annual\\_Report\\_2013-14\\_\(V1\)\\_08.2014.pdf](http://www.nhsbsa.nhs.uk/Students/Documents/Students/Student_Services_Annual_Report_2013-14_(V1)_08.2014.pdf) for information on student bursaries.

## 19.2 Training costs of doctors (after discounting)<sup>1</sup>

<i>Doctors (working life in years)</i>	Tuition	Living expenses/lost production costs	Clinical placement	Placement fee <sup>2,3</sup> plus Market Forces Factor (a)	Salary (inc o/heads) and post graduate centre costs	Total investment	Expected annual cost discounted at 3.5%
Doctors (26)							
Pre-registration training: years 1-5	£43,634	£61,740	£135,496	NA		£240,870	£19,551
Post-graduate(26)							
Foundation officer 1 (25) (included in pre-reg training)	£43,634	£61,740	£135,496	£10,754	£44,428	£296,051	£24,030
Foundation officer 2 (24)	£43,634	£61,740	£135,496	£20,780	£50,310	£311,960	£27,127
Registrar group (20)	£43,634	£61,740	£135,496	£40,155	£99,826	£380,850	£38,423
Associate specialist (18)	£43,634	£61,740	£135,496	£48,496	£135,402	£424,768	£45,381
GP (16)	£43,634	£61,740	£135,496	NA	£144,653	£385,523	£41,188
Consultants (16)	£43,634	£61,740	£135,496	£65,598	£202,351	£508,819	£58,351

<sup>1</sup> The method of calculating post graduate costs has been revised this year following the introduction of training placement tariffs.

<sup>2</sup> Gov.uk (2014) Healthcare education and training placement tariffs, <https://www.gov.uk/government/publications/healthcare-education-and-training-placement-tariffs> [accessed October, 2015].

<sup>3</sup> Placement fees for post-graduate doctors in training before discounting, but including the Market Forces Factor are: Foundation Officer 1 £12,772; Foundation Officer 2 £25,544; Registrar £51,088; Associate specialist £63,860; Consultants £89,404. Placement fees are not provided for GP placements.

## 20. Care home fees

No information was available on fees for local authority homes. See previous volume for 2013 data.

### The minimum and maximum fee for 2013/14 for single and shared rooms for private and voluntary nursing and residential care homes in the UK

	Nursing homes				Residential care homes			
	Min	Max	Min	Max	Min	Max	Min	Max
	Single room		Shared room		Single room		Shared room	
Adults under 65 years	£888	£775	£675		£782	£700	£400	£600
Dementia	£647	£879	£593	£800	£525	£648	£484	£570
Mental health	£831	£1,389	£648	£1,157	£808	£808	£451	£577
Mental health (Brain Injury Rehabilitation)	£1,096	£1,718	£708		£1,354	£1,367		
Mental health (Learning disability)	£1,028	£1,756	£727	£1,544	£856	£1,489	£549	£758
Older people (65+)	£652	£838	£603	£706	£509	£636	£458	£540
Physical disability	£740	£1,326	£594	1,075	£705	£1,030	£483	£626
Substance misuse problems	£1,212	£1,837			£676	£762	£668	£642
Average cost of all private/voluntary sector care home fees	£666	£887	£604	£743	£555	£727	£465	£553

## 21. Land values

The table below provides information on regional and national land values which were provided by the Valuation Office Agency (VOA) for use in the Unit Costs publications. The valuations were provided in June 2013 and have been updated using the England and Wales Residential Development Land Index to provide estimated valuations for 2014/15. The figures provided are appropriate to a single, hypothetical site and should not be taken as appropriate for all sites in the locality.

The sites chosen for this work are considered to be 'representative' of the locality in that area but they are not always 'average' sites. When choosing the sites, the following assumptions were adopted:

- site of gross area approximately 1 hectare
- development density in line with current development preferences
- all services and good road frontage
- no major contamination or remediation issues
- nil grant funding
- no major allowances to be made for s106/278 potential costs
- no allowance for Community Infrastructure Levy costs (even where these are already in place)
- schemes to be fully compliant with affordable housing requirements

For the vast majority of the sites, data were obtained on affordable housing percentages required (although often the precise tenure mix is not stated) and these are reflected in the valuations provided.

