

PSSRU

Unit Costs of  
Health & Social  
Care 2016

Compiled by Lesley Curtis  
and Amanda Burns

# **Unit Costs of Health and Social Care 2016**

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## Preface

### Lesley Curtis

To meet the challenges laid out in the *Five Year Forward View (5YFV)*, NHS England has been working with Monitor (now part of NHS Improvement) to develop payment systems which can measure and record activity, costs and quality data at the level of individual patients (Monitor, 2014). With accurate information on where money is being targeted, efficiencies can be more easily identified when changes to services or care plans are made, thereby providing the basis for a 'best practice tariff', a national price that is designed to 'incentivise quality and cost-effective care' (Monitor, 2016a, p.19). Some changes to NHS information systems are already in place, and there are changes to the social care systems too. I would like to take the opportunity to discuss how these changes are reflected in this year's *Unit Costs of Health and Social Care* volume.

As well as taking information from published cost studies, we draw information from two principal data collections: first, NHS reference costs which are one of the building blocks for setting prices for NHS-funded services in England; and second, the PSS EX1 returns on social care expenditure. This year, the PSS EX1 returns have been replaced with the Adult Social Care-Financial Return (ASC-FR). Improvements made to these information systems are reflected in our unit cost calculations, thus keeping our estimates current and in line with policy developments. Sometimes changes made to these databases feed seamlessly into our volumes, but this year more substantial modifications may catch your eye.

### NHS data collection

A recurrent theme of the NHS England Business Plan is the need to improve patient outcomes (NHS England, 2015). Of course, outcomes can be considered without reference to the cost of services, but, by putting a monetary value on them, it would be possible to see whether money is being spent wisely. Although NHS information systems are currently unable to reflect this directly, in the last few years the majority of NHS organisations have improved their information systems to enable costs to be linked more easily with outcomes (NHS Improvement, 2016, p.16).

With Patient Level Costing systems (PLICS) in place, costs incurred by patients in diagnosis and treatment can be linked more meaningfully to patient-level clinical data. The approach taken in PLICS is closer to a bottom-up approach, rather than the traditional top-down approach and can provide a better understanding of cost drivers. The approach informs new methods of pricing NHS services (Monitor, 2016b, p.44). Patients who have clinically similar treatments which use common levels of health care resource are then aggregated for presentation in NHS reference costs by Health Care Resource Groups (HRG). Similarly, mental health care clusters, mandated for use from April 2012 for working age adults and older people, were introduced to facilitate a better understanding of the relationship between needs, price and outcomes (Department of Health, 2013a, p.10). By allocating patients with similar levels of needs to the same cluster using the Mental Health Clustering booklet (Department of Health, 2012), the most resource efficient packages of care can be developed. Both HRGs and clusters enable individual actions of medical professionals to be linked with patient outcomes, thereby providing a mechanism for rewarding positive outcomes (Blunt & Bardsley, 2012, p.31; Monitor, 2014, p.6).

For this volume we have provided readers with selected reference costs for mental health services (2.1), children's services (6.1) and adult services (7.1). These are derived from the full file <https://www.gov.uk/government/collections/nhs-reference-costs>. We provide examples of both approaches to costing: the traditional top-down by service and bottom-up by HRG/clusters of patient-level data. As usual, most of our estimates are average costs weighted appropriately to reflect use of each service or 'currency'.

### Social care data collection

The new ASC-FR also aims to link costs to user needs. The information collected in the new Short and Long Term Return (SALT) is designed to track customer journeys through the social care system and opens up the possibility of linking the data to patient outcomes, as reported in the ASCOF Handbook of Definitions (Department of Health, 2013b). This change is intended to improve the information available locally and nationally on the needs, health condition or cognitive disability of individuals. Thus, instead of reporting by primary client groups, as was the case with the PSS EX1, the SALT data allows the new national ASC-FR collection to provide costs that are attributed to 'primary support reasons' (PSRs). One PSR, determined through assessment, is captured for each client and their most recent PSR is used for reporting. This year, we

have modified some of our tables to reflect these changes (listed below). This means that for these services, direct comparisons should not be made between the unit costs in the 2015 and 2016 volumes.

- 1) Local authority and private sector care homes 'for people with mental health problems' have become local authority and private sector homes 'for people requiring mental health support'; similarly, residential care for people 'with learning disabilities' or 'with a physical disability' has become residential care 'for people requiring learning disability support' or 'physical support'. We have also added separately the costs for those aged 65 and over.
- 2) The ASC-FR collection does not provide unit costs for residential care for older people. We have calculated this by aggregating expenditure for all PSRs for people aged 65+ and dividing the total by the total number of weeks.
- 3) Expenditure on day care services is still included in the ASC-FR collection but is combined with expenditure on supported employment and meals. This combined figure and the absence of activity data (probably reflecting the decline in provision; Ismail et al., 2014) makes it impossible to estimate unit costs from the new ASC-FR data. For this year, estimates for the day care schema (1.4, 2.4, 2.5, 4.1 & 5.3) have been drawn from the 'old' PSS EX1 collection for 2013/14 and updated to current prices.
- 4) The method of calculating home care unit costs has also changed. This year, we have drawn average standard hourly rates directly from the ASC-FR, rather than totalling costs and dividing these by the number of hours delivered.

## Other work

### Articles

#### Guest Editorial: Agency nurses

The announcement, in November 2015, that spending on agency staff increased by 31 per cent between 2013/14 and 2014/15 led Monitor and the NHS Trust Development Authority (TDA) to cap hourly rates paid for all agency staff. Katja Grasic provides this year's guest editorial outlining the full costs of providing agency nurses. Other work on agency nursing can be found in two PSSRU's blogs: <http://www.pssru.ac.uk/blogs/blog/the-clampdown-on-nhs-agency-staff-spending-addressing-symptoms-instead-of-causes/> and <http://www.pssru.ac.uk/blogs/blog/the-nhs-agency-staff-spending-cap-cutting-the-branch-on-which-it-sits/>.

Our first article discusses the importance of investing in prevention initiatives as emphasised throughout the 5YFV (NHS England, 2015). In this article, Raphael Wittenberg and colleagues provide the costs of implementing a Well London programme.

Over the 25 years that the *Unit Costs of Health and Social Care* has been produced we have often been asked whether there was a programme that allows users to more easily develop unit costs to suit their local conditions. Perhaps based on the salary actually paid to a member of staff? Or more appropriately reflecting the local 'overheads' accruing for back-office functions? In this short article by Eva-Maria Bonin and Jennifer Beecham, we introduce a downloadable tool which allows users to do just that. It also includes a facility for estimating the costs of multi-person interventions. The model was developed as part of the *Preventonomics* research, funded to support the Big Lottery Fund's *Fulfilling Lives: A Better Start* (ABS) initiative.

## New services

### Geriatric Care Management Model (GRACE)

Despite recent policy focus on integrated health and social care services, it has been reported that some individuals are still being treated as a collection of conditions or symptoms, rather than as a whole person (Department of Health, 2013a, p.9). This led the Department of Health to ask NICE to develop an evidence-based guideline to help address the issue. NICE evidence found information to support use of the geriatric care management model (GRACE) (<https://www.nice.org.uk/guidance/ng22/evidence/appendix-c2-economic-plan-552742673>). This intervention integrates health and social care professional input into the assessment, care planning and service delivery process to meet the health

and social care needs of community-dwelling older people aged 65 and over. This model has been costed at current prices, drawing on findings from Counsell et al. (2009) (schema 1.8).

## Adoption

As part of the Department for Education's Innovation programme (Department for Education, 2014), the Centre for Child and Family Research (CCFR) was commissioned by Coram Family to extend the Cost Calculator for Children's Services to include adoption services in England. Using these data, we have added information to schema 6.8 on the costs of the sub-processes that are associated with adoption.

## Diabetes out-patient appointment

A study carried out by Paul Grant (2015) explores the difference in the unit costs of a diabetes out-patient appointment when patient-level costing (PLICS) or service level reporting (SLR) is used. If you want to understand the benefits of using PLICS and how this links into payment by results (PBR) and tariffs, this article is a must. Grant concludes that using the activity-based costing that is part of PLICS demonstrates the true cost of the service and is a fairer reflection of the costs generated by each patient.

## Intervention for excessive alcohol consumption among people attending sexual health clinics

Although a detailed costing is not available for this service, it is worth mentioning that a paper by Crawford & colleagues (2014) provides a cost for brief advice and input provided by an Alcohol Health Worker.

## General practitioner

Thanks to Hobbs and colleagues' (2016) retrospective analysis of GP and nurse consultations through the Clinical Practice Research Datalink, we have been able to update our information on the length of an average GP consultation. The authors provide duration of contact figures for surgery, telephone and home consultations with GPs and nurses at the mean and by age group. These estimates have now replaced those drawn from the 2006/07 UK general practice workload survey and have been used in schema 10.3. Using data from the Hobbs et al. (2016) study, we have also been able to calculate an average annual cost per patient. Care should be taken when comparing these unit costs to data shown in earlier volumes.

## Routine information

### NHS overheads

Last year we undertook some work to see whether it would be appropriate to use the *Foundation Trusts: Consolidated Accounts* for calculating expenditure on overheads for all NHS professionals. On comparing these consolidated accounts with those of community-based services, we found that the higher spend on drugs in hospitals meant that this would not be appropriate. We therefore used an overhead percentage calculated from the *NHS Foundation Trusts: Consolidated Accounts* for hospital-based services, and collated data from the financial accounts of individual community trusts to estimate overheads of NHS community-based services.

This year we have continued with this work to improve NHS overheads drawing on the *Foundation Trust Consolidated* pivot tables provided by Monitor to separate the accounts of the acute trusts from other trusts. We have found that staff overheads for acute trusts were 24.2 per cent of total care staff costs and non-staff overheads were 43.1 per cent of total care staff. This means that this year overheads for hospital-based staff have reduced from 69.8 per cent to 67.3 per cent. The figures for community-based professionals remain the same as those reported in last year's volume.

### Discount rate

PSSRU's standard approach to costing is grounded in economic theory. We provide a close approximation of the long-run marginal opportunity cost of services: the cost of supporting one extra client, or providing one additional unit of output whilst recognising the financial implications of necessary expansion to the service. To include the cost implications of buildings and other large, one-off investments alongside revenue costs, we assume that the resources are invested over the lifespan of the building/equipment, and that these generate a stream of income. The rate of interest used should be that which is applicable in the market in which the resources would be invested; in public services the Treasury currently estimates this to be 3.5 per cent (HM Treasury, 2015).

Also referred to as the 'discount rate', this flat rate has been used in previous volumes of the *Unit Costs of Health and Social Care* to convert all investments regardless of their expected life span to current values. This year, in keeping with Treasury guidelines on long-term discount rates (HM Treasury, 2015, p.98), a declining discount rate has been used beyond 30 years (HM Treasury, 2015, table 6.1). To provide an idea of the effect this has had on estimates, this change has meant that capital costs (building and land) for a clinical psychologist have fallen from £4,861 to £4,583. However, as building and land costs form only a small proportion of the annual total cost of providing a clinical psychologist, the final impact on the unit cost per working hour is negligible (<£1.00).

### **Local authority overheads**

This year, alongside the improvements we have made to NHS overheads, we have discussed with the Chartered Institute of Public Finance and Accountancy (CIPFA) how their social care benchmarking activities, carried out in 2014/15, might assist us in improving the information we hold on local authority overheads. This work will continue next year when we hope to be able to reflect our findings in the appropriate schema for local authority services.

### **Environmental costs**

Following the inclusion of environmental costs alongside the unit costs for inpatient and outpatient days, and for GP and dentist appointments in last year's volume, this year we have extended these costs to mental health hospital services (see 2.1).

### **Personal Social Services Inflator**

To uprate values for adult social care for which an actual cost has not been found, we use the PSS Pay and Prices inflator. To calculate this inflator, the Department of Health draw on the Annual Survey of Hours and Earnings (ASHE) to uprate pay costs, Her Majesty's Treasury (HMT) GDP inflator to uprate prices, and the Public Sector non-housing Tender Price Index to uprate capital costs. In previous years, the annual percentage increases for these three components have been combined together using a weighting derived from the PSS EX1 expenditure return. This year, the inflator has been recalculated using data from the ASC-FR return, which has replaced the PSS EX1 return as discussed above.

Alongside this work, we are also working with the Department for Education to create a new inflator for children's social care services. This will be finalised next year and incorporated into the relevant schema in next year's edition.

### **Consultation with readers**

The Department of Health has consulted analytical colleagues on how well these volumes meet their needs, whether they could make suggestions to enhance our calculations or their presentation, and whether there were other unit costs likely to be required to support new policy initiatives. This consultation has included users within the Department of Health and its arm's length bodies, and will guide our work for the duration of the current contract.

In this volume, we have been able to respond to some of the smaller points put forward. For example, residential care costs are now expressed as a cost-per-day as well as a cost-per-week, and examples of roles by band are at the beginning of many chapters. Last year we concentrated the information for some health professionals onto one page and so could provide unit costs for more grades of that professional whilst keeping our methods visible. Given the success of this format, this year we have used the same format for nurses and hospital-based scientific and professional staff (see chapters 10 and 13). As last year, these tables will be available on the website in Excel.

Cost estimation work is underway in several new areas, and is likely to continue over the next two or three years. Some of the topics listed below have been suggested as part of the Department of Health consultation. As usual, we encourage readers to let us know about any studies which can support this research or supplement our work in other ways. We would also welcome contact from provider organisations who are willing to work with us on these unit costs calculations.

- Sexual health services
- Abortion services
- Video consultations
- Services for people with physical disabilities
- Services for people with learning disabilities

## Acknowledgements

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### Blogs published this year:

Unit costs across Europe (Jennifer Beecham) : <http://www.pssru.ac.uk/blogs/blog/category/unit-costs/>

Finally, the CSRI website has arrived! (Jennifer Beecham): <http://www.pssru.ac.uk/blogs/blog/finally-the-csri-website-has-arrived/>

Unit Costs of Health and Social Care 2015 – reflections and Christmas time (Lesley Curtis)  
<http://www.pssru.ac.uk/blogs/blog/category/unit-costs/>

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## Agency staff in the NHS

Katja Grasic

### Introduction

The quality of care and safety of patients in NHS hospitals depend on having an adequate number of skilled healthcare professionals. Growing shortages of qualified clinical and non-clinical staff have led to increasing reliance on agency staff to resolve staffing shortfalls and ensure safe staffing numbers. This has engendered a rapid growth in agency expenditure, and contributed to deficits in hospital budgets (King's Fund, 2015a).

To reverse the ongoing trend, Monitor and the NHS Trust Development Authority (now combined to form NHS Improvement) introduced a cap on the hourly rates paid to the agencies. Introduced in November 2015, a cap was initially set for nurses; since 1 April 2016 it has applied to all categories of staff (Monitor, 2015a). The main objective of the policy was to bring payments made to the agency staff closer to the salaries of NHS payroll staff and so reduce NHS expenditure.

As seen in the figure below, agency expenditure has rapidly increased in recent years, both in absolute terms and as a proportion of total staff expenditure. It totalled around £3.3bn in 2014/15 before the cap was in place, and £3.6bn in 2015/16, when the cap was partially in place (NHS Improvement, 2016).

The estimates by Monitor show that of the £3.3bn spent in 2014/15, around £0.7 billion (21%) was a premium paid for agency staff over the equivalent pay and other costs (NI contribution, pension) for staff on the NHS payroll (Monitor, 2015b). This premium payment corresponds to around 0.6 per cent of the total healthcare budget (NHS England, 2016) and is considered one of the largest areas of inefficiencies in the NHS (Lord Carter, 2015).

The role of the cap was to reduce agency profit and rebalance the incentive for people to accept permanent NHS contracts rather than taking agency work. For a critical evaluation of the new policy, we need first to gain an understanding of the root of hospitals' ever-growing reliance on the use of agency staff.

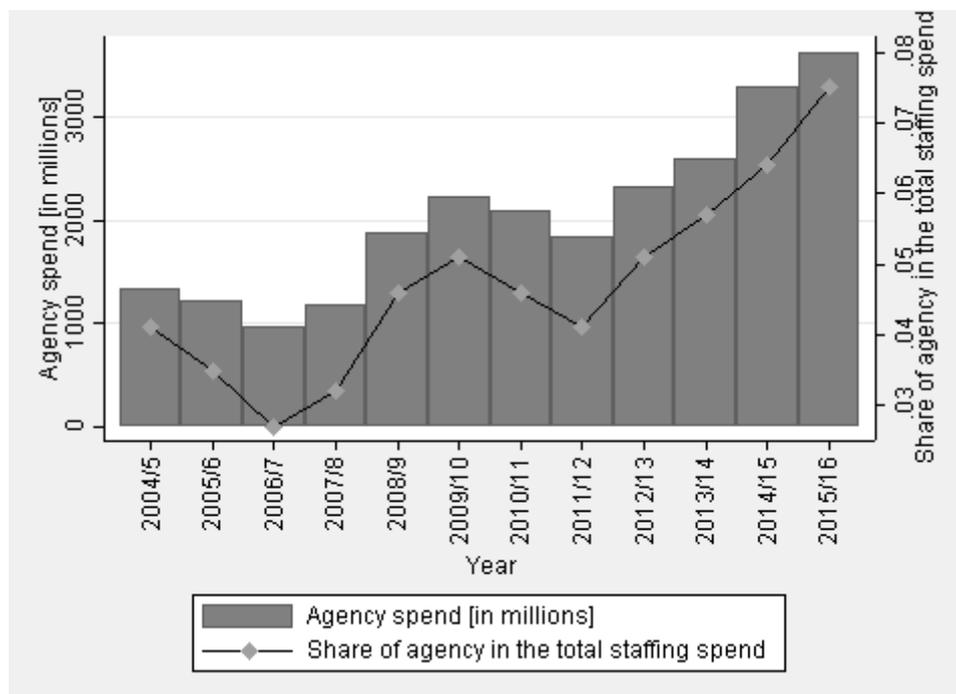


Figure 1: Agency spend over time

## Factors driving demand for staff

Three principal factors have driven increased demand for staff. The first is that more patients are being treated. According to the recent report on NHS productivity, there was an increase of 8 per cent in the total NHS activity<sup>1</sup> between 2010/11 and 2013/14 (Bojke, 2016). The number of hospital admissions<sup>2</sup> grew by over 0.6 million in the same period, while the number of outpatient appointments increased by 7.8 million in just two years, from 2011/12 to 2013/14.<sup>3</sup> We can observe similar positive growth trends in other settings - for example, mental health, community care and specialised services - while A&E demand is at an all-time high (Vize, 2016). Growth in the population is partially responsible for the increase in hospital activity, although in recent years the number of admissions has grown at a higher rate than the population (King's Fund 2015b).