<b>Residential land</b>		
<b>Local authority</b>	<b>Town</b>	<b>Weighted value per hectare</b>
<b>South East</b>		
Aylesbury Vale District Council	Aylesbury	£2,244,769
<b>East Midlands</b>		
Northampton Borough Council	Northampton	£1,085,281
<b>East</b>		
Norwich City Council	Norwich	£956,449
<b>North East</b>		
Middlesbrough Borough Council	Middlesbrough	£1,303,780
<b>North West</b>		
Bolton Metropolitan Borough Council	Bolton	£1,419,213
<b>South West</b>		
Cornwall Council	Truro	£1,419,213
<b>West Midlands</b>		
Worcester City Council	Worcester	£1,273,891
<b>Yorkshire and the Humber</b>		
Sheffield City Council	Sheffield	£1,256,370
<b>Outer London</b>		
London Borough of Hillingdon	Hayes	£3,795,185
<b>England</b>		
	Excl. Outer London	£1,311,510
	Incl. Outer London	£1,587,474

## 22. Time use of community care professionals

The following table provides information collected in an online survey carried out by PSSRU in 2014/15 (see Preface for more details). The survey was distributed non-selectively via various channels. **Given the small sample from which the ratios of direct to indirect time have been calculated, the ratios have not been used in the unit cost calculations**, but have been tabulated here so that readers can use them if they wish.

Community professionals	Sample size	Average number of hours worked (including unpaid overtime)	% of hours worked spent with patients	% of hours worked spent on other patient-related tasks (a)	% of hours worked spent on non-direct activities (b)	Other time (definition not provided but includes travel)	Average mileage per professional per week	Ratios of direct to indirect time on: client-related work
<b>Nurses</b>								
(bands 5 and 6)	<b>44</b>	39	54%	29%	13%	5%	102	1:0.20
(bands 7 and 8)	<b>31</b>	40	42%	33%	19%	6%	71	1:0.33
<b>Physiotherapists</b>	<b>11</b>	41	35%	38%	22%	5%	132	1:0.37
(bands 5-8)								
<b>Occupational therapists</b>	<b>6</b>	40	51%	36%	11%	2%	42	1:0.15
(bands 4-7)								
<b>Speech and language therapists</b>	<b>7</b>	40	38%	50%	9%	3%	84	1:0.14
(bands 5-6)								

a) Includes time researching and gathering information before each patient/client contact, writing-up case notes after each patient/client contact and liaising with or meeting with other professionals in relation to patients/clients

b) Non-direct activities include training (either others or self), supervision and general administration.

## 23. Glossary

**Annuity** Converting a capital investment (such as the cost of a building) into the annual equivalent cost for the period over which the investment is expected to last.

**Child and adolescent mental health services (CAMHS)** is a name for NHS-provided services for children with mental health needs in the UK. In the UK they are often organised around a tier system. Tier 3 services, for example, are typically multidisciplinary in nature and the staff come from a range of professional backgrounds.

**Capital overheads** The cost of buildings, fixtures and fittings employed in the production of a service.

**Care package costs** Total cost of all services received by a patient.

**Cost function analysis** Statistical analysis using a multivariate technique 'designed to simultaneously tease out the many influences on cost'.

**Department for Work and Pensions (DWP)** is the largest government department in the United Kingdom, created on 8 June 2001, from the merger of the employment part of the Department for Education and Employment and the Department of Social Security and headed by the Secretary of State for Work and Pensions, a Cabinet position.

**Discounting** Adjusting costs using the time preference rate spread over a period of time to reflect their value at a base year.

**Durables** Items such as furniture and fittings.

**Long-term** The period during which fixed costs such as capital can be varied.

**Marginal cost** The cost of an additional unit of a service.

**Oncosts** Essential associated costs, salary costs, for example, include the employer's national insurance contributions.