The second factor is that there has also been a shift in the case mix of patients: they are becoming older and their health conditions more severe. The average age for inpatients increased from 54.9 in 2010/11 to 56.3 in 2013/14 (Bojke, 2016) and care for people with long-term health conditions absorbs 70 per cent of the health service budget (NHS England, 2014). So changes in both the number of patients treated and in their case mix drive the need for more qualified staff.

The third, more recent factor, that contributes to increasing staff demand is the change in recommended staffing levels, following the publication of the Francis Report in February 2013 (Quality Commission, 2013).

This Francis report was commissioned to examine the causes of the serious failings in care at mid-Staffordshire NHS Foundation Trust between 2005 and 2009. The Report gives 290 recommendations, with major implications for all levels of the health service across England. One recommendation was to create tools to establish the safe staffing needs for each service. The National Institute for Health and Care Excellence (NICE) then started to develop safe staffing guidelines for hospital wards. While the NICE guidance did not specify a staff-to-patient ratio, it implied an increased risk of harm for patients if a nurse regularly had to care for more than eight patients on a ward during a shift (Monitor, 2015a). Development of the staffing guidelines was subsequently stopped, possibly to help tackle the trusts' growing financial problems (Siddique, 2015).

## Changes in the workforce

The number of employees working for the NHS has not increased at the pace required to meet the demands driven by the factors identified above. According to the NHS Digital (2016), the total number of NHS staff increased only by 3,660 FTE (0.36%) from 2010/11 to 2015/16. In fact, there were noticeable drops in 2011/12 and 2012/13 due to cuts to the NHS budget and the pressure to reduce the staffing costs (Buchan & Seccombe, 2012).

The increase in the number of clinical staff is somewhat larger (17,805 FTE or 3.32%), with the highest growth in the number of doctors (7,791 or 8.09%). Somewhat surprisingly, the rise in the number of nurses was very modest, with only 2,275 nurses (FTE) more in 2015/16 than in 2010/11, representing a growth of only 0.81 per cent.

Bojke (2016) identifies that the labour index, calculated as a wage-weighted growth index, increased by 12 per cent from 2004/5 to 2013/14, while at the same time, NHS output rose by 42 per cent (see Figure 3). Looking only at 2010/11 to 2013/14, the growth in outputs was 7.5 per cent, while the labour growth was negative, at -1.5 per cent. With such a significant discrepancy between the expansion of NHS activities on one hand, and only a modest increase in labour inputs on the other hand, it is therefore not surprising to observe a big expansion in the use of agency services to meet the difference.

<sup>1</sup> Measured as cost-weighted output.

<sup>2</sup> Admission is counted as a continuous inpatient stay.

<sup>3</sup> Data from 2010/11 is not included as it comes from a different data source and therefore it is not comparable to the later series.

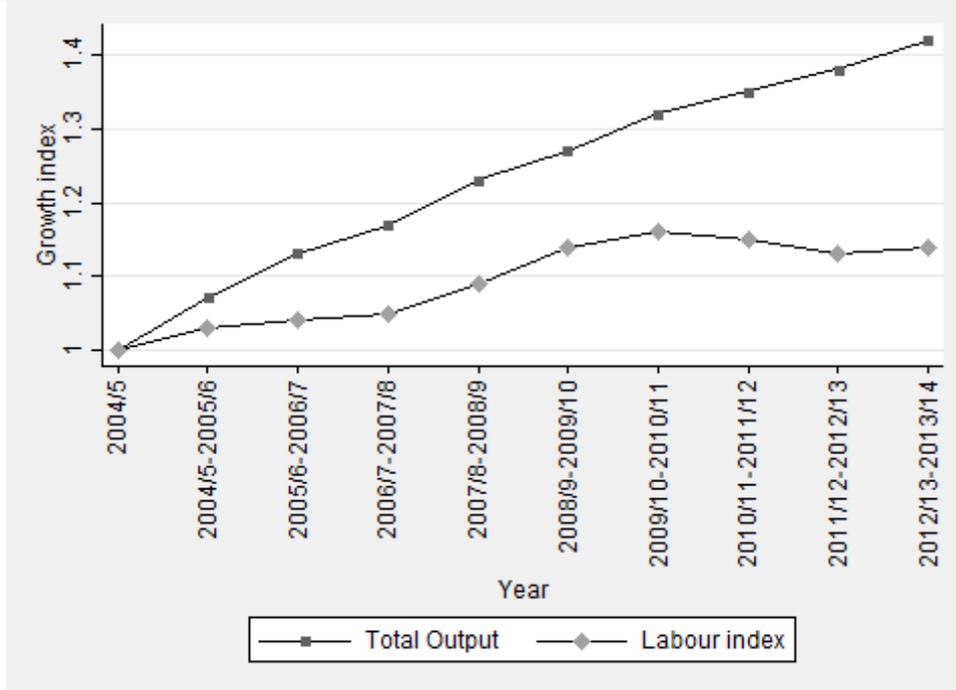


Figure 2: Comparison between labour index and output growth index

### Impact of the agency cap

The agency cap has only recently been introduced so it is hard to assess its impact. However, as Figure 1 suggests, agency expenditure by the NHS did not fall in the immediate aftermath of the cap’s introduction. In fact, agency spend increased by almost 10 per cent in the year that the policy was introduced.

While some initial figures indicate the new policy made some savings (BBC, 2016), other statistics show that the hospitals are still paying more than the rate set in November 2015. Since the introduction of the caps, most trusts have used the ‘break glass’ clauses to exceed the cap payment for agency staff. Although these clauses should only be used in exceptional cases when patient safety is at risk, Monitor (2016) found more than 50,000 cases exceeding the cap every week.

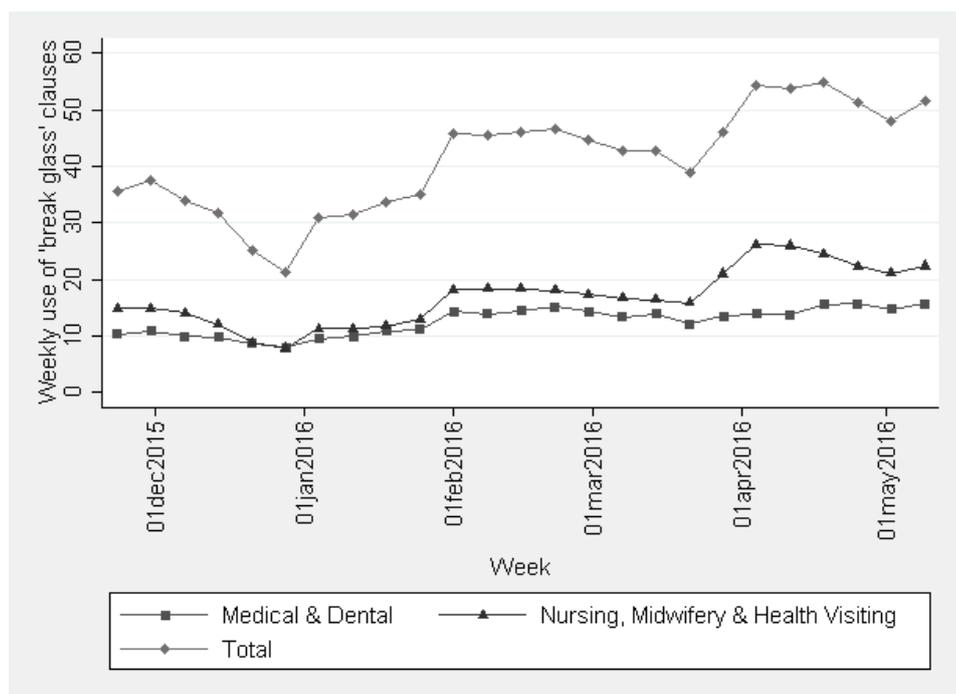


Figure 3: Weekly use of 'break glass' clause

At the same time, NHS trusts report very little effect on their vacancy rates. According to one survey conducted in May 2016, 65 per cent of trusts said they observed no change in the number of unfilled vacancies, with 28 per cent trusts observing an increase in the number of vacant posts (Monitor, 2016).

It seems unlikely that the cap will have a measurable effect on filling the staffing gap in the NHS, which is growing. In February 2016 there were almost 24,000 unfilled nursing vacancies in the NHS in England, Wales and Northern Ireland, representing nearly 9 per cent of all staff, much higher than the 2.7 per cent vacancy rate across other sectors (BBC, 2016). On the other hand, evidence shows that recruitment agencies now struggle to attract workers for NHS temporary positions (Lintern, 2016). This may worsen the staff situation in the NHS as, with inadequate numbers of permanent staff, there will not be enough temporary staff to fill the gaps.

### Potential solutions

Instead of focusing on the agency staff costs, policy makers should pay more attention to having a proper workforce plan for the NHS (Public Accounts, 2016). Improving working conditions for NHS staff should be a priority as this has a direct impact on staff retention and might increase the uptake of payroll NHS posts by current agency staff.

- According to the annual NHS staff survey (Picker Institute, 2015), only 37 per cent of the NHS workforce is satisfied with their level of pay. However, 50 per cent were dissatisfied with the flexible working opportunities provided by their organisation, which might be one of the reasons some staff decide to work through an agency. While only 32 per cent of staff reported working paid overtime, this figure increases to 60 per cent when that overtime is unpaid.
- The majority of employees (70%) think that there are not enough staff at their organisation for them to do their job properly, and that this affects the ability of staff to meet demands of their work: only 43 per cent agreed that they were able to manage these requirements, while nearly one in three (31%) disagreed.
- Despite these complaints, NHS staff tend to like their job. Around 58 per cent of them look forward to going to work, with 74 per cent of staff feeling enthusiastic about their job. Seventy-eight per cent of staff also felt that time passed quickly while they were at work. This is an important message to take forward: NHS is a good place to work, despite its shortcomings.
- While improving NHS job satisfaction will undoubtedly help with recruitment of new staff, another important focus should be to increase the pool of potential candidates. England currently does not educate a sufficient number of clinical staff to meet its current or future needs (National Audit Office, 2016).

### Conclusion

Agency staff provide a valuable contribution to the NHS. It is impossible to run a health system subject to demands that fluctuate unpredictably from day to day and hour to hour without being able to draw from a pool of temporary staff at short notice. To say that expenditure on agency staff is the sole cause of NHS financial problems is simplistic and partial. The longer term requires better workforce planning, so that vacant NHS posts can be filled by training a sufficient number of potential staff and reinforcing the message that the NHS is an exciting and rewarding workplace.

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## Costs of the Well London programme

Raphael Wittenberg, Gail Findlay and Patrick Tobi

This article discusses the methods and findings of a study to estimate the unit costs of a programme to promote health and wellbeing in deprived neighbourhoods of London. In view of the policy emphasis on primary prevention of ill health and promotion of wellbeing, it is as important to understand the costs and outcomes of public health initiatives as those of health and social care services. Investigating the costs of public health initiatives, however, can present challenges.

The Well London programme aimed to improve health and wellbeing, reduce inequalities and build resilience in disadvantaged communities in London through an asset-based community development and co-production approach. Its vision was 'empowered local communities, who have the skills and confidence to take control of and improve their individual and collective health and wellbeing'. This resonates with the philosophy of asset-based approaches to make best use of the health assets or health and social capital of individuals, communities and society.

The background to and description of the Well London programme is presented in Tobi et al. (2015). Phase Two, in 2012 to 2015, involved eleven disadvantaged neighbourhoods in nine London boroughs. Each area had a local steering/strategy group and a local coordinator to link and integrate local activities. A key part of Well London was local community, patient and stakeholder engagement to co-produce the local programme of activities. Some of the activities addressed specific health outcomes, for example through promoting exercise or healthy diet. Others encouraged participation, volunteering, capacity-building, community networks and community cohesion.

The Wellcome Trust commissioned the Institute for Human Health and Development (IHHD) at the University of East London (UEL) to conduct an evaluation of phase 1, and this was extended to include the health economics component in phase 2. Tobi et al. (2015) explain the aims and methods of the evaluation, and present and discuss the results, focusing on participant outcomes in phase 2. Almost 19,000 people participated in Well London across all the neighbourhoods, representing almost triple the target number: 69 per cent were female, 44 per cent were aged under sixteen and 32 per cent were white. Of those who completed surveys, 82 per cent reported increased levels of physical activities, 60 per cent increased levels of volunteering and 54 per cent improved mental wellbeing. The programme exceeded its targets on these and the other agreed outcome indicators.

UEL commissioned the Centre for Health Service Economics and Organisation (CHSEO), University of Oxford, to estimate the costs of phase 2 of the Well London programme and investigate the relationship between its costs and benefits. The aims of the CHSEO study were, first, to estimate the costs to public funds of the Well London programme phase 2 as far as was feasible from available data. Secondly, they were to consider and, where feasible, attempt to quantify in broad terms the costs to society of the Well London programme phase 2, to include data permitting the opportunity costs of volunteers' input to phase 2 projects. This study was linked to the overall UEL evaluation of the Well London programme, and was conducted with close collaboration between UEL and CHSEO.

The Well London programme was designed to make best use of health assets in the participating localities to promote population health and wellbeing. It involved community engagement events where local populations decided what projects to run, widespread engagement of volunteers from the local population, and use of local physical assets such as NHS buildings.

The resources devoted to the programme can be seen as an investment to improve public health and wellbeing. As such, they can be regarded as producing a social return on investment. In particular, the volunteers who played a crucial role in running the local projects were generally also participants in those projects. While they incurred costs in terms of their time, which they could have devoted to other activities, they also reaped benefits in terms of their own wellbeing and may have gained skills valuable for current or future employment.

## Data and methods

The purpose of estimating the overall costs of the Well London programme phase 2 was mainly so that the benefits in terms of outcomes for participants could be compared with the costs of achieving those benefits. This meant that, as in any economic appraisal, it was important that the estimate should relate to the full opportunity costs, preferably from a societal perspective as well as from a public sector perspective. It should include the costs of all activities that contributed to the achievement of the benefits but exclude the costs of any activities that were not essential for achieving the benefits.

Our general approach was to equate the opportunity costs with the sum of: the Big Lottery grant which was the major source of funding for the Well London programme; matched funding and other grants provided to local areas; the value of support in kind for areas and projects; and the opportunity costs of volunteer inputs. Data on these was derived from two sources. The first was the Greater London Authority (GLA) budget and accounts for the Big Lottery grant of £1.8 million. The second was data provided by Well London areas and local projects in response to a questionnaire we administered. This collected data on grants from sources other than the Big Lottery, support in kind from local councils and other agencies, and input by unpaid volunteers.

The GLA provided data on the distribution between programmes and areas of costs met from the Big Lottery grant. The GLA did not, however, hold information on support in kind for areas and projects, such as staff or premises lent by councils, or on the input of volunteers. The research team therefore developed questionnaires to collect information on matched funding and other grants from local agencies, support in kind and input by volunteers. These comprised two questionnaires: one for use by area coordinators for support and input at area level, and the other to be completed by individual projects for support and input at project level. The development of these questionnaires was greatly assisted by advice from several of the area coordinators and from the Well London Evaluation Steering Group. The Group also commented on the method for imputing an opportunity cost to volunteer time, and methods for bringing together costs and benefits.

Six out of the 11 areas and 42 of the 262 local projects submitted completed questionnaires: response rates of 55 per cent and 16 per cent respectively. For areas and projects which did not respond to the questionnaires, we used averages from those which did submit completed questionnaires.

The costs for each area comprise: all grants to the area and its local projects; an allowance of 10 per cent for administrative overheads; apportioned centrally incurred costs on training etc; the estimated value of support in kind to the area and its local projects; and the estimated opportunity costs of volunteers working for the area and its local projects.

Data on matched funding and local grants was sourced from the questionnaires for areas which completed them. For areas which did not complete them, we assumed a grant of £5,000 (pro rata for areas operating for less than two years). Data on the estimated value of support in kind was similarly taken from the questionnaires for areas which completed them. For other areas we assumed £20,000 over two years. Data on hours of volunteer inputs was sourced from the questionnaires for areas which completed them. For other areas we assumed 15 hours volunteer input per week at area level. Volunteer hours have been costed at the current national minimum wage.

## Results

The total estimated cost of Well London phase 2 over the two-year data collection period, 2013-15, was £2.0 million excluding the opportunity cost of input by volunteers, or £2.6 million including this input. A breakdown of these costs by type of cost and source of funding is shown in Table 1. These estimates were produced by summing costs by area across the 11 areas.