**Opportunity cost** The value of the alternative use of the assets tied up in the production of the service.

### Overheads

#### NHS overheads

Management and other non-care staff overheads include administration and estates staff.

Non-staff overheads include costs to the provider for office, travel/transport and telephone, education and training, supplies and services (clinical and general), as well as utilities such as water, gas and electricity.

#### Local authority overheads

Direct overheads include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.

Indirect overheads include general management and support services, such as finance and human resource departments.

**Short-term** The period during which durable assets cannot be immediately added to or removed from the existing stock of resources.

**SSMSS** Social services management and support services: overhead costs incurred by a local authority, as defined by CIPFA guidelines. These include indirect overheads such as finance and personnel functions.

**Time preference rate** The rate at which future costs or benefits are valued in comparison to current or base year's costs or benefits.

### Time use and unit costs

**Per average stay** Cost per person for the average duration of a typical stay in that residential facility or hospital.

**Per client/patient hour** Cost of providing the service for one hour of client/patient attendance. The costs of time not spent with clients are allocated to the time spent with clients.

**Per clinic visit** Cost of one client attending a clinic. This allows for overall time spent on non-clinical activity to be allocated to the total time spent with clients in any setting.

**Per consultation** Cost per attendance in a clinic or surgery. This also allows for overall time spent on non-clinical activity to be allocated to the total time spent with clients.

**Fee per resident week** For example in care homes, the fee charged is assumed to include care costs, accommodation and hotel costs, ancillary costs and operator's profit.

**Per example episode** Cost of a typical episode of care, comprising several hours of a professional's time.

**Per home visit** Cost of one visit to a client/patient at home. This includes the cost of time spent travelling for the visit, the proportion of time spent on non-clinical activity which is attributable to visiting patients in their own home, and the time spent on visiting patients at home.

**Per hour of home visiting** Cost of one hour spent by a professional undertaking visits to clients/patients at home. This includes the cost of time spent travelling. It also allows for overall time spent on non-clinical/patient activity to be allocated to the total time spent with clients/patients in any setting.

**Per hour in clinic** Cost of one hour spent by a professional in a clinic. Time spent on non-clinical activity is allocated to the total time spent with clients/patients in any setting.

**Per hour of direct contact/per hour of face-to-face contact** Hourly cost of time spent with, or in direct contact with, the client/patient. Some studies include travel time in this cost. When this is the case, it has been noted in the schema.

**Per hour on duty** Hourly cost of time spent by a hospital doctor when on duty. This includes time spent on call when not actually working.

**Per hour worked** Hourly cost of time spent by a hospital doctor when working. This may be during the normal working day or during a period of on-call duty.

**Per inpatient day** Cost per person of one day and overnight in hospital.

**Per patient day** Cost per person of receiving a service for one day and overnight.

**Per procedure** Cost of a procedure undertaken in a clinic or surgery. This includes the cost of time spent on non-clinical activity and the total time spent with clients.

**Per resident week** Cost per person per week spent in a residential facility.

**Per client attendance** Cost per person per attendance.

**Per client session** Cost for one person attending one session. The length of a session will be specified in the schema and may vary between services.

**Per short-term resident week** Total weekly cost of supporting a temporary resident of a residential facility.

**Price base** The year to which cost information refers.

**Ratio of direct to indirect time spent on client/patient-related work/direct outputs/face-to-face contact/clinic**

**contacts/home visits** The relationship between the time spent on direct activities (such as face-to-face contact) and time spent on other activities. For example, if the ratio of face-to-face contact to other activities is 1:1.5, each hour spent with a client requires 2.5 paid hours.



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## 26. List of useful websites

Audit Commission: <http://www.audit-commission.gov.uk/Pages/default.aspx>

Building Cost Information Service: <http://www.bcis.co.uk/site/index.aspx>

BCIS is the UK's leading provider of cost and price information for construction and property occupancy.

Care Quality Commission: <http://www.cqc.org.uk/>

The Care Quality Commission is the new health and social care regulator for England and replaces the Healthcare Commission, Commission for Social Care Inspection and the Mental Health Act Commission which all ceased to exist on 31 March 2009.