**Table 1: Summary of costs/sources of funding**

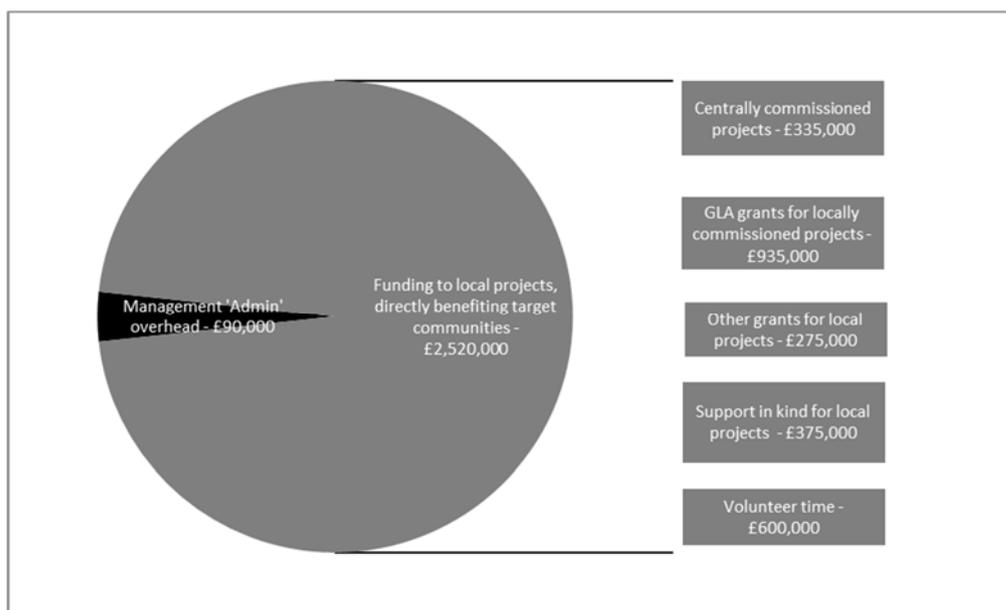
	Source	Amount
Admin overhead	Big Lottery	£90,000
Central Commissioning	Big Lottery	£335,000
GLA grants	Big Lottery	£935,000
Other grants	Councils etc.	£275,000
Support in kind	Councils etc.	£375,000
Volunteers	Volunteers	£600,000
Total		£2,600,000

The Big Lottery monies provided to each area varied between £109,350 and £42,750 and totalled £935,255, slightly over half the total Big Lottery grant of £1.8 million. The rest of the Big Lottery grant was spent on costs incurred centrally (including training for communities, which was commissioned centrally from a range of organisations), GLA administration of the grant, the Well London website, the phase 2 evaluation by UEL, and the legacy programme run by UEL.

Since the objective was to produce an estimate of those costs which could be regarded as the opportunity costs of achieving the outcomes, certain expenditures were excluded. These amounted to slightly over £600,000 and comprised central administration costs incurred by the GLA, website costs, the costs of the evaluation and most of the legacy costs. The only legacy costs included were those relating to coordination. Instead of including the administration costs incurred by the GLA, we included an allowance for administration costs estimated as 10 per cent of the expenditure from grants incurred in each area. The purpose of the adjustments was to exclude costs that would not need to be incurred in any replication of Well London since the activity they funded was not critical to achieving the outcomes.

The centrally incurred costs, for example costs of coordination and training, were apportioned to areas pro rata to their grants. These amounted to almost £335,000. The assumed administration costs amounted to slightly over £90,000. A total of £425,000 of the Big Lottery grant monies was thus apportioned between areas pro rata to their grants. Figure 1 shows the relationship between *Management 'Admin' costs* and the breakdown of *Funding allocated to local projects which directly benefited the target communities*.

**Figure 1**



The information provided by the local projects which completed the questionnaire showed that per £100,000 Big Lottery grant they leveraged and received on average: £5,800 in match funding, £4,200 in other grants, £13,800 support in kind and £46,800 input from volunteers. These ratios have been used to estimate the amounts received for each of these types of inputs for all 262 projects collectively.

**Table 2: Estimated inputs from sources other than Big Lottery**

Input	Areas	Projects	Total
Grants other than BL	£179,000	£94,000	£273,000
Support in kind	£236,000	£137,000	£373,000
Volunteers' input	£125,000	£454,000	£579,000
Total	£540,000	£685,000	£1,225,000

On this basis, the overall value of grants, including matched funding, from sources other than the Big Lottery was around £275,000, most of which went to areas (Table 3). The estimated value of support in kind for Well London was around £375,000, most of which also went to areas. The estimated opportunity cost of volunteer inputs, valued at the national minimum wage, was around £600,000, most of which went to local projects.

The UEL evaluation found that across the 262 local projects there were some 18,265 individual attendances and 18,680 participants.<sup>1</sup> The average total opportunity cost was around £10,000 per project or £140 per attendance when the opportunity costs of volunteer time are included, or around £7,700 per project or £110 per attendance when they are excluded. These costs varied considerably between areas, as shown in Table 3 in which the average costs include the costs of volunteer time.

**Table 3: Average opportunity cost per project and per attendance**

Area	No. of projects	No. of attendance	Average cost per project	Average cost per attendance
Neighbourhood A	21	1,236	£8,800.00	£150.00
Neighbourhood B	33	2,087	£12,000.00	£190.00
Neighbourhood C	28	4,746	£9,000.00	£50.00
Neighbourhood D	36	1,689	£6,300.00	£130.00
Neighbourhood E	33	3,491	£6,600.00	£60.00
Neighbourhood F	20	882	£11,700.00	£270.00
Neighbourhood G	26	1,289	£10,100.00	£200.00
Neighbourhood H	18	836	£13,500.00	£290.00
Neighbourhood I	13	469	£13,100.00	£360.00
Neighbourhood J	29	734	£9,200.00	£360.00
Neighbourhood K <sup>2</sup>	5	766		
Total for Well London	262	18,225	£9,900.00	£140.00

<sup>1</sup> The number of individual participants was derived by adjusting the number of attendances to account for under-reporting and multiple attendances by the same participant.

<sup>2</sup> An average cost per attendance is not presented for Neighbourhood K since the area joined phase 2 late in 2014 and is not included in the fidelity ranking.

The UEL evaluation produced fidelity scores and rankings for each area. This is important in the context of the evaluation since areas which did not keep so closely to the Well London protocol are less relevant for assessing the costs and outcomes of the approach under evaluation. The fidelity criteria comprised a mix of quantitative and qualitative criteria against which each neighbourhood was scored. The scores were turned into rankings which were in turn dichotomised into low fidelity and high fidelity areas. The high fidelity areas, as assessed on the basis of the criteria, were Neighbourhoods A, C, D, E and H.

The evaluation found that the higher fidelity areas generally achieved better outcomes, as discussed in Tobi et al. (2015). Two of the high fidelity areas (C and E) had the two lowest cost per attendance and below-average cost per project. Two of them (A and D) had an average cost per attendance but below-average cost per project. Neighbourhood H, however, had a high cost per attendance and cost per project.

### **Conclusion**

The total estimated costs of Well London phase 2 over its two-year duration was £2.0 million excluding the opportunity cost of input by volunteers or £2.6 million including this input. The average cost was around £7,700 per project and £110 per attendance excluding the opportunity cost of input by volunteers, or around £9,900 per project and £140 per attendance including this input. These estimates should be treated with some caution since it proved difficult to collect data on volunteer inputs and support in kind for local projects and areas.

### **Acknowledgements**

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## PUCC: The Preventonomics Unit Cost Calculator

Eva-Maria Bonin and Jennifer Beecham

### Introduction

In this short article we introduce a new downloadable tool that allows users to estimate unit costs for individuals and for interventions. Building on the work undertaken within the *Unit Costs of Health and Social Care* volumes, the Preventonomics Unit Cost Calculator (PUCC) programme allows users to more easily develop unit costs that reflect local conditions: perhaps based on the salary actually paid to a member of staff, or on the 'overheads' accruing for back-office functions in a specific organisation. The second function addresses another challenge often faced by both researchers and service personnel: estimating the cost of an intervention that involves more than one professional, such as a 10-week parenting course, or a 12-week course of CBT. This tool addresses some of the common challenges in costing such services:

- The calculator allows users to include staff and non-staff costs (such as room hire fees or refreshments), as well as both revenue (such as finance or HR departments) and capital (buildings, land) overheads.
- PUCC enables data to be entered for multi-site deliveries of the same intervention – a useful attribute in a large cost-effectiveness study – and can take into account the different ways a single intervention may be delivered and used.
- Cost estimates can be stored, so PUCC allows users to see the impact on cost if some of the parameters are changed. What if care assistants not nurses were to deliver the intervention? What if intervention participants could be encouraged to attend all the sessions?
- Particularly useful in times of constrained budgets, PUCC can therefore help a service manager understand how they can deliver a particular intervention within their budget constraints.

PUCC was developed as part of our [Preventonomics](http://www.pssru.ac.uk/blogs/preventonomics/) research, funded to support the Big Lottery Fund's *Fulfilling Lives: A Better Start* (ABS) initiative. The [Personal Social Services Research Unit \(PSSRU\) at LSE](http://www.biglotteryfund.org.uk/betterstart) was commissioned by The Big Lottery Fund in 2013 to develop models and frameworks to help local areas understand potential down-stream public sector cost savings to be generated from intervening with parents and children aged 0-3 years. The ABS initiative aims to improve child outcomes in social and emotional development, speech and language, and diet and nutrition. Thus, PUCC originates from research primarily concerned with providing services for children and families. However, the principles underpinning this work apply to all unit costs in health and social care services.

*The aim is to identify a coherent method for calculating unit costs that is convincing in its relationship with – for example – the work of children's services and the realities of children's needs.*

*However, estimating costs is always likely to be an imperfect science, but the more accurately all the expenditure categories that contribute to a service are acknowledged, the closer we will get to understanding real costs.*

(Beecham, 2000)

### Using the Preventonomics Unit Cost Calculator

The Preventonomics Unit Cost Calculator (PUCC) is built on an Access database. It allows users to

- Calculate the unit cost for individual professionals
- Calculate the unit cost for multi-professional interventions and services, and

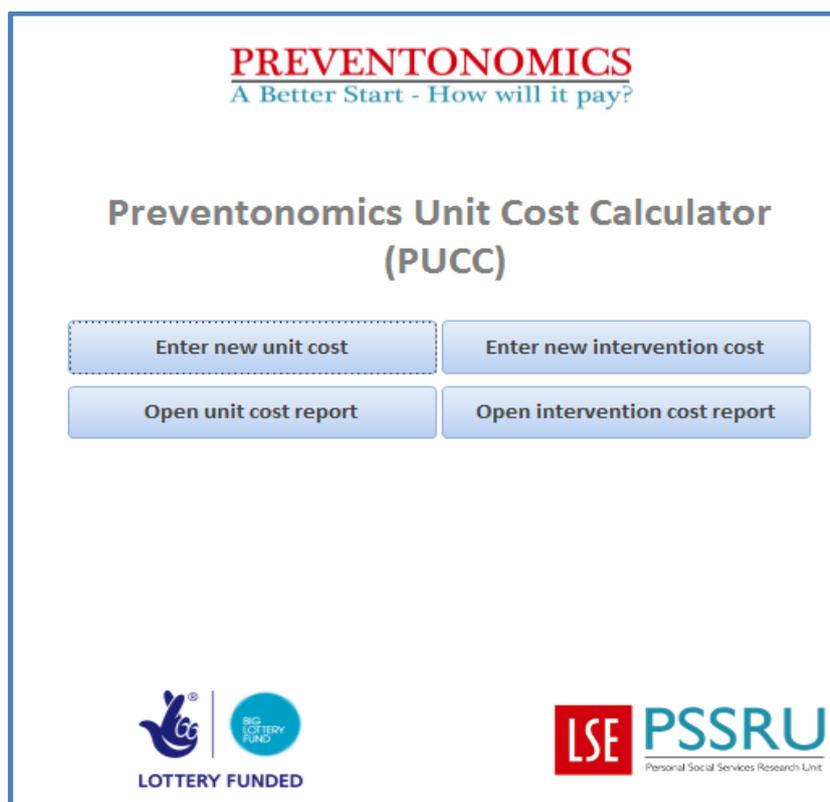
- Stores these estimates in a database

The calculator follows ‘best-practice’ principles of unit costing, as applied to these volumes of the *Unit Costs of Health and Social Care*. Indeed, the default values for some overheads have been taken from the *Unit Costs of Health and Social Care 2015*. The PUC is also pre-loaded with salary information, such as the NHS Agenda for Change pay bands. In addition, it is easily customisable with local data, resulting in unit costs that better reflect local circumstances.

The database allows data to be stored over time. This means that costs data for any professional, need only be entered once and can be drawn in for multiple purposes, for example to estimate an intervention cost or to compare costs over time. As well as being able to vary the ‘input’ parameters for a multi-professional intervention (staff grade or numbers, overheads, etc), PUC also allows users to vary ‘outputs’: perhaps to see the impact on the intervention cost of increasing attender numbers per session or improving the recruitment to completer ratios over time. The standard reporting function makes it easy to see both assumptions and results.

This is a short introduction to a tool that we hope will be simple to use. This article gives a flavour of PUC’s capabilities; the detailed Guidance can be found at [www.pssru.ac.uk/project-pages/unit-costs/pucc/](http://www.pssru.ac.uk/project-pages/unit-costs/pucc/). The PUC includes pre-loaded data entry forms, relevant queries and reports, allowing for data entry and retrieval, and unit cost calculation following the standardised PSSRU approach. There are some in-built macros that must be enabled, and we advise users to export their databases periodically to ensure work is not lost.

The **PUC welcome page** shows four options.



Each of the large buttons takes the user to a different PUC function.

**Estimate new unit cost** allows the user to enter data (or use pre-loaded default) for a single professional. The form follows a simplified version of the UCH&SC schema asking the user for information on, for example, the grade of professional, their annual pay and on-costs, and overheads. The final part of the form is concerned with working time such as total annual working hours (net of sick days, training etc.), and work-time multipliers for, say, face-to-face contact.

The **unit cost report** can then be opened which shows a summary of the information selected for each professional or practitioner, and displays the total annual costs, cost per hour and any 'weighted' costs using the multipliers.

One of the most exciting functions of PUCC comes at **Enter a new intervention cost**. Here, stored information on individual professionals can be drawn in alongside additional entries to build up the cost of an intervention. This part of the PUCC is based on the idea of a 'cohort' of users starting in year one for whom costs may be incurred over one or several years. Participants starting the intervention in year two (or perhaps a second cohort starting in year one) would form a separate cohort, and a new intervention cost would be calculated for them. This is to ensure that information on effectiveness can be matched to the information on the resources used (costs) for the same intervention.

For the PUCC user, the starting point is to enter information about the intervention: a brief title and description. Then information on the intervention users can be entered such as the numbers referred or enrolled to the intervention, or who take up the offer. There is also space to identify how many completed the programme. Each item is linked to a specific definition, for example:

- **Successfully enrolled:** Those successfully enrolled to the intervention, having previously been referred or recruited. A difference between the numbers recruited and enrolled may arise if a referred participant is not eligible to receive the intervention.

Before moving on to the 'resources' or staffing section, there is space to identify the number and duration of sessions in the intervention.

Staffing information is drawn up from the stored data-base and staff costs are calculated on the basis of the amount of staff time entered for each of the five intervention phases: design, recruitment, training and preparation, delivery, and feedback. Information on other resources used can also be entered for each phase.

Again, the **intervention cost report** shows the calculations in a standardised format, identifying the costs per recruit, per user taking up the intervention, and by person completing the intervention. Other parts of this report show the cost of the design process (which is not attributed to participants) and the total cost of the intervention. The report also shows the intervention cost by agency, phase, cost category and year incurred. All costs are shown as a total and at present value.

## Conclusion

This short article introduces readers to a downloadable tool for estimating unit costs. The development of PUCC was financed by the [Big Lottery Fund](https://www.biglotteryfund.org.uk/) (<https://www.biglotteryfund.org.uk/>) and was initially intended to support the five sites providing early prevention services for young families under the [Fulfilling Lives: A Better Start](http://www.biglotteryfund.org.uk/betterstart) (ABS) (<http://www.biglotteryfund.org.uk/betterstart>) initiative. However, underlying PUCC are aims and purposes that link closely with the *Unit Costs of Health and Social Care* volumes. PUCC aims to produce unit costs that reflect the long-run marginal opportunity cost of a relevant unit of service, and to make the methods used and data sources transparent, and to be disseminated widely.

For service providers and commissioners, and for researchers, PUCC's pre-programming and its flexibility are major advantages. For service personnel – whether in the public or independent sector – PUCC can help identify, not only the cost of an intervention but also the impact on cost if some of the parameters are changed, perhaps to meet budgetary limitations. Of course, as with any cost information, it is important that the results generated by PUCC are seen as only part of the information needed for commissioners and providers to make decisions. For researchers undertaking economic evaluations, PUCC makes estimating brief multi-person intervention costs easier, and can considerably reduce researcher workload where costs have to be calculated for multi-site or multi-mode deliveries of the same intervention.

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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 own provision residential care for older people
- 1.4 Local authority own provision day care for older people
- 1.5 Home care for older people
- 1.6 Extra-care housing for older people
- 1.7 Dementia memory service
- 1.8 Geriatric Resources for Assessment and Care of Elders (GRACE)



## 1.1 Private sector nursing homes for older people

Using Adult Social Care Finance Return (ASC-FR)<sup>1</sup> returns for 2014/15 uprated by the PSS pay and prices inflator, the median cost per person for supporting older people in a non-local authority nursing care home was £497 per week, with an interquartile range of £447 to £584. The mean cost was £518 per week. The standard NHS nursing care contribution is £112.<sup>2</sup> When we add the standard NHS nursing care contribution to PSS expenditure, the total expected median cost is £609 and the mean cost is £630. This analysis of the ASC-FR returns excludes self-funded residents.

Costs and unit estimation	2015/2016 value	Notes
A. Fees	£770 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>3,4,5,6,7</sup> A weighted average fee for England reflecting the distribution of single and shared rooms was taken from Laing & Buisson Care Homes Complete Dataset 2015/16. <sup>8</sup> Care home fees have been split into their component parts by Laing & Buisson (2015). <sup>9</sup> For nursing care for frail elderly people, direct costs (staff: ancillary support, and non-staff: repairs and maintenance at home level and other non-staff current costs) form 68 per cent of care staff costs, and indirect costs (corporate overheads) form 8.7 per cent.
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	£24.90 per week	The Department for Work and Pensions (DWP) personal allowance for people in residential care or a nursing home is £24.90. <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	90.1 per cent	The occupancy level in England for private and voluntary care homes for older and physically disabled people during June 2015 was 90.1 per cent. The occupancy rate for care homes (for-profit sector) with nursing was 89.2 per cent (provisional). <sup>6</sup>
London multiplier	1.11 x A	Fees in London nursing homes were 11 per cent higher than the national average. <sup>6</sup>
<b>Unit costs available 2015/2016</b>		
£770 establishment cost per permanent resident week (A); £795 establishment cost plus personal living expenses per permanent resident week (A and E); £110 establishment cost per permanent resident day (A); £114 establishment cost plus personal living expenses per permanent resident day (A and E).		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds. <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

<sup>2</sup> PayingForCare (2016) *Types of state and local authority support*, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 19 May 2016].

<sup>3</sup> Forder, J. & Allen, S. (2011) *Competition in the care homes market*, <https://www.ohe.org/sites/default/files/Competition%20in%20care%20home%20market%202011.pdf> [accessed 29 November 2016].

<sup>4</sup> Institute of Public Care (2014) *The stability of the care market and market oversight in England*, <http://www.cqc.org.uk/sites/default/files/201402-market-stability-report.pdf> [28 November 2016].

<sup>5</sup> Drummond, M. & McGuire, A. (2001, p.71) *Economic evaluation in health care*, Oxford University Press.

<sup>6</sup> Laing & Buisson (2015) *Care of older people: UK market report 2014/2015*, Laing & Buisson, London.

<sup>7</sup> Laing & Buisson (2012) *'Fair Fees' for care placements left behind amidst council cuts*, [http://www.laingbuisson.co.uk/Portals/1/PressReleases/FairPrice\\_12\\_PR.pdf](http://www.laingbuisson.co.uk/Portals/1/PressReleases/FairPrice_12_PR.pdf) [accessed 29 November 2016].

<sup>8</sup> Laing & Buisson (2016) *Laing & Buisson Care Homes Complete Dataset 2015/16*, London.

<sup>9</sup> Laing & Buisson (2013) *Councils rely on a 'hidden tax' on older care home residents*, Laing & Buisson, London.

## 1.2 Private sector residential care for older people

Using Adult Social Care Finance Return (ASC-FR)<sup>1</sup> returns for 2014/15 uprated by the PSS pay and prices inflator, the median cost per person for supporting older people in a residential care home provided by non-local authority organisations was £497 per week, with a mean cost of £519 per week, and an interquartile range of £447 to £584. This analysis of the ASC-FR returns excludes self-funded residents.

Costs and unit estimation	2015/2016 value	Notes
A. Fees	£628 per week	The direct unit cost of private sector residential 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>2,3,4,5,6</sup> A weighted average fee for England reflecting the distribution of single and shared rooms was taken from Laing & Buisson Care Homes Complete Dataset 2015/16. <sup>7</sup> Care home fees have been split into their component parts by Laing & Buisson (2015). <sup>8</sup> For residential care for frail elderly people, direct costs (staff: ancillary support, and non-staff: repairs and maintenance at home level and other non-staff current costs) form 68 per cent of care staff costs, and indirect costs (corporate overheads) form 8.7 per cent.
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	£24.90 per week	The Department for Work and Pensions (DWP) personal allowance for people in residential care or a nursing home is £24.90. <sup>9</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	1.38 x A	Fees in London residential homes were 38 per cent higher than the national average. <sup>5</sup>
Occupancy	90.1 per cent	The occupancy level in England for private and voluntary care homes for older and physically disabled people during June 2015 was 90.1 per cent. The occupancy rate for care homes (for-profit sector) without nursing was 89.7 per cent (provisional). <sup>5</sup>
<b>Unit costs available 2015/2016</b>		
£628 establishment cost per permanent resident week (A); £653 establishment cost plus personal living expenses per permanent resident week (A and E); £90 establishment cost per permanent resident day (A); £93 establishment cost plus personal living expenses per permanent resident day (A and E).		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds [<http://www.content.digital.nhs.uk/catalogue/PUB22240>] [accessed 28 November 2016].

<sup>2</sup> Forder, J. & Allen, S. (2011) *Competition in the care homes market*, <https://www.ohe.org/sites/default/files/Competition%20in%20care%20home%20market%202011.pdf> [accessed 29 November 2016].

<sup>3</sup> Institute of Public Care (2014) *The stability of the care market and market oversight in England*, <http://www.cqc.org.uk/sites/default/files/201402-market-stability-report.pdf> [28 November 2016].

<sup>4</sup> Drummond, M. & McGuire, A. (2001, p.71) *Economic evaluation in health care*, Oxford University Press.

<sup>5</sup> Laing & Buisson (2015) *Care of older people: UK market report 2014/2015*, Laing & Buisson, London.

<sup>6</sup> Laing & Buisson (2012) *'Fair Fees' for care placements left behind amidst council cuts*, [http://www.laingbuisson.co.uk/Portals/1/PressReleases/FairPrice\\_12\\_PR.pdf](http://www.laingbuisson.co.uk/Portals/1/PressReleases/FairPrice_12_PR.pdf) [accessed 29 November 2016].

<sup>7</sup> Laing & Buisson (2016) *Laing & Buisson Care Homes Complete Dataset 2015/16*, London.

<sup>8</sup> Laing & Buisson (2013) *Councils rely on a 'hidden tax' on older care home residents*, Laing & Buisson, London.

<sup>9</sup> PayingForCare (2016) *Types of state and local authority support*, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 19 May 2016].

### 1.3 Local authority own-provision residential care for older people

This table uses the Adult Social Care Finance Return (ASC-FR)<sup>1</sup> return for 2014/15 for local authority expenditure, which has been updated using the PSS pay & prices inflator.

Costs and unit estimation	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£89 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, declining to 3 per cent after 30 years.
B. Land	£17.10 per week	Land costs researched for PSSRU by the Valuation Office Agency. <sup>3</sup> The cost of land has been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 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)	£957 per week	The median estimate is taken from ASC-FR 2014/15 updated using the PSS pay & prices index. <sup>1</sup> Capital charges relating to buildings and oncosts have been deducted. The mean cost is £806 per week (interquartile range £734-£1,363).
E. Agency overheads		Social services management and support services (SSMSS) costs are included in ASC-FR total expenditure figures so no additional overheads have been added.
External services		
F. Community nursing		No current studies indicate how external services are used by residential care home residents. See previous editions of this volume for sources of information.
G. GP services		
H. Other external services		
I. Personal living expenses	£24.90 per week	The Department for Work and Pensions (DWP) personal allowance for people in residential care or a nursing home is £24.90. <sup>4</sup> This has been used as a proxy for personal consumption.
Use of facility by client	52.18 weeks per year	
Occupancy	92.6 per cent	Based on information reported by Laing & Buisson, occupancy rates for the not-for-profit sector care homes without nursing in 2015 (provisional) were 92.6 per cent. <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	1.56 x (A&B) 1.45 x (D)	Based on ASC-FR 2014/15 data. <sup>1</sup>
<b>Unit costs available 2015/2016</b>		
£1,063 establishment cost per permanent resident week (includes A to E); £1,088 establishment cost plus personal living expenses per permanent resident week (includes A to D and I).		
£152 establishment cost per permanent resident day (includes A to E); £155 establishment cost plus personal living expenses per permanent resident day (includes A to D and I).		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds. <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

<sup>2</sup> Building Cost Information Service (2016) *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 (2016) *Types of state and local authority support*, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 19 May 2016].

<sup>5</sup> Laing & Buisson (2015) *Care of older people: UK market report 2015*, Laing & Buisson, London.

## 1.4 Local authority own-provision day care for older people

As day care expenditure is now combined with other expenditure in the ASC-FR data collection (see Preface for more information),<sup>1</sup> this table uses data from the Personal Social Services Expenditure return (PSS EX1) for 2013/14,<sup>2</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 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>3</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	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£6.00 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). <sup>4</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
B. Land	£1.30 per client attendance	Land costs researched for PSSRU by the Valuation Office Agency. <sup>5</sup> These allow for 33.4 square metres per person. Land costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
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)	£53 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. <sup>2</sup> Based on PSSRU research, <sup>3</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 £53 and £59. 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>3</sup>
Occupancy		
London multiplier	1.34 x A 1.88 x B 1.07 x D	Relative London costs are drawn from the same source as the base data for each cost element.
<b>Unit costs available 2015/2016</b>		
£61 per client attendance (includes A to D); £13 per client hour; £46 per client session lasting 3.5 hours.		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds.

<sup>2</sup> NHS Digital (2014) *PSS EX1 2013/14*, NHS Digital, Leeds.

<sup>3</sup> Based on research carried out by PSSRU in 2014.

<sup>4</sup> Building Cost Information Service (2016) *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.

## 1.5 Home care for older people

In past editions of this volume, we have taken information from the PSS expenditure return. Unit costs for home care have been based on the total expenditure on home care services divided by the total number of hours delivered, but this is not reflective of the actual hourly rate paid to providers of external home care services.

The new ASC-FR return (see Preface for more information) currently provides two rates for home care: one for the hourly rate of in-house home care provision and one for the average hourly rate paid to external providers of home care services. The rates should be based on the cost of an hour of personal care. NHS Digital do not analyse the rate further by primary support reason or age group.<sup>1</sup>

For home care, the average standard hourly rate was £30.75 for services provided in-house, compared to £14.28 for provision by external providers.<sup>1</sup>

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

<sup>1</sup> NHS Digital (2015) *Adult Social Care Finance Return (ASC-FR) Guidance*, NHS Digital <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

## 1.6 Extra-care housing for older people

This is based on an evaluation of extra-care housing which followed the development of 19 new-built 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 £469 per resident per week, with a standard deviation of £191 and a range of £186 to £1,317. The median cost was £384 per resident per week.

Costs and unit estimation	2015/2016 value	Notes
A. Capital costs		
Building and land costs	£116 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	£56 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	106 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 (2015), table 3.4 <sup>2</sup> and updated using the Retail Price Index.
D. Health and social service costs		
Health services	£72 per resident per week	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 care estimates ranged from £0-£734.
Social services	£108 per resident week	Social care estimates ranged from £0-£717
Use of facility by client	52.18 weeks per year	
<b>Unit costs available 2015/2016</b>		
£182 accommodation, housing management and support costs; £288 accommodation, housing management, support and living expenses; £469 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 (2015) *Family spending 2015 edition*, Office for National Statistics, London, available at [accessed 10 October 2016]. [http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/datasets-and-tables/index.html?newquery=\\*&newoffset=350&pageSize=50&content-type=Reference+table&content-type=Dataset&content-type=orig=%22Dataset%22+OR+content-type+original%3A%22Reference+table%22&sortBy=pubdate&sortDirection=DESCENDING&applyFilters=true](http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/datasets-and-tables/index.html?newquery=*&newoffset=350&pageSize=50&content-type=Reference+table&content-type=Dataset&content-type=orig=%22Dataset%22+OR+content-type+original%3A%22Reference+table%22&sortBy=pubdate&sortDirection=DESCENDING&applyFilters=true). [accessed 18 October 2016]

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

## 1.7 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 £1,218. Two further dementia memory services provided by SLAM (but not providing assessments) had average annual costs per client of £1,018 (Lambeth and Southwark) and £1,015 (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	2015/2016 value	Notes
A. Wages/salary	£447,514 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	£114,176 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	£110,575 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	£186,357 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	£3,963 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, declining to 3 per cent after 30 years.
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 2015/2016</b>		
Total annual cost £862,586; total cost per hour £428; cost per client £1,218.		

<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> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, 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.

## 1.8 Geriatric Resources for Assessment and Care of Elders (GRACE)

The GRACE model is a US-based intervention that integrates health and social care professional input into the assessment, care planning and service delivery process to meet the health and social care needs of community-dwelling older people aged 65 years and over. In the US study, it targeted low-income individuals with multiple chronic conditions. Eligible individuals are those with a 40 per cent or higher predicted probability of hospital admission (Counsell et al., 2007; 2009).<sup>1,2</sup>

On assessment, the individual's needs are linked to the 'GRACE' protocol, a standardised checklist and response to 12 common geriatric conditions: advance care planning, health maintenance, medication management, difficulty walking/falls, chronic pain, urinary incontinence, depression, hearing loss, visual impairment, malnutrition or weight loss, dementia, and caregiver burden. There are weekly meetings among the multi-disciplinary team and the case managers to discuss the successes and barriers in implementing the GRACE protocols.<sup>1,2</sup> The intervention has been costed using current salary levels.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£82,668 per year	Based on mean basic salaries for Agenda for Change (AfC) bands and information taken from the National Minimum Data Set (NMDS-SC) <sup>3,4</sup> The multi-disciplinary team included two FTE case managers (nurse and social worker) and a physiotherapist, pharmacist, community organiser, mental health social worker and geriatrician, all at 0.05 FTE, for a caseload of 125 older people. <sup>1</sup>
B. Salary oncosts	£23,064 per year	Employer's national insurance is included plus employer's contribution to superannuation.
C. Qualifications	£43,798 per year	
D. Overheads		
Direct staffing costs	£21,073 per year	Direct overheads: this includes the costs (salary costs) for practice manager (0.25 FTE) and an administrative assistant (0.25 FTE) (Agenda for change band 8A and AFC Band 2).
Other direct and indirect overheads	£56,302 per year	Other direct overheads include non-staff costs: office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity. Indirect overheads include general management and support services such as finance and human resource departments.
E. Capital overheads	£4,595 per year	Based on the new-build and land requirements of NHS offices and shared facilities for waiting, interviews and clerical support. <sup>5,6</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. Nurses and social workers are reported to share office space.
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>
Frequency of visits		The intervention comprises an initial and annual in-home comprehensive geriatric assessment from the case managers to create an individualised care plan that is discussed with the multi-disciplinary team. Weekly meetings are held thereafter to discuss the successes and barriers in implementing the GRACE protocols. Individuals receive ongoing support from the case managers at least once a month (either face-to-face or by telephone). <sup>2</sup>
Length of intervention	2 years	
Caseload	125	Based on a caseload of 125 older people.
<b>Unit costs available 2015/2016 (costs with qualifications in brackets)</b>		
£187,702 (£231,499) annual cost of service; £1,502 (£1,852) annual cost per case, £3,003 (£3,704) annual cost per intervention per case.		

<sup>1</sup> Counsell, S., Callahan, C., Clark, D., Tu, W., Buttar, A., Stump, T., et al. (2007). Geriatric care management for low-income seniors. *Journal of American Medical Association*, 298, 22, 2623–33.

<sup>2</sup> Counsell, S., Callahan, C., Tu, W., Stump, T., & Arling, W. (2009). Cost analysis of the geriatric resources for assessment and care of elders care management intervention. *Journal of American Geriatrics Society*, 57, 8, 1420–26.

<sup>3</sup> Skills for Care (2016) *National Minimum Dataset-Social Care online* <https://www.nmds-sc-online.org.uk/help/Article.aspx?id=1646> [accessed 6 October 2016].

<sup>4</sup> NHS Digital (2015) *NHS staff earnings estimates to June 2016*, NHS Digital, Leeds.

<sup>5</sup> Building Cost Information Service (2016) *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 Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, NHS Digital, Leeds. <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

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

2.1 NHS reference costs for mental health services

2.2 Local authority own-provision care homes for people requiring long-term mental health support

2.3 Private sector care homes for people requiring long-term mental health support

2.4 Local authority own-provision social services day care for people requiring mental health support

2.5 Private and voluntary sector day care for people requiring mental health support

2.6 Behavioural activation delivered by a non-specialist

2.7 Deprivation of liberty safeguards in England: implementation costs

2.8 Mindfulness-based cognitive therapy: group-based intervention

2.9 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 for selected mental health services.<sup>1</sup> All costs have been updated to 2015/16 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 2014-2015<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)	£373	NA	NA
Mental health care clusters (per bed day), including carbon emissions 59 kgCO <sub>2</sub> e)	£376		
Mental health care clusters (initial assessment)	£300	£190	£342
Mental health care clusters (initial assessment), including carbon emissions 47 kgCO <sub>2</sub> e)	£302		
<b>All drug and alcohol services (adults and children)</b>	<b>£130</b>	<b>£95</b>	<b>£150</b>
Alcohol services – admitted (per bed day)	£359	£324	£377
Alcohol services – community (per care contact)	£124	£117	£139
Drug services – admitted (per bed day)	£462	£292	£580
Drug services – community (per care contact)	£126	£82	£161
Drug services – outpatient (per attendance)	£132	£80	£114
<b>Mental health specialist teams (per care contact)</b>	<b>£121</b>	<b>£96</b>	<b>£145</b>
A&E mental health liaison services	£209	£157	£237
Criminal justice liaison services	£202	£147	£234
Improving Access to Psychological Therapies (IAPT), adult and elderly	£96	£85	£118
Prison health adult and elderly	£80	£50	£112
Forensic community, adult and elderly	£223	£104	£255
<b>Secure mental health services (per bed day)</b>	<b>£528</b>	<b>£471</b>	<b>£591</b>
Low-level secure services	£423	£376	£462
Medium-level secure services	£503	£453	£554
<b>Specialist mental health services (per bed day)</b>	<b>£358</b>	<b>£284</b>	<b>£399</b>
Eating disorder (adults) – admitted	£461	£373	£528
Mother and baby units – admitted	£693	£619	£755

<sup>1</sup> Department of Health (2015) *NHS reference costs 2014-2015*, <https://www.gov.uk/government/publications/nhs-reference-costs-2014-to-2015> [accessed 10 October 2016].