Centre for Child and Family Research: <http://www.lboro.ac.uk/research/ccfr/>

Centre for Health Related Studies:

[http://www.bangor.ac.uk/research/rae\\_egs/groups\\_by\\_school.php.en?SchoolID=0770&SchName=School%20of%20Health%20care%20Sciences/](http://www.bangor.ac.uk/research/rae_egs/groups_by_school.php.en?SchoolID=0770&SchName=School%20of%20Health%20care%20Sciences/)

Chartered Institute of Public Finance and Accountancy (CIPFA): <http://www.cipfa.org/>

The CIPFA Statistical Information Service (SIS) was established as a partnership between individual authorities and CIPFA. SIS has been undertaking detailed annual surveys of local authority operations for more than a century, and the 'CIPFA Statistics' still remain the only impartial and comprehensive account of the extent and achievements of each individual council. Surveys are conducted in the following areas: education, environmental services, environmental health, housing, leisure, planning, public protection, social services, transport.

Department for Education: <http://www.education.gov.uk/>

Department of Health: <https://www.gov.uk/government/organisations/department-of-health>

Department for Work and Pensions: <http://www.dwp.gov.uk/>

Family Resource Survey: <http://research.dwp.gov.uk/asd/frs/>

Federation of Ophthalmic & Dispensing Opticians: <http://www.fodo.com/>

Health & Social Care Information Centre (HSCIC): <http://www.ic.nhs.uk/>

The Health & Social Care Information Centre (IC) is a Special Health Authority set up on 1 April 2005 to take over most DH statistical collection and dissemination and some functions of the former NHS Information Authority. This includes information on Personal Social Services Expenditure.

Hospital Episode Statistics (HES): <http://www.hesonline.nhs.uk/>

This is the national statistical data warehouse for England of the care provided by NHS hospitals and for NHS hospital patients treated elsewhere. HES is the data source for a wide range of health-care analysis for the NHS, Government and many other organisations and individuals. The HES database is a record-level database of hospital admissions and is currently populated by taking an annual snapshot of a sub-set of the data submitted by NHS Trusts to the NHS-Wide Clearing Service (NWCS). Quarterly information is also collected. A separate database table is held for each financial year, containing approximately 11 million admitted patient records from all NHS Trusts in England.

Joseph Rowntree Foundation: <http://www.jrf.org.uk/>

This website provides information on housing and care.

Laing & Buisson: <http://www.laingbuisson.co.uk/>



Laing & Buisson, an independent company, provides authoritative data, statistics, analysis and market intelligence on the UK health.

Livability: <http://www.livability.org.uk/>

National Council for Palliative Care: <http://www.ncpc.org.uk/>

National End of Life Care Intelligence network: <http://www.endoflifecare-intelligence.org.uk/home/>

National Institute for Health and Clinical Excellence: <http://www.nice.org.uk/>

National Prescribing Centre: <http://www.npc.co.uk/>

National Institute for Health and Care Excellence: <http://www.nice.org.uk/>

Personal Social Services Expenditure Data (PSS EX1 data): <http://www.ic.nhs.uk/statistics-and-data-collections/>

PSSRU at LSE, London School of Economics and Political Science:  
<http://www2.lse.ac.uk/LSEHealthAndSocialCare/Home.aspx>

Pub Med: <http://www.pubmedcentral.nih.gov/>

Reference Costs: <https://www.gov.uk/government/publications/nhs-reference-costs-2012-to-2013>

This website gives details on how and on what NHS expenditure was used. The Reference Costs/Reference Costs Index publication is the richest source of financial data on the NHS ever produced. As in previous years, its main purpose is to provide a basis for comparison within (and outside) the NHS between organisations, and down to the level of individual treatments.

Social Care Institute for Excellence: <http://www.scie.org.uk/>

Social Care Online: <http://www.scie-socialcareonline.org.uk/>

Social Policy Research Unit, University of York: <http://www.york.ac.uk/inst/spru/>

Social Research Unit at Dartington: <http://investinginchildren.eu/contact>

Investing in Children provides free and independent advice on the costs and benefits of competing investment options in children's services.