## 2.2 Local authority own-provision care homes for people requiring long-term mental health support

This table uses the Adult Social Care Finance Return (ASC-FR)<sup>1</sup> for expenditure which has been updated using the PSS pay & prices inflator. The median cost per resident week for adults over the age of 65 is £817 and the mean cost is £808.

Costs and unit estimation	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£102 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, declining to 3 per cent after 30 years. (See Preface for more information).
B. Total local authority expenditure (minus capital)	£824 per resident week	The median revenue weekly cost estimate (£824) for adults requiring long-term mental health support in own-provision residential care (includes full-cost paying and preserved-rights residents). The mean cost per client per week is reported as £764. <sup>1</sup> Capital costs (calculated using ASC-FR) relating to buildings have been deducted (£157). 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 ASC-FR expenditure figures, so no additional overheads have been added.
Other costs		
D. Personal living expenses	£24.90 per week	The DWP personal allowance for people in residential care or a nursing home is £24.90. <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		Insufficient data to provide a London multiplier
<b>Unit costs available 2015/2016</b>		
£926 per resident week establishment costs (includes A to B); £951 per resident week (includes A to D).		
£132 per resident day establishment costs (includes A to B); £136 per resident day (includes A to D).		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds. <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

<sup>2</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>3</sup> PayingForCare (2016) *Types of state and local authority support*, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 19 May 2016].

## 2.3 Voluntary and private sector care homes for people requiring long-term mental health support

This table uses the Adult Social Care Finance Return (ASC-FR)<sup>1</sup> returns for 2014/15 for expenditure costs, which have been updated using the PSS pay & prices inflator. The median establishment cost per resident week for adults over the age of 65 is £487 and the mean cost is £466.

Costs and unit estimation	2015/2016 value	Notes
Capital costs A. Buildings and oncosts	£102 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, declining to 3 per cent after 30 years. (See Preface for more information).
B. Total expenditure (minus capital)  C. Agency overheads	£585 per resident week	The median cost estimate (£585) for adults (18-65) requiring long-term mental health support in a residential care home 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 £636. <sup>1</sup> Capital charges relating to building and oncosts have been deducted. Councils reporting costs of over £2,000 per client week have not been included in this estimate. Social services management and support services (SSMSS) costs are included in ASC-FR expenditure figures so no additional overheads have been added.
Other costs D. Personal living expenses	£24.90 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	1.24 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 2015/2016</b>		
£687 per resident week establishment costs (includes A to B); £712 per resident week (includes A to D). £98 per resident day establishment costs (includes A to B); £102 per resident day (includes A to D).		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds. <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

<sup>2</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>3</sup> PayingForCare (2016) *Types of state and local authority support*, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 19 May 2016].

## 2.4 Local authority own-provision social services day care for people requiring mental health support

As day care expenditure is now combined with other expenditure in the ASC-FR data collection (see Preface for more information),<sup>1</sup> this table uses the Personal Social Services Expenditure return (PSS EX1)<sup>2</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 £105 and mean cost was £109 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>3</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 requiring mental health support, 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>4</sup>

Costs and unit estimation	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£6.00 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital and land costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. (See Preface for more information.)
B. Land	£1.30 per client attendance	Based on research carried out by the Valuation Office Agency. <sup>5</sup> These allow for 33.4 square metres per person. <sup>6</sup>
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)	£26 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 requiring mental health support attend on average 3 times per week (4.1 hours in duration), the median and mean cost per day care attendance is £26 and £20 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>3</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 2015/2016</b>		
£34 per client attendance (includes A to D); £8.20 per client hour; £29 per client session lasting 3.5 hours.		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds.

<sup>2</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>3</sup> Based on research carried out by PSSRU in 2014.

<sup>4</sup> Salford City Council (2011) *Mental health*, Salford City Council. <http://www.salford.gov.uk/mentalhealth.htm> [accessed 9 October 2014].

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

<sup>6</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

## 2.5 Private and voluntary sector day care for people requiring mental health support

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 £101 per client week and the mean cost was £88 (including capital costs).

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.

For day care for people requiring mental health support, 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	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£6.00 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital and land costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. (See Preface for more information.)
B. Land	£1.30 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>
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)	£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), <sup>2</sup> the median cost per day care attendance per day is £25 and the mean cost per day is £20. 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 2015/2016</b>		
£32 per client attendance (includes A to D); £8 per client hour; £27 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 (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

## 2.6 Behavioural activation delivered by a non-specialist

Behavioural activation (BA) provides a simple, effective treatment for depression which can be delivered in a group setting or to individuals. This schema provides the costs for group-based BA which 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 BA 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 (AFC) band 7, the grade normally used for this service. However, if we base the costs on AFC band 5, the cost per session per person is £10 (£13 with qualifications) and for 12 sessions £126 (£151 with qualifications).<sup>1</sup> Another study<sup>2</sup> provides information on BA delivered on a one-to-one basis by a grade 5 AFC band mental health nurse. This costs £31 per hour or £57 per hour of face-to-face contact.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£77,100 per year	Based on the mean full-time equivalent basic salary for two mental health nurses on AFC band 7 of the July 2015-June 2016 NHS staff earnings estimates. <sup>3</sup>
B. Salary oncosts	£19,209 per year	Employer's national insurance is included plus 14 per cent of salary for contribution to superannuation.
C. Qualifications	£22,502 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> This is for 2 mental health nurses.
D. Training for behavioural activation	£656 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) (£231 per therapist). Supervision costs were based on 1-hour fortnightly contact for 40 weeks (£3,002 per therapist); 12 session behavioural protocol (£228 per therapist). These costs have been annuitised over the working life of the nurse.
E. Overheads		
Management, administration and estates staff	£23,596 per year	Taken from the 2013/14 financial accounts for 10 community trusts. 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	£36,790 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	£7,778 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>6,7</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. (See Preface for more information.)
Working time	42 weeks per year 37.5 hours per week	Unit costs are based on 1,564 hours per year: 210 working days minus sickness absence and training/study days as reported for all NHS staff groups. <sup>8</sup>
Duration of contact		One-hour sessions included direct treatment time of 40-50 minutes and administration.
<b>Unit costs available 2015/2016 (costs including qualifications given in brackets)</b>		
Cost per session per person £15 (£17); Cost per 12 sessions per person £185 (£210)		

<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.

<sup>2</sup> Richards, D., Ekers, D., McMillan, D. Taylor, R., Byford, S., Warren, F., Barrett, B. Farrand, P., Gilbody, S., Kuyken, O'Mahen, H., Watkins, E., Wright, K., Hollon, S., Reed, N., Rhodes, S., Fletcher, E. & Finning, K. (2016) Cost and outcome of behavioural activation versus cognitive behavioural therapy for depression (COBRA): a randomised, controlled, non-inferiority trial, *The Lancet*, 388, 10047, 871-880.

<sup>3</sup> NHS Digital (2015) NHS staff earnings estimates to June 2015 (not publicly available), NHS Digital, 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> Building Cost Information Service (2016) *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 NHS Digital (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, NHS Digital, Leeds.

## 2.7 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 was 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 reported 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 £1,412. The standard deviation around the estimated cost of a single DoLS assessment was £422, and the 95 per cent confidence interval was £543 to £2,198. 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	£503	£229	£586	£291	£250	£372
Assessments by best-interest assessor	£706	£424	£297	£1,034	£576	£608
Secretarial costs	£329	£185	£130	£594	£312	£310
Independent mental capacity advocates assessments	£114	£87	£62	£60	£74	£79
Court protection costs	£43	£43	£43	£43	£43	£43
<b>Total costs</b>	<b>£1,696</b>	<b>£968</b>	<b>£1,119</b>	<b>£2,021</b>	<b>£1,255</b>	<b>£1,412</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.

## 2.8 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 2015/2015	Notes
A. Wages/salary	£38,173 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 7 of the July 2015-June 2016 NHS staff earnings estimates. <sup>2</sup> See section V for further information on salaries.
B. Salary oncosts	£9,500 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.
Management, administration and estates staff	£11,680 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	£18,211 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	£4,583 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 2015/2016</b>		
£52 per hour, £86 per hour of direct contact, £173 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> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>3</sup> Building Cost Information Service (2016) *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 NHS Digital (2016) *Sickness absence rates in the NHS: April 2011 – April 2016*, NHS Digital, Leeds.

## 2.9 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 £1,028 per family, while that of individual interventions is £2,243. 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 £1,270 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 £142 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 £17 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 £3,182 per patient, compared with £802 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 multi-disciplinary 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 £12,079 at current prices. The first year of the early intervention team's input is estimated to cost £2,523 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 £18.80 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 £259.

### 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 £86 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 £12,637 per year, while the annual costs of health and social service use are £1,667.

**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 £270 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 £442 per person. Further ongoing pharmaceutical and psychological therapy is estimated to cost £1,307 a year. The cost of suicide prevention training for GPs, based on the Applied Suicide Intervention Skills Training (ASIST) course, is £221.

### **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 £754, compared with £382 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 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 £92, 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/Alcohol liaison nurse/Substance misuse nurse



## Services for people who misuse drugs or alcohol

Using data from the NHS reference costs 2014/15,<sup>1</sup> the mean average cost for an outpatient attendance (adult) and for a community contact (adult) for drug services is estimated to be £100. Admitted patient stays for rehabilitating adults cost on average £462 for alcohol services (range: £285-£587). These costs have been updated using the Hospital and Community Health Services (HCHS) inflator.

In 2014-15, 295,224 individuals were in contact with drug and alcohol services. The average age of people in treatment is rising. These people require a wide range of support, including social care. The number of people presenting for alcohol problems in 2014-15 was 150,640. Of these 89,107 were treated for problematic drinking alone, and 61,533 for alcohol alongside other substances. While the overall numbers accessing treatment for alcohol have increased by 3 per cent since 2009-2010 (86,385 to 88,904), the number aged 40 and over accessing services has risen by 21 per cent, and the number aged 50 and over by 44 per cent. See *Adult Substance Misuse Statistics from the National Drug Treatment Monitoring System (NDTMS)* for more details on the prevalence of people who misuse drugs or alcohol.<sup>2</sup>

The information presented in schema 3.1 to 3.3 was provided by the National Treatment Agency<sup>3</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>4</sup> and on the National Treatment Agency for Substance Misuse website, [www.nta.nhs.uk](http://www.nta.nhs.uk).

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 2014-2015*, <https://www.gov.uk/government/publications/nhs-reference-costs-2014-to-2015> [accessed 10 October 2016].

<sup>2</sup> Public Health England (2015) *Adult substance misuse statistics from the National Drug Treatment System (NDTMS)*, Department of Health. <http://www.nta.nhs.uk/uploads/adult-statistics-from-the-national-drug-treatment-monitoring-system-2014-2015.pdf>.

<sup>3</sup> Personal communication with the National Treatment Agency, 2010.

<sup>4</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 £684 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 multi-disciplinary 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 £153 per patient day, which is equivalent to £1,074 per patient week.

Costs and unit estimation	2015/2016 value	Notes
A. Direct pay	£88 per patient day	Salaries plus oncosts for care staff.
B. Direct overheads	£17 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 and non-pay administration (for example, telephones and information technology).
C. Indirect costs and overheads	£49 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 2015/2016</b>		
£153 per patient day or £1,074 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 multi-disciplinary 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 £55 per patient week. All costs have been updated from 2007/08 using the Gross Domestic Product (GDP) index, as suggested by the NTA.

NHS reference costs show that the mean cost per client contact in a NHS and PCT combined drugs and alcohol mental health team was £121 per face-to-face contact and £52 per non-face-to-face contact. These costs have been updated from reference costs 2013-2014<sup>3</sup> (no later costs are reported) using the Hospital and Community Health Services (HCHS) inflator.

Costs and unit estimation	2015/2016 value	Notes
A. Direct pay	£26 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, portage, transport, waste disposal, security, finance, human resources, personnel, communications and corporate charges.
<b>Unit costs available 2015/2016</b>		
£55 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/Alcohol liaison nurse/Substance misuse nurse

In the majority of hospitals, alcohol health workers are qualified nurses: however, they can also be staff with alternative qualifications (NVQ in health and social care, counselling skills) or experience in substance misuse. They work predominantly in non-emergency admission units followed by A&E, specialist gastroenterology/liver wards, and general medical wards.<sup>1</sup>

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£32,114 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 6 of the July 2014-June 2014. <sup>2</sup> See <i>NHS terms and conditions of service handbook</i> for information on payment for unsocial hours and shift work. <sup>3</sup> See section V for further information on salaries.
B. Salary oncosts	£7,785 per year	Employer's national insurance contribution is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£11,251 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> It has been assumed that this health worker requires the same qualifications as a staff nurse/ward manager.
D. Overheads		Taken from <i>NHS foundation trusts accounts: consolidated (FTC) files 2014/15</i> . <sup>6</sup> (See Preface for more information.)
Management, administration and estates staff	£9,663 per year	Management and other non-care staff costs were 24.2 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£17,210 per year	Non-staff costs were 43.1 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), utilities such as water as well as gas and electricity.
E. Capital overheads	£3,065 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>7,8</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>9</sup>
Ratio of direct to indirect time on: clinic contacts		No current information available. See previous editions of this volume for sources of information.
Length of contact		
<b>Unit costs available 2015/2016 (costs including qualifications given in brackets)</b>		
£45 (£52) per hour of clinic consultation		

<sup>1</sup> Baker, S., & Lloyd, C. (2012) A national study of acute care Alcohol Health Workers, Alcohol Research UK. [http://alcoholresearchuk.org/downloads/finalReports/FinalReport\\_0115.pdf](http://alcoholresearchuk.org/downloads/finalReports/FinalReport_0115.pdf).

<sup>2</sup> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>3</sup> NHS Employers (2016) *NHS Terms and Conditions of Service Handbook (Agenda for Change)*, <http://www.nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook>.

<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> Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415>.

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

<sup>8</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>9</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 NHS Digital (2014) *Sickness absence rates in the NHS: April 2009 – April 2014*, NHS Digital, Leeds.



## **4. Services for people requiring learning disability support**

- 4.1 Local authority own-provision day care for people requiring learning disability support
- 4.2 Advocacy for parents requiring learning disability support
- 4.3 Residential care homes for people requiring learning disability support
- 4.4 Residential care homes for adults with autism and complex needs



## 4.1 Local authority own-provision day care for people requiring learning disability support

As day care expenditure is now combined with other expenditure in the ASC-FR data collection (see Preface for more information),<sup>1</sup> this table uses the Personal Social Services Expenditure return (PSS EX1)<sup>2</sup> for 2013/14 for expenditure costs, which have been uprated using the PSS pay & prices inflator. The median cost was £318 per client week and the mean cost was £331 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 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>3</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	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£6.00 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, declining to 3 per cent after 30 years. <sup>4</sup>
B. Land	£1.30 per client attendance	Based on research carried out by the Valuation Office Agency. <sup>5</sup> The cost of land has been annuitised at 3.5 per cent over 60 years, declining to 3 per cent after 30 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)	£75 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 requiring learning disability support attend on average 4.8 times per week (4 hours in duration), <sup>2</sup> the mean cost per day care attendance is £76. 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	1.57 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>1,4,5</sup>
<b>Unit costs available 2015/2016</b>		
£81 per client attendance (includes A to D); £17 per client hour; £60 per client session lasting 3.5 hours.		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds. <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

<sup>2</sup> Health & Social Care Information Centre (2014) *PSS EX1 2013/14*, Health & Social Care Information Centre, Leeds.

<sup>3</sup> Based on research carried out by PSSRU in 2014.

<sup>4</sup> Building Cost Information Service (2016) *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.

## 4.2 Advocacy for parents requiring learning disability support

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	2015/2016 value	Notes (for further clarification see Commentary)
A. Wages/salary	£38,890 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	£17,509 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation.
C. Overheads Management/supervision	£6,671 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	£3,948 per year	Premises costs (office, stationery, utilities etc.) are estimated at 7 per cent of salary costs. <sup>2</sup>
Indirect overheads	£8,685 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	£2,641 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, declining to 3 per cent after 30 years. (See Preface for more information.)
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 8.5 days sickness leave have been assumed based on the median average sickness absence level in England for all authorities. <sup>3</sup> Unit costs assume 1,513 working hours.
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 2015/2016</b>		
Average cost per working hour £34, average cost per client-related hour £58. (Estimates exclude travel costs). Average total cost £78,344; Total cost for project A: £44,419; Total cost for project B: £85,533. Average cost per advocacy intervention (based on 95 hours); £4,582 (Project A £3,119 and Project B £6,046).		

<sup>1</sup> 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/bld.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.

<sup>3</sup> Local Government Association (2016) *Local Government workforce survey 2014/15*, research report, March 2016.

<http://www.local.gov.uk/documents/10180/11627/Workforce+Survey+2014-15+report+Final.pdf/185ef91c-b4be-46a3-b854-b43c25c8df2a>. [accessed 17 October 2016].

### 4.3 Residential care homes for adults requiring learning disability support

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. Using Adult Social Care Finance Returns (ASC-FR)<sup>2</sup> for 2014/15 uprated by the PSS pay & prices inflator, the median cost per person for adults requiring learning disability support in long-term residential care was £1,323 per week and the mean cost was £1,338 per week.

#### 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 suite bath or shower rooms and good communal spaces. The average fee paid for a place in the 4-bedroom house is £2,027 per week and is £1,771 for a place in the 8-bedroom house.

Costs and unit estimation	2015/16			
	4-bed house	Notes	8-bed house	Notes
Staff costs				
Salaries	£213,585	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 £28,688 per year.	£309,333	Based on approximately 12.4 WTE staff providing 427 hours of support per week plus 1 waking night staff member (2 additional WTEs to cover the full week). There is also a full-time manager earning £35,860 per year plus one additional deputy manager.
Training	£6,393		£6,926	
Staff overheads	£7,352		£21,737	
Capital costs				
Building	£23,087	The purchase price of the building was £610,760. This has been annuitised over 60 years at 3.5 per cent, declining to 3 per cent after 30 years.	£32,321	The purchase price of the building was £855,065. This has been annuitised over 60 years at 3.5 per cent, declining to 3 per cent after 30 years.
Equipment	£9,234	Major adaptations cost £244,304. This amount has been annuitised over 60 years at 3.5 per cent, declining to 3 per cent after 30 years.	£18,469	Major adaptations cost £488,608. This amount has been annuitised over 60 years at 3.5 per cent, declining to 3 per cent after 30 years.
Living expenses				
Personal living expenses	£26,794	Living expenses per person per week cover £49 food, £49 travel, £25 service user activities and £7 for holidays.	£48,485	Living expenses per person per week cover £49 food, £49 travel, £25 service user activities and £7 for holidays.
Utilities	£7,656		£15,311	
Direct overheads				
Maintenance/service	£29,857	Includes the costs of boiler and other equipment maintenance, cleaning materials, maintenance staff costs, and damages and breakages.	£49,507	Includes the costs of boiler and other equipment maintenance, cleaning materials, maintenance staff costs, and damages and breakages.
Indirect overheads				
Head office costs	£18,647	Head office costs are charged at £88 per person per week, on the basis of full occupancy.	£37,294	Head office costs are charged at £89 per person per week, on the basis of full occupancy.
Total cost per year	£342,607		£539,386	
Total cost per person per year	£85,652		£67,423	
Total cost per person per week	£1,641		£1,292	

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

<sup>2</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

### 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>

<b>Costs and unit estimation</b>	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)	
<b>Income</b>	<b>Per person fee/cost per week (including oncosts)</b>	<b>2 residents Total per year</b>	<b>Per person fee/cost per week (including oncosts)</b>	<b>3 residents Total per year</b>
<b>INCOME</b>				
Fees	£936	£97,348	£936	£146,022
<b>COSTS</b>				
Direct staff costs				
Senior support staff	£218	£22,671	£273	£42,757
Support staff	£372	£38,779	£302	£47,231
<b>Sub-total</b>	<b>£590</b>	<b>£61,450</b>	<b>£576</b>	<b>£89,988</b>
Waking nights Sleep-in staff	£113	£11,222	£72	£11,222
Manager	£40	£4,070	£92	£14,496
<b>Sub-total</b>	<b>£153</b>	<b>£15,292</b>	<b>£164</b>	<b>£25,718</b>
Recruitment	£5	£515	£5	£746
Training	£12	£1,336	£12	£2,056
Other staff overheads	£16	£1,709	£20	£3,004
<b>Total staff support costs</b>	<b>£776</b>	<b>£80,302</b>	<b>£777</b>	<b>£121,512</b>
<b>Management costs-area, division, central</b>	<b>£121</b>	<b>£13,276</b>	<b>£128</b>	<b>£20,101</b>

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

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

This schema was prepared in 2015, in collaboration with three 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. Costs have been updated using the PSS inflators and the Retail Price Index.

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 the associated costs.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£44,933 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	£6,401 per client year	Employer's national insurance contribution plus employer's contribution to superannuation.
C. Direct overheads Management and supervision	£9,635 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	£11,035 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	£12,754 per client year	Indirect overheads include general management and support services such as finance and human resource departments. On average, these costs comprised 33 per cent of direct care salary costs.
E. Personal living expenses	£3,899 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	£23,752 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 2015/2016</b>		
Average annual cost per client (excluding day care) £88,657; average weekly cost per client £1,699. Average annual cost per client (including day care, ratio one member of staff for every two clients attending) £112,409; average weekly cost per client £2,162.		



## **5. Services for adults requiring physical support**

5.1 Local authority own-provision care homes for adults requiring physical support

5.2 Voluntary, private and independent sector care homes for adults requiring physical support

5.3 Day care for adults requiring physical support

5.4 Home care for adults requiring physical support



## 5.1 Local authority own-provision care homes for adults requiring physical support

This table uses the ASC-FR data return (ASC-FR) for 2014/15,<sup>1</sup> which has been updated using the PSS pay & prices inflator. For residents age 65 and over, the mean cost establishment cost is £893 and the median cost is £927.

Costs and unit estimation	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£139 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, declining to 3 per cent after 30 years. (See Preface for more information.)
B. Land costs	£16 per resident week	Land costs have been based on research carried out by the Valuation Office Agency. <sup>3</sup> Land costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. (See Preface for more information.)
C. Total local authority expenditure (minus capital)	£ 834 per resident week	The median revenue weekly cost estimate (£834) for adults requiring physical support 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 £1,031.
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	£24.90 per week	The DWP personal allowance for people in residential care or a nursing home is £24.90. <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	1.65 x A&B 0.71 x C	
<b>Unit costs available 2015/2016</b>		
£989 per resident week establishment costs (includes A to C); £1,014 per resident week (includes A to E). £141 per resident day establishment costs (includes A to C); £145 per resident day (includes A to E).		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds. <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

<sup>2</sup> Building Cost Information Service (2016) *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 (2016) *Types of state and local authority support*, <http://www.payingforcare.org/types-of-state-and-local-authority-support>. [accessed 17 October 2016].

## 5.2 Voluntary and private sector care homes for adults requiring physical support

This table uses the ASC-FR data return (ASC-FR) for 2014/15,<sup>1</sup> which has been updated using the PSS pay & prices inflator. For residents age 65 and over, the mean establishment cost is £513 and the median cost is £494.

Costs and unit estimation	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£139 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, declining to 3 per cent after 30 years. (See Preface for more information.)
B. Land costs	£16 per resident week	Land costs have been based on research carried out by the Valuation Office Agency. <sup>3</sup> Land costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. (See Preface for more information.)
C. Total expenditure (minus capital)	£715 per resident week	The median weekly expenditure (£715) for adults requiring physical support 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 £727.
D. Agency overheads		Social services management and support services (SSMSS) costs are included in ASC-FR expenditure figures so no additional overheads have been added.
Other costs		
E. Personal living expenses	£24.90 per week	The DWP personal allowance for people in residential care or a nursing home is £24.90. <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	1.65 x A&B 1.15 x C	
<b>Unit costs available 2015/2016</b>		
£870 per resident week establishment costs (includes A to C); £895 per resident week (includes A to E). £124 per resident day establishment costs (includes A to C); £128 per resident day (includes A to E).		

<sup>1</sup> NHS Digital (2016) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital, Leeds. <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

<sup>2</sup> Building Cost Information Service (2016) *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 (2016) *Types of state and local authority support*, <http://www.payingforcare.org/types-of-state-and-local-authority-support>. [accessed 17 October 2016].

### 5.3 Day care for adults requiring physical support

As day care is now combined with other expenditure in the ASC-FR data collection (see Preface for more information), 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 £218 per client week and the mean cost was £217 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	2015/2016 value	Notes
Capital costs		
A. Buildings and oncosts	£6.00 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, declining to 3 per cent after 30 years. (See Preface for more information.) <sup>3</sup>
B. Land	£1.30 per client attendance	Land costs have been based on research carried out by the Valuation Office Agency. <sup>4</sup> Land costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
C. Other capital		
Revenue costs		
D. Salary and other revenue costs	£80 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 £80 and the mean cost per attendance is £79. 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	1.57 x A&B 1.31 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 2015/2016</b>		
£87 per client attendance (includes A to D); £18 per client hour; £64 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 (2016) *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 for adults requiring physical support

In past editions of this volume, we have taken information from the PSS expenditure return. Unit costs for home care have been based on the total expenditure on home care services divided by the total number of hours delivered, but this is not reflective of the actual hourly rate paid to providers of external home care services.

The new ASC-FR return (see Preface for more information) currently provides two rates for home care: one for the hourly rate of in-house home care provision and one for the average hourly rate paid to external providers of home care services. The rates should be based on the cost of an hour of personal care. NHS Digital do not analyse the rate further by primary support reason or age group.<sup>1</sup>

For home care, the average standard hourly rate was £30.75 for services provided in-house, compared to £14.28 for provision by external providers.<sup>1</sup>

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

<sup>1</sup> NHS Digital (2015) *Adult Social Care Finance Return (ASC-FR) Guidance*, NHS Digital <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

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

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## 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 2015/2016 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 2014/15.<sup>1</sup>

	National average	Lower quartile	Upper quartile
<b>COMMUNITY SERVICES, average cost per one-to-one session (group)</b>			
Therapy services			
Physiotherapy	£87 (£94)	£55 (£65)	£128 (£107)
Occupational therapy	£135 (£138)	£106 (£95)	£195 (£157)
Speech therapy services	£89 (£95)	£67 (£74)	£109 (£117)
<b>Community health services – nursing, average cost per care contact/group session</b>			
School-based children's health core (other) services – group multi professional	£62 (£50)	£44 (£41)	£65 (£41)
School-based children's health core (other) services – group single professional	£46 (£53)	£35 (£5)	£64 (£82)
School-based children's health core (other) services – one to one	£54 (£54)	£34 (£36)	£62 (£66)
<b>Elective inpatient (paediatrics), average cost per stay</b>	£2,990	£1,503	£3,948
<b>OUTPATIENT ATTENDANCES, average cost per attendance</b>			
Paediatrics	£199		
Paediatric consultant-led outpatient attendances	£210		
Paediatric non-consultant-led outpatient attendances	£157		
<b>SPECIALIST PALLIATIVE CARE, average cost per bed day</b>			
Hospital specialist palliative care support	£289	£100	£137
<b>CHILD AND ADOLESCENT MENTAL HEALTH SERVICES, average cost per patient contact</b>			
Mental health specialist teams	£217	£182	£219
Day care facilities – regular attendances	£318	£223	£389
Admitted patients (excluding psychiatric intensive care)	£680	£521	£735
Community contacts	£241	£206	£264
Community contacts, crisis resolution	£199	£166	£184
Outpatient attendances	£306	£244	£343

<sup>1</sup> Department of Health (2016) *NHS reference costs 2014-2015*, <https://www.gov.uk/government/publications/nhs-reference-costs-2014-to-2015> [accessed 6 September 2016].

## 6.2 Care home for children — local authority own provision

This table presents the costs per resident week for a local authority own-provision home for children. Establishment costs are £3,421 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 -](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/436452/RR451_-_Children_s_residential_care_report.pdf)

[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	2015/2016 value	Notes
Capital costs (A & B)		
A. Buildings	£163 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 have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
B. Land	£19 per resident week	Land costs researched for PSSRU by the Valuation Office Agency <sup>2</sup> and annuitised over 60 years at a discount rate of 3.5 per cent declining to 3 per cent after 30 years.
C. Total local authority expenditure (minus capital)	£3,239 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 2014/15. <sup>3</sup>  The cost for a child for a week in an own-provision residential care home was £3,239. This was calculated by dividing total current expenditure for local authority (LA) provision children's care homes (£283,428,285) by the number of LA provision care days (own provision and other local authority provision) for children in residential care (residential care homes: R1; children in secure units: K1; children in homes and hostels: K2; residential schools: S1) (580,256) to give a cost of £488 per day or £3,419 per week, and £3,422 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 £3,239. Local authorities reporting costs of less than £400 per week (£57 per day) (8 local authorities) or more than £14,000 per week (£2,000 per day) (13 local authorities) have been excluded.
D. Agency overheads		No current information available. See previous editions of this volume for sources of information.
E. Other costs	£12.70 per resident week for school support	Using Section 251 data <sup>3</sup> and dividing total expenditure for 'education of looked-after children' (£38,151,709) by total children looked-after aged 5 and over (57,770), <sup>5</sup> a cost per child per year for education was calculated (£660). This cost was uprated using the PSS pay & prices inflator (£661) or £12.70 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	86 per cent	Occupancy rates in local authority run homes was 86 per cent in 2014. <sup>6</sup>
London multiplier	1.61 x (A to B) 1.78 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 2015/2016</b>		
£3,421 establishment costs per resident week (includes A to D); £489 establishment costs per resident day (includes A to D); £3,435 per resident week (includes A to E); £491 per resident day (includes A to E).		

<sup>1</sup> Building Cost Information Service (2016) *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 (2015) *Underlying data of the section 251 data archive: outturn summary 2014-15*, Department for Education, London. <https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data> [accessed 26 April 2015].

<sup>4</sup> Department for Education (2016) *Children looked-after in England including adoption and care leavers, year ending 31 March 2015, 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> CoramBaaF (2016) *Statistics:England*, <http://www.corambaaf.org.uk/res/statengland>. [accessed 1 November 2016].

<sup>6</sup> Department for Education (2015) *A census of the children's homes workforce*, Research report, Department for Education, London. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/391529/RR437 - Children s homes workforce census .pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/391529/RR437_-_Children_s_homes_workforce_census.pdf).

## 6.3 Voluntary and private sector care homes for children

This table presents the costs per resident week for an independent sector care home for children. Establishment costs are £2,777 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	2015/2016 value	Notes
Capital costs (A & B)		
A. Buildings	£163 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 have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
B. Land	£19 per resident week	Land costs researched for PSSRU by the Valuation Office Agency <sup>2</sup> and annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
C. Total expenditure (minus capital)	£2,594 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 2014/15.  The cost for a child for a week in a non-statutory residential care home for children was £2,594. This was calculated by dividing total expenditure for other provision children's care homes (private, voluntary/third sector plus other public provision, eg. by a PCT) (£632,591,078) 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) (1,725,571) to give a cost of £397 per day (£2,777 per week, and £2,780 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 £2,594. Local authorities reporting costs of less than £400 per week (£57 per day) (2 local authorities) or more than £14,000 per week (£2,000 per day) have been excluded (no local authorities had costs in this category).
D. Agency overheads		No current information available. See previous editions of this volume for sources of information.
E. Other costs External services	£12.70 per resident week for school support	Using Section 251 data <sup>3</sup> and dividing total expenditure for 'education of looked-after children' (£38,151,709) by total children looked-after aged 5 and over (57,770), <sup>4</sup> a cost per child per year for education was calculated (£660). This cost was uprated using the PSS pay & prices inflator (£661) or £12.70 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	79 per cent	Occupancy rates in independent sector homes was 79 per cent in 2014. <sup>5</sup>
London multiplier	1.61 (A to B) 1.07 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 2015/2016</b>		
£2,777 establishment costs per resident week (includes A to D); £397 establishment costs per resident day (includes A to D) £2,789 per resident week (includes A to E); £399 per resident day (includes A to E).		

<sup>1</sup> Building Cost Information Service (2016) *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 (2015) *Underlying data of the section 251 data archive: outturn summary 2014-15*, Department for Education, London. <https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data> [accessed 26 April 2015].

<sup>4</sup> CoramBAAF (2016) *Statistics: England*, <http://www.corambaaf.org.uk/res/statengland>. [accessed 1 November 2016].

<sup>5</sup> Department for Education (2015) *A census of the children's homes workforce*, Research report, Department for Education, London. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/391529/RR437 - Children s homes workforce census .pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/391529/RR437_-_Children_s_homes_workforce_census_.pdf).

## 6.4 Local authority own-provision foster care for children

This table provides the cost of foster care for children. For information on multi-dimensional treatment foster care, see table 6.9 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	2015/2016 value	Notes
A. Boarding out allowances, administration and the costs of social worker and other support staff who support foster carers	£579 per child per week	<p>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 £1,540,322,446<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) (18,644,361)<sup>4</sup>, the cost per day for all foster care for 2015/16 was £83 (£578 per week and £579 when uprated using the Personal Social Services (PSS) pay &amp; prices inflator). One authority reported expenditure but no care days and was deleted from the analysis.</p> <p>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 £813,114,948 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) (12,261,072)<sup>4</sup>, the cost per day for 2015/16 was £66 (£464 per week and £465 per week when uprated to 2015/16 prices using the PSS pay &amp; prices inflator). Local authorities reporting an average cost of less than £50 (4 local authorities) or expenditure but no own provision or other public provision care days (2 local authorities) have been excluded from this analysis).</p>
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	£12.70 per child per week for school support	Using Section 251 data <sup>3</sup> and dividing total expenditure for 'education of looked-after children' (£38,151,709) by total children looked-after aged 5 and over (57,770), <sup>6</sup> a cost per child per year for education was calculated (£660). This cost was uprated using the PSS pay & prices inflator (£661) or £12.70 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	1.13 x A	Relative London costs are drawn from the same source as the base data. <sup>3</sup>
<b>Unit costs available 2015/2016</b>		
£591 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 (2015) *Underlying data of the section 251 data archive: outturn summary 2014-15*, Department for Education, London. <https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data> [accessed 26 April 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.

<sup>6</sup> CoramBaaF (2016) Statistics:England, <http://www.corambaaf.org.uk/res/statengland>. [accessed 1 November 2016].

## 6.5 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	2015/2016 value	Notes
A. Wages/salary	£290,105 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	£70,740 per year	Employer's national insurance plus 14 per cent of salary for employer's contribution to superannuation.
C. Overheads Staff costs	£20,583 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 per cent of salary costs. <sup>2</sup>
D. Travel costs	£25,266 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 2015/2016</b>		
Cost per week £7,794; cost per hour £46.39 (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].

<sup>2</sup> Note these overhead costs are lower than used elsewhere in this volume.

## 6.6 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 2015/2016	Notes
A. Salary plus oncosts	£46,936 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		Taken from the 2013/14 financial accounts for 10 community trusts.
Management, administration and estates staff.	£11,499 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	£17,930 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	£4,583 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, declining to 3 per cent at 30 years.
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 2015/2016</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.nhs-careers.nhs.uk/working-in-the-nhs/pay-and-benefits/> [accessed 9 October 2015]. Working days and sickness absence rates as reported in NHS Digital (2015) *Sickness absence rates in the NHS: April 2009 – April 2015*, NHS Digital, Leeds.