YoungMinds: <http://www.youngminds.org.uk/>

YoungMinds is a national charity committed to improving the mental health of all children and young people.

## 27. List of items from previous volumes

### Editorials and articles

#### 2006

Guest editorial: Conducting and interpreting multi-national economic evaluations: the measurement of costs  
The costs of an intensive home visiting programme for vulnerable families  
Direct payments rates in England  
Training costs of person centred planning  
The baker's dozen: unit costs and funding

#### 2007

The costs of telecare: from pilots to mainstream implementation  
The Health BASKET Project: documenting the benefit basket and evaluating service costs in Europe  
Recording professional activities to aid economic evaluations of health and social care services

#### 2008

Guest editorial: National Schedule of Reference Costs data: community care services  
The challenges of estimating the unit cost of group-based therapies  
Costs and users of Individual Budgets

#### 2009

Guest editorial: Economics and Cochrane and Campbell methods: the role of unit costs  
Estimating unit costs for Direct Payments Support Organisations  
The National Dementia Strategy: potential costs and impacts  
SCIE's work on economics and the importance of informal care

#### 2010

The costs of short-break provision  
The impact of the POPP programme on changes in individual service use  
The Screen and Treat programme: a response to the London bombings  
Expected lifetime costs of social care for people aged 65 and over in England

#### 2011

The costs of extra care housing  
Shared Lives – model for care and support  
Calculating the cost and capacity implications for local authorities implementing the Laming (2009) recommendations

#### 2012

Guest editorial: Appropriate perspectives for health care decisions  
Using time diaries to contribute to economic evaluation of criminal justice interventions  
Costing multi-site, group-based CBT workshops  
A review of approaches to measure and monetarily value informal care

#### 2013

Guest editorial: Widening the scope of unit costs to include environmental costs  
Cognitive behaviour therapy: a comparison of costs  
Residential child care: costs and other information requirements  
The costs of telecare and telehealth

**2014**

Guest editorial: Big data: increasing productivity while reducing costs in health and social care  
Cost of integrated care  
Shared Lives – improving understanding of the costs of family-based support  
RYCT & CSP intervention costs

**Tables****2006**

Adolescent support worker  
Educational social work team member  
Behavioural support service team member  
Learning support service team member

**2007**

All children's service withdrawn, but reinstated in 2010

**2008**

Paramedic and emergency ambulance services

**2009**

Cost of maintaining a drugs misuser on a methadone treatment programme  
Unpaid care

**2010**

Voluntary residential care for older people  
Nursing-Led Inpatient Unit (NLIU) for intermediate care  
Local authority sheltered housing for older people  
Housing association sheltered housing for older people  
Local authority very sheltered housing for older people  
Housing association very sheltered housing for older people  
Local authority residential care (staffed hostel) for people with mental health problems  
Local authority residential care (group home) for people with mental health problems  
Voluntary sector residential care (staffed hostel) for people with mental health problems  
Private sector residential care (staffed hostel) for people with mental health problems  
Acute NHS hospital services for people with mental health problems  
NHS long-stay hospital services for people with mental health problems  
Voluntary/non-profit organisations providing day care for people with mental health problems  
Sheltered work schemes for people with mental health problems  
Village communities for people with learning disabilities  
The costs of community-based care of technology-dependent children

**2011**

Approved social worker

**2012**

High-dependency care home for younger adults with physical and sensory impairments  
Residential home for younger adults with physical and sensory impairments  
Special needs flats for younger adults with physical and sensory impairments  
Rehabilitation day centre for younger adults with brain injury  
Comparative costs of providing sexually abused children with individual and group psychotherapy

**2013**

Rapid response service

**2014**

Community rehabilitation unit

Intermediate care based in residential homes

Counselling services in primary medical care

Group homes for people with learning disabilities

Fully-staffed living settings (people with learning disabilities)

Semi-independent living settings (people with learning disabilities)

Hospital-based rehabilitation care scheme

Expert patients programme

Community care packages for older people

Nursing homes for people with dementia

Private and other independent sector residential homes for people with dementia