## 6.7 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	2015/2016 value	Notes
A. Wages/salary	£43,271 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	£5,559 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.
Management, administrative and estates staff	£11,817 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	£21,046 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	£4,229 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, declining to 3 per cent after 30 years. <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	50 per cent of time is spent on face-to-face contact and 50 per cent on other activities. <sup>6</sup>
Length of contact	55 minutes	Average duration of CBT session. <sup>6</sup>
<b>Unit costs available 2015/2016</b>		
£97 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> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

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

<sup>4</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</sup> Contracted hours are taken from NHS Careers (2016) *Pay and benefits*, National Health Service, London, <https://www.healthcareers.nhs.uk/about/careers-nhs/nhs-pay-and-benefits/> [accessed 2 November 2016]. Working days and sickness absence rates as reported NHS Digital (2015) *Sickness absence rates in the NHS: April 2010 – April 2016*, NHS Digital, Leeds.

<sup>6</sup> Byford, S., Barrett, B., Roberts, C., Wilkinson, P., Dubicka, B., Kelvin, R.G., White, L., Ford, C., Breen, S. & Goodyer, I. (2007) Cost-effectiveness of selective serotonin reuptake inhibitors and routine specialist care with and without cognitive behavioural therapy in adolescents with major depression, *British Journal of Psychiatry*, 191, 6, 521-527.

## 6.8 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 begins with information from a routine source: Section 251 of the Department of Education's financial data collection. It also includes findings from a survey conducted in 2016 to inform the Centre for Child and Family Research's (CCFR's) initial work to extend the Cost Calculator for Children's Services (CCFCS) to include adoption services in England. All costs have been updated using appropriate inflators.

### Local authority expenditure – Section 251

Based on the Section 251 outturn account for 2015/2016, 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 29 September 2016, 7,520 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 5,360 looked-after children adopted during the year ending 31 March 2015.<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 (2016) 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 2015/2016
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 (2015) *Underlying data of the section 251 data archive: outturn summary 2014-15*, Department for Education, London. <https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data> [accessed 26 April 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 (2016) *Children looked-after in England including adoption*, year ending 29 September 2016, see [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/556331/SFR41\\_2016\\_Text.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/556331/SFR41_2016_Text.pdf) [accessed 2 November 2016].

<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 ARI, 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.

This year, we have drawn from new research carried out by the Centre for Child and Family Research (CCFR) which was commissioned by Coram Family, as part of one of the DfE's Innovation Programme projects (<https://www.gov.uk/government/publications/childrens-services-innovation-programme>). The remit was to undertake research and development to extend the CCFCS and its underlying conceptual approach to adoption services in England. To calculate the costs, a bottom-up costing methodology is being applied, involving the linking of social care time-use and activity data with information about salaries, overheads, and other types of expenditure.

The early stages of this ongoing project involved an online survey of 14 adoption agencies between March and July 2016. Eight local authority agencies and six VAAs participated. Two-hundred and seven personnel provided valid responses. Time-use data were collected from social workers, team managers, agency decision makers, panel chairs and members, and business support staff and administrators involved in the adoption process.

The average unit costs of five adoption sub-processes are shown in Table 2, for 'standard' cases and 'difficult to place'<sup>2</sup> cases supported by local authority, voluntary and all adoption agencies.

The sub-processes for which costs are provided begin with the child's journey from care planning, and the adopters' journey from the decision to adopt, through to the child's placement. The average costs for assessments for adoption support are also provided. Table 2 does not include all the costs associated with adoption. It excludes, for instance, staff travel; group training and preparation for prospective adopters; group-based family-finding events such as activity days; and the provision of adoption allowances and adoption support services. CCFR's ongoing unit costing work involves linking the process unit costs detailed in Table 2 with these other types of expenditure to provide total costs of adoption. In late 2016, CCFR will also be administering the time-use survey to additional local authorities and VAAs in the North Yorkshire and Humberside region to verify the figures from the initial survey and improve confidence in the data.

<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> Cases were classified as 'difficult to place' if the child had a least one of the following characteristics – they were part of a sibling group; from a black and minority ethnic background; living with a disability; were affected by a health condition, and/or were over four-years old.

**Table 2: Average costs (£) of adoption processes at 2015/2016 values**

Adoption sub-processes	Local authority adoption agencies		Voluntary adoption agencies		All adoption agencies	
	'Standard' case	'Difficult to place' case	'Standard' case	'Difficult to place' case	'Standard' case	'Difficult to place' case
Adoption planning	£1960	£2006	£1471	£1410	£1910	£1864
Preparation, assessment of adopters	£3894	£3251	£3520	£4198	£3711	£3970
Adoption panel	£1722	£1278	£810	£1534	£1480	£1460
Linking & matching	£3491	£3471	£1352	£5042	£2437	£4525
Placement of the child	£1714	£1823	£656	£2225	£1627	£2054
Assessment for adoption support	£2489	£3025	£1606	£3013	£1964	£3428

### Helping birth families

A study undertaken by Neil & colleagues (2010)<sup>1</sup> and commissioned by the DfE aimed to estimate the cost of providing support services to birth relatives over a 12-month period. 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 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 updated 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 £580 (range £0 to £5,183). 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://webarchive.nationalarchives.gov.uk/20130123124929/http://www.education.gov.uk/childrenandyoungpeople/families/adoption/a00212027/>.

### Supporting direct contact after adoption

A study undertaken by Neil & colleagues (2010)<sup>2</sup> explored services provided to support post-adoption contact in 'complex' cases, i.e. direct contact where agencies had an ongoing role. 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 £1,135 (range £0-£4,602). On average, birth relatives used contact support services 8.9 times over a 12-month period, at a mean total cost of £860 (range £0-£2,253).

<sup>1</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].

<sup>2</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].

## 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 Statutory Guidance on Adoption 2013 (Department of Health, 2013; 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>3</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 £7,478 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	£2,458	£869	£6,619
Health care	£534	£0	£2,058
Education support	£11	£0	£121
Specialist services	£117	£0	£1,357
<b>Total cost of services</b>	<b>£3,120</b>	<b>£1,076</b>	<b>£6,883</b>
Financial support	£4,358	£0	£23,363
<b>Total cost (services and financial support)</b>	<b>£7,478</b>	<b>£1,449</b>	<b>£24,439</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>4</sup>

Another study funded through the ARI reported costs of £3,407 (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>5</sup> Social work was at the heart of their 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> Department of Education (2013) Statutory guidance on adoption, For local authorities, voluntary adoption agencies and adoption support agencies, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/270100/adoption\\_statutory\\_guidance\\_2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/270100/adoption_statutory_guidance_2013.pdf) [accessed 30 November 2016].

<sup>2</sup> Bonin, E., Beecham, J., Dance, C. & Farmer, E. (2013) Support for adoption: the first six months, *British Journal of Social Workers*, [www.basw.co.uk/social-work-careers/](http://www.basw.co.uk/social-work-careers/)

<sup>3</sup> Bonin, E., Beecham, J., Dance, C. & Farmer, E. (2013) Support for adoption: the first six months, *British Journal of Social Workers*, [www.basw.co.uk/social-work-careers/](http://www.basw.co.uk/social-work-careers/)

<sup>4</sup> Selwyn, J., Sempik, J., Thurston, P. & Wijedasa, D. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol.

<sup>5</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].

## 6.9 Multi-dimensional treatment foster care (MTFC)

Multi-dimensional 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 multi-disciplinary 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 multi-dimensional treatment foster care<sup>1,2</sup> builds on a previous study that calculated unit costs for eight social care processes.<sup>3</sup> 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 2015/2016 prices using the PSS pay & prices inflators.

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

Process number	MTFC cost per child (2015/2016 prices)
Process one: decision to place and finding first MTFC placement	£10,134
Process two: care planning	£260
Process three: maintaining the placement (per month)	£7,664
Process four: leaving care/accommodation	£504
Process five: finding subsequent MTFC placement	£9,419
Process six: review	£716
Process seven: legal process	£5,071
Process eight: transition to leaving care services	£2,247

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

Process number	LA foster care in LA area (2015/2016 prices)	Independent sector foster care in LA area (2015/2016 prices)	Independent sector residential in LA area (2015/2016 prices)
Process one	£1,268	£1,800	£1,598
Process two	£260	£260	£260
Process three	£3,972	£5,744	£11,013
Process four	£504	£504	£504
Process five	£568	£1,133	£1,156
Process six	£861	£861	£861
Process seven	£5,071	£5,071	£5,071
Process eight	£2,247	£2,247	£2,247

<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.

## 6.10 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 in one authority and discussed 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 activity times for each personnel type involved in the three panels are shown in the table below.

**Table 1 Activity times for three types of decision-making 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)	£50
Family support worker	£32
Social worker	£46
Team manager	£50
Administration	£30

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	£87				£145	£232
Short-breaks panel	£119	£66		£140		£325
Joint commissioning panel	£44	£74	£87	£100		£305

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

## 6.11 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 (adapted from Farmer et al, 2011).<sup>3</sup> 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 2015/2016 prices, the weighted average cost was £5,843 per case.

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>; ` 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	2015/2016 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).	£9,638	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	£1,667	80 per cent of parents receive parenting support, fortnightly, for one year (Farmer et al., 2011). <sup>3</sup> 45 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>	£3,928	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>	£2,463	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>	£1,226	Comprises ongoing support as an open Child in Need case for 6 months at a low level.
<b>Unit costs available 2015/2016</b>		
£5,843 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. & McDermid, S. (2012) *Understanding costs and outcomes in child welfare services*, Jessica Kingsley Publishers, London.

## 6.12 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 and costs have been updated to current prices using the appropriate inflators.

**Table 1 Short break service costs**

Service type	Unit	Average cost 2015/2016 value		Range 2015/2016 value
		Mean cost	Median cost	
Residential	Per child per night (24-hour period)	£290	£318	£77-£447
Family-based overnight	Per child per night (24-hour period)	£188	£162	£155-£249
Day care	Per child per session (8 hours)	£144	£134	£109-£226
Home support	Per family per hour	£24	£24	£19-£28
Home sitting	Per family per hour	£21	£21	£12-£29
General groups	Per session	£367	£419	£107-£678
Afterschool clubs	Per session	£309	£300	£264-£365
Weekend clubs	Per session	£343	£344	£327-£357
Activity holidays	Per child per break	£1,415	£914	£125 <sup>a</sup> -£4,082 <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 2015/2016 value	London cost 2015/2016 value
<b>Referral and assessment processes</b>		
Local Core Offer eligibility models <sup>4</sup>	Not available	£13
Common Assessment Framework	£206	Not available
Initial assessment	£370	£339
Core assessment	£557	£783
Resource panels for short-break services <sup>5</sup>	£105	£57
<b>Ongoing support</b>		
Ongoing support	£84	£109
Reviews	£213	£288

<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.

## 6.13 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 2015/2016 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	£139,669	£11,987	£71,923	£69,685
Area two	£108,862	£7,493	£44,958	£22,845
Area three	£314,756	£18,158	£217,900	£153,011
Area four	£101,037*	£16,725	£66,900	£83,191
Area five	£118,449	£9,953	£59,719	Data not available
Area six	£205,081	£17,382	£69,528	Data not available
<b>Average cost</b>	<b>£164,642</b>	<b>£13,617</b>	<b>£88,488</b>	<b>£82,183</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.

## 6.14 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, is £1,233 per participant. All costs have been updated to 2015/2016 using the appropriate inflators.

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

	Median	Mean	Low	High
Total practitioner cost (includes time in session, preparation and supervision time)	£6,456	£6,291	£1,210	£11,041
Venue hire	£986	£933	£563	£1,197
Food and refreshment	£514	£487	£294	£624
Childcare	£599	£532	£205	£727
Translation services	£671	£596	£230	£814
Materials	£153	£146	£115	£160
Total cost per programme for training, supervision and materials	£9,379	£8,986	£2,618	£14,565
<b>Total per person assuming 10 per group</b>	<b>£938</b>	<b>£899</b>	<b>£262</b>	<b>£1,457</b>
Total costs of practitioners' training time and fees	£2,055	£2,369	£1,448	£3,920
Training/100 people (assuming 10 participants per group and 10 sessions delivered)	£21	£24	£14	£39
<b>Per person estimate including a component for training</b>	<b>£958</b>	<b>£922</b>	<b>£276</b>	<b>£1,496</b>
Hours of supervision needed x hourly cost of minimum recommended level of supervisor	£499	£499	£273	£724
Per person supervision estimate assuming: 10 per group; cost does not depend on number of practitioners; nor the number of programmes run at once	£50	£50	£27	£72
<b>Per person per programme estimate including a component for training and supervisor cost</b>	<b>£1,008</b>	<b>£972</b>	<b>£304</b>	<b>£1,568</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.

### 6.14.2 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	£1,909	£2,718	£760	£5,521
Total food	£51	£39	£0	£62
Childcare	£60	£43	£0	£72
Translation	£67	£48	£0	£82
Materials	£15	£12	£1	£16
<b>Total costs (including preparation, supervision, materials etc.)</b>	<b>£2,102</b>	<b>£2,860</b>	<b>£761</b>	<b>£5,753</b>
Training costs (lead practitioner)	£701	£686	£500	£876
Training fees	£654	£884	£146	£2,168
Total costs of lead practitioner's training time and fees	£1,354	£1,570	£646	£3,045
Per person training component (assuming 50 deliveries per training)	£27	£31	£13	£61
<b>Total including training component</b>	<b>£2,129</b>	<b>£2,891</b>	<b>£774</b>	<b>£5,814</b>
Hours of supervision needed x hourly cost of minimum recommended level of supervisor	£384	£452	£256	£680
Per person supervision cost 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>£2,168</b>	<b>£2,937</b>	<b>£800</b>	<b>£5,882</b>

## 6.15 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> £7,885 <b>Programme cost</b> £171 <b>Total</b> £8,056
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 Autistic Support Group 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> £3,994 <b>Programme cost</b> £182 <b>Total</b> £4,176
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> £4,135 <b>Programme cost</b> £241 <b>Total cost</b> £4,376
<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> £3,209 <b>Programme cost</b> £271 <b>Total cost</b> £3,480
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> £1,911 <b>Programme cost</b> £118 <b>Total cost</b> £2,029

<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.

## 6.16 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 (Ofsted, 2013). The analysis of resources needed for the IRO service was conducted 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	2015/2016 value	Notes
A. Salary	£40,043 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 as reported in this volume.
B. Salary oncosts	£12,422 per year	Employer's national insurance is included plus 20 per cent of salary for employer's contribution to superannuation. <sup>4</sup>
C. Qualifications	£27,481 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>5</sup> Current cost information is drawn from research by Curtis et al. (2011). <sup>6</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	£15,215 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	£8,394 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>7</sup>
F. Capital overheads	£2,641 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>8,9</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
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>10</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 8.5 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. <sup>11</sup> Unit costs are based on 1,513 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 1.59	Allows for higher costs associated with London compared to the national average cost. <sup>3,9,10</sup>
<b>Unit costs available 2015/2016 (costs including qualifications given in brackets)</b>		
£52 (£70) per hour; £442 (£595) per review; £494 (£665) (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> Thurley, D. (2011) *Local government pension scheme, 2010 onwards*, House of Commons, London.

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

<sup>7</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>8</sup> Building Cost Information Service (2016) *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> 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>11</sup> Local Government Association (2016) *Local government workforce survey 2014/15*, [http://www.local.gov.uk/workforce/-/journal\\_content/56/10180/7843334/ARTICLE](http://www.local.gov.uk/workforce/-/journal_content/56/10180/7843334/ARTICLE) [accessed 20 October 2016].

## 6.17 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 full-day day workshops 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 uprated using the appropriate inflators.

Costs and unit estimation	2015/2016 value	Notes
<b>Start-up costs</b>		
Group leader training	£1,461 per year	Based on the cost of £244 per person per day for a training course requiring three days. 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	£1,516 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	£13,396 per year	Based on the cost of £559 per day (includes salaries and overheads) for two group leaders for six days.
<b>Teachers attending programme</b>		
Supply cover	£9,743 per year	Supply cover provided for the 10 teachers attending the course at £162 per day for 6 days.
<b>Incredible Years professional</b>		
Supervision	£1,583 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	£356 per year	Books and handouts at £36 per teacher for 10 teachers
Miscellaneous costs	£51 per annum £370 per annum	Incentives and materials Lunch and refreshments are based on a cost of £61 per session.
Certification/accreditation	£274 per annum	This promotes fidelity to the programme
<b>Unit Costs for 2015/2016</b>		
Start-up costs £2,938 (excluding airfare and accommodation for Incredible Years trainer).		
Cost per programme for 10 teachers excluding start-up costs £25,773.		
Cost per teacher excluding start-up costs £2,577.		

<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 services



## 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 2015/2016 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	£3,653	£2,472	£4,088
Elective inpatient stays (inc. carbon impact 760 kgCO <sub>2</sub> e) <sup>2</sup>	£3,685		
Non-elective inpatient stays (long stays)	£2,900	£2,111	£3,404
Non-elective inpatient stays (long stays) (inc. carbon 603 kgCO <sub>2</sub> e)	£2,926		
Non-elective inpatient stays (short stays)	£616	£490	£855
Non-elective inpatient stays (short stays) (inc. carbon 128 kgCO <sub>2</sub> e)	£621		
<b>Day cases HRG data (finished consultant episodes)</b>			
Weighted average of all stays	£713	£489	£847
Weighted average of all stays (inc. carbon 148 kgCO <sub>2</sub> e)	£719		
<b>Outpatient attendances<sup>3</sup></b>			
Weighted average of all outpatient attendances	£135		
Weighted average of all outpatient attendances (inc. carbon 28 kgCO <sub>2</sub> e)	£136		
<b>PALLIATIVE CARE</b>			
Inpatient – specialist palliative care (adults only), average cost per bed day	£397	£289	£540
Inpatient – hospital specialist palliative care support (adults and children)	£108	£51	£86
Outpatient – medical specialist palliative care attendance (adults and children)	£156	£105	£154
Outpatient – non-medical specialist palliative care attendance (adults and children)	£98	£57	£164
<b>AMBULANCE SERVICES (Weighted average of attendances)</b>			
Calls	£7	£6	£8
Hear and treat and refer	£36	£27	£44
See and treat and refer (including carbon 30 kgCO <sub>2</sub> e)	£184 (£185)	£151	£202
See and treat and convey (including carbon 39 kgCO <sub>2</sub> e)	£238 (£240)	£208	£262
All Ambulance Services	£98	£85	£108

<sup>1</sup> Department of Health (2016) *NHS reference costs 2014-2015*, <https://www.gov.uk/government/publications/nhs-reference-costs-2014-to-2015> [accessed 6 September 2016].

<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.

<sup>3</sup> See also Grant, P. (2015) How much does a diabetes out-patient appointment actually cost? An argument for PLICS, *Journal of Health Organisation and Management*, 29, 2, 2015. <http://www.emeraldinsight.com/doi/pdfplus/10.1108/JHOM-01-2012-0005>

## 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). 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<sup>2</sup> suggests that powered wheelchairs range from £1000-£7000 and self- or attendant-propelled wheelchairs range from £100-£1,200.

Type of chair	Total value 2015/2016	Annual cost 2015/2016	Notes
Capital costs			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.
Self- or attendant-propelled	£287	£64	
Active user	£716	£160	
Powered	£1,432	£321	
Revenue costs			Revenue costs exclude therapists' time but include the staff costs of maintenance, and all costs for pressure relief. The cost of reconditioning has not been included in the cost of maintenance.
Maintenance			
- non-powered		£31	
- powered		£122	
Agency overheads			No estimate of management overhead costs is available. They are likely to be minimal.
<b>Unit costs available 2015/2016</b>			
£95 per self or attendant propelled chair per year; £191 per active user per chair per year; £443 per powered chair per year.			

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

<sup>2</sup> UK wheelchairs- <https://www.uk-wheelchairs.co.uk/>

### 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.

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. In the absence of data and 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 updated from 2015/2016 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	£2,570	£12,338	£4,782 (£4,098)	£575 (£493)
Stair lift (straight)	21	£1,080	£2,908	£1,927 (£1,979)	£232 (£238)
Stair lift (more complex)	7	£2,365	£6,799	£4,693 (£4,730)	£564 (£569)
Convert room for downstairs WC /washroom	7	£2,879	£22,620	£10,134 (£10,150)	£1,218 (£1,220)
Build downstairs extension for WC/washroom	5	£12,338	£30,846	£23,199 (£25,705)	£2,788 (£3,090)
Build downstairs extension for bedroom	5	£12,338	£46,269	£27,468 (£26,471)	£3,302 (£3,182)
Build downstairs extension for bedroom and en suite facilities	6	£23,648	£46,269	£34,587 (£32,971)	£4,157 (£3,963)
<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 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 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 2015/2016 prices using the appropriate inflators. Further information on the specific research studies can be found in the reports named above and King's Fund have produced a set of infographics that describe key facts about the public health system and the return on investment for some public health interventions <https://www.kingsfund.org.uk/audio-video/public-health-spending-roi>.

### 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		£181	£688		£869
Workplace intervention	£585				£585
Physical activity education and workplace visit		£181	£688	£52	£921

### Alcohol 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 £36 for a GP (see tables 10.2 and 10.3c of this publication).

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

**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 £86 and £189 per person.

### Reducing smoking and the harms from smoking

The review suggests that there is strong evidence that **mass media campaigns** are effective for both young and adult populations and cost between £0.30 and £2.06 per person. Estimates of cost are higher when the unit receiving the intervention is defined as those potentially exposed to the campaign (£26-£49).

**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. There is economic

<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>

evidence from the UK on the cost of NRT (£47-£164 per person), bupriopion (£90-£96 per person), and combinations of NRT and bupriopion (£180-£186 per person).

**A ten-minute opportunistic brief advice session** for smoking costs £36 for a GP and £8 for a practice nurse (see tables 10.2 and 10.3c 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, which 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 influencing 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	£209-£9214	9	£48-£314
Workplaces	2	£230-£243	3	£30-£114
Community venues (inc. pharmacies)	6	£112-£473	4	£70-£1,235

## 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 programme of community-based 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 £37.

<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 intensive 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 serves 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	2015/2016 value	Notes
A. Wages/salary	£285,193 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	£62,266 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications		HCAs require 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 £755. Staff have continued to access in-house development training, statutory and mandatory annual training.
E. Overheads		
Service co-ordinator and day to day co-ordinator	£40,831 per year	Based on information provided by the hospice, supervision was provided by an Agenda for Change band 8 nurse (40% of WTE) plus a day to day coordinator (80% of WTE Agenda for Change band 3). Salary and oncosts included in this calculation.
Management, administration and estates staff	£17,373 per year	Based on information provided by the hospice, estates and indirect care staff are assumed to be approximately 5 per cent of direct care salary costs.
Non-staff	£149,755 per year	Taken from <i>NHS foundation trusts accounts: consolidated (FTC) files 2014/15</i> . <sup>5</sup> Hospice overheads are broadly similar to those applied to NHS staff. Non-staff costs were 43.1 per cent of direct care salary costs. They include costs to the provider for drugs, 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	£3,882 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, declining to 3 per cent after 30 years.
H. Travel	£123,537 per year	£12.20 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 2015/2016</b>		
Total annual costs £682,837; cost per hour of service £79; average cost per patient (referral) £1,119 (£1,019)		

<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> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>5</sup> Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415>. [accessed 17 October 2016]

<sup>6</sup> Building Cost Information Service (2016) *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

Specialist rehabilitation services<sup>1</sup> 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 (level 2). 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.

### 2015/2016 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 1,000,000-5,000,000 through specialised commissioning arrangements.		
<b>Level 1a</b> - for patients with high physical dependency	£535 (£465 - £613)	£400 (£344 - £440)
<b>Level 1b</b> - mixed dependency	£477 (£429 - £514)	£356 (£305 - £389)
<b>Level 1c</b> - mainly physically stable patients with cognitive/behavioural disabilities. <sup>a</sup>	£637 (£580 - £713)	£480 (£433 - £534)
<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 750,000-1,000,000, 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.		
	£656 (£624 - £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 returning home from care
- 8.5 Support care for children
- 8.6 Young adults with acquired brain injury in the UK
- 8.7 Residential parenting assessments
- 8.8 Acute medical units (patient costs following discharge)
- 8.9 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 updated 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 people with learning disabilities attend 4 times per week. Based on these assumptions, the mean cost per client attendance for older people is £61 per week, and for people with mental health problems (local authority and independent provision) is £32.<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 lasting 4.8 hours is £64.<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. Included were long-term incapacity benefit (£105.35 per week), severe disability (single) benefit (£61.85 per week), attendance allowance (lower/higher rate, £55.10/£82.30 per week) and carer's allowance (£62.10 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., Fernandez, 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> PayingForCare (2016) *Types of state and local authority support*, <http://www.payingforcare.org/types-of-state-and-local-authority-support> [accessed 19 May 2016].

### 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 £287 per week, with 10 per cent incurring costs of less than £130 and 10 per cent more than £570.

Service/need group	Average weekly costs 2015/2016	Number of users	Description
<b>Home care</b>			
Critical	£303	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 £303 compared to £156 for those with moderate needs. The average weekly cost for all 118 service users was £180 (9 hours per week).
Substantial	£156	74 users	
Moderate	£160	26 users	
Average/total	£180	118 users	
<b>Day care</b>			
Critical	£154	4 users	Twelve per cent of the older participants reported the use of day care. The average weekly cost for all 35 users was £73.
Substantial	£98	24 users	
Moderate	£80	7 users	
Average/total	£73	35 users	
<b>Benefits</b>			
Critical	£127	15 users	Thirty-seven per cent reported receiving benefits. In total, the cost of benefits received by critical service users was £127 compared to £99 for moderate service users. The total average weekly cost for all 105 users was £97.
Substantial	£88	66 users	
Moderate	£99	24 users	
Average/total	£97	105 users	
<b>Accommodation</b>			
Critical	£193	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 £169.
Substantial	£159	171 users	
Moderate	£204	71 users	
Average/total	£169	281 users	
<b>Total costs</b>			
Critical	£427	39 users	The average weekly cost for all service users was £287. Support costs for critical service users were 33 per cent higher than costs for moderate service users.
Substantial	£287	171 users	
Moderate	£312	71 users	
Average/total	£287	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 £328 per week, with 10 per cent incurring costs of less than £201 and 10 per cent more than £520.

Service/need group	Average weekly costs 2015/2016	Number of users	Description
<b>Home care</b>			
Critical	£402	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 £402 compared to £277 for those with moderate needs. The average weekly cost for all 77 service users was £391.
Substantial	£395	47 users	
Moderate	£277	2 users	
Average/total	£391	77 users	
<b>Day care</b>			
Critical	£372	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 £61 across the 72 users.
Substantial	£54	51 users	
Moderate	£39	3 users	
Average/total	£61	72 users	
<b>Benefits</b>			
Critical	£145	68 users	Seventy-seven per cent reported receiving benefits. In total, the value of benefits received by critical service users was £144 compared to £151 for moderate service users. The total average weekly cost for all 199 users was £144.
Substantial	£143	119 users	
Moderate	£151	12 users	
Average/total	£144	199 users	
<b>Accommodation</b>			
Critical	£193	76 users	The cost of accommodation for those with critical needs was £193 compared to the cost of those with moderate needs of £70. The average weekly cost for the whole sample of people with learning disabilities was £166.
Substantial	£167	159 users	
Moderate	£70	25 users	
Average/total	£166	260 users	
<b>Total costs</b>			
Critical	£415	76 users	The average weekly cost for all service users was £328.
Substantial	£316	159 users	
Moderate	£173	25 users	
Average/total	£328	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 £475 per week, with 10 per cent incurring costs of less than £210 and 10 per cent incurring costs of more than £520 per week.

Service/need group	Average weekly costs 2015/2016	Number of users	Description
<b>Home care</b>			
Critical	£105	4 users	Seven per cent of people with mental health problems were receiving home care. The average weekly cost for critical users was £105 compared to £80 for moderate users. The average weekly cost for all 10 service users was £180.
Substantial	£257	5 users	
Moderate	£80	1 user	
Average/total	£180	10 users	
<b>Day care</b>			
Critical	£74	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	£71	2 users	
Average/total	£77	20 users	
<b>Benefits</b>			
Critical	£149	17 users	Seventy-seven per cent service users were receiving benefits. In total, the value of benefits received by critical service users was £149 compared to £115 for moderate service users. The total average weekly cost for all 110 users was £150.
Substantial	£162	73 users	
Moderate	£115	20 users	
Average/total	£150	110 users	
<b>Accommodation</b>			
Critical	£209	22 users	The cost of accommodation for those with critical needs was £209 compared to the cost of those with moderate needs of £180. The average weekly cost across all users was £210.
Substantial	£223	96 users	
Moderate	£180	25 users	
Average/total	£210	143 users	
<b>Total costs</b>			
Critical	£340	22 users	The average weekly cost for all service users was £475. Support costs for critical users were 22 per cent higher than costs for moderate service users.
Substantial	£555	96 users	
Moderate	£278	25 users	
Average/total	£475	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 £717 per week, with 10 per cent of service users incurring costs of less than £280 and 10 per cent more than £2,000.

Service/need group	Average weekly costs 2015/2016	Number of users	Description
<b>Home care</b>			
Critical	£386	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 £386 compared to £127 for those with moderate needs. The average weekly cost for all users of home care (176 people) was £294.
Substantial	£286	136 users	
Moderate	£127	9 users	
Average/total	£294	176 users	
<b>Day care</b>			
Critical	£173	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 £184 for all 37 users of day care.
Substantial	£182	27 users	
Moderate	£267	2 users	
Average/total	£184	37 users	
<b>Benefits</b>			
Critical	£133	72 users	Ninety-four per cent of service users were receiving benefits. In total, the cost of benefits received by critical service users was £133 per week compared to £171 for moderate service users. The total average weekly cost for all 297 service users was £183.
Substantial	£182	230 users	
Moderate	£171	17 users	
Average/total	£183	297 users	
<b>Accommodation</b>			
Critical	£804	52 users	The average weekly cost of accommodation for those with critical needs was £804 compared to £253 for those with moderate needs. The average weekly cost was £343.
Substantial	£253	245 users	
Moderate	£253	20 users	
Average/total	£343	317 users	
<b>Total costs</b>			
Critical	£1,282	52 users	The average weekly care package cost for all service users was £717 per week. Support costs for critical users were 26 per cent higher than costs for moderate service users.
Substantial	£611	245 users	
Moderate	£495	20 users	
Average/total	£717	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 uprated 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	£222	1,278	£0-£14,368
Primary care	£874	2,028	£0-£10,831
Inpatient care	£4,163	1,771	£0-£109,561
Outpatient and A&E	£988	1,772	£0-£12,262
<b>People with mental health problems</b>			
Nursing and therapy	£159	180	£0-£3,937
Primary care	£560	344	£0-£2,454
Inpatient care	£4,426	358	£0-£109,561
Outpatient and A&E	£844	358	£0-£6,762
<b>People aged over 75</b>			
Nursing and therapy	£189	226	£0-£4,094
Primary care	£1,118	345	£0-£13,773
Inpatient care	£6,090	275	£0-£78,620
Outpatient and A&E	£1,061	275	£0-£7,064

<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 2015/2016 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 £2,989, equivalent to £498 per month and over £5,978 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 £365 to £7,723 over six months). Box 1 below presents case studies of low- and high-cost cases.

On average, families spent an additional £292 as a result of their child's illness over the six months prior to interview (range £0 to £4,304). 51 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 £317 per family. Mean total costs including all services, family costs and productivity losses were estimated at over £3,598 over six months, equivalent to over £600 per month.

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

	Mean	SD	Total service cost %	Total cost %
Accommodation	£20	£246	0.66	0.55
Hospital-based health services	£358	£524	11.97	9.95
Community health and social care services	£1,229	£1,030	41.12	34.17
Medication	£19	£97	0.65	0.54
Voluntary sector services	£35	£95	1.16	0.96
Education and child care	£1,328	£950	44.44	36.92
<b>Total service costs</b>	<b>£2,989</b>	<b>£1,438</b>	<b>100.00</b>	<b>83.08</b>
Out-of-pocket expenses	£292	£618		8.11
Productivity losses	£317	£693		8.81
<b>Total costs</b>	<b>£3,598</b>	<b>£1,926</b>		<b>100.00</b>

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

##### High cost — £7,723 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 — £366 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)

Research carried out by Knapp and colleagues. (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	£18,423	£26,259	£37,706	-	-	-
Hospital services	-	£1,018	£1,874	-	£1,018	£1,874
Other health and social care services	£691	£8,158	£472	£691	£8,158	£472
Respite care	-	-	-	-	£3,337	£4,351
Special education	-	£10,796	£32,605	-	£10,796	£32,605
Education support	-	£1,398	£1,177	-	£1,398	£1,177
Treatments	-	£21	£18	-	£21	£18
Help from voluntary organisations	-	-	-	-	£996	£113
Benefits	-	-	-	£4,437	£4,724	£4,724
Lost employment (parents)	-	-	-	-	£2,464	£2,464
<b>Total annual cost (excluding benefits)</b>	<b>£19,114</b>	<b>£47,921</b>	<b>£73,853</b>	<b>£691</b>	<b>£28,189</b>	<b>£43,075</b>
<b>Total annual cost (including benefits)</b>	<b>£19,114</b>	<b>£47,921</b>	<b>£73,853</b>	<b>£5,128</b>	<b>£32,912</b>	<b>£47,799</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)

Research carried out by Knapp and colleagues. (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	-	£918	£918
Other health and social care services	£1,434	£1,434	£1,434
Respite care	-	£7,688	£7,688
Special education	-	£13,794	£13,794
Education support	-	£644	£644
Treatments	-	£175	£175
Help from voluntary organisations	-	-	-
Benefits	£554	£554	£554
Lost employment (parents)	-	£255	£255
<b>Total annual cost (excluding benefits)</b>	<b>£1,434</b>	<b>£24,907</b>	<b>£24,907</b>
<b>Total annual cost (including benefits)</b>	<b>£1,988</b>	<b>£25,461</b>	<b>£25,461</b>

**Note:** 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

Research carried out by Knapp and colleagues. (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 (£100,772 and £103,975 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	£1,757	£69,703	£71,580	-	£69,703	£72,906	-
Hospital services	£918	£918	£918	£103	£177	£40	£89,140
Other health and social care services	£574	£574	£574	£835	£553	£684	-
Respite care	-	-	-	£1,814	-	-	-
Day services	£2,629	£2,629	£2,629	£4,431	£4,279	£979	-
Adult education	£3,408	£3,408	£3,408	£1,695	£1,005	£3,916	-
Employment support	-	-	-	£595	£1,291	-	-
Treatments	£175	£175	£175	£73	£73	£73	-
Family expenses	£2,233	-	-	£2,571	-	-	-
Lost employment (parents)	£4,351	-	-	£4,351	-	-	-
<b>Sub-total</b>	<b>£16,045</b>	<b>£77,407</b>	<b>£80,609</b>	<b>£16,467</b>	<b>£77,081</b>	<b>£78,598</b>	<b>£89,140</b>
Lost employment (person with ASD)	£23,365	£23,365	£23,365	£26,434	£26,434	£26,434	£26,434
<b>Total (excluding benefits)</b>	<b>£39,410</b>	<b>£100,772</b>	<b>£103,975</b>	<b>£42,901</b>	<b>£103,514</b>	<b>£105,032</b>	<b>£115,573</b>
Benefits	-	-	-	£7,916	£5,102	£5,102	£1,092
<b>Total (including benefits)</b>	<b>£39,410</b>	<b>£100,772</b>	<b>£103,975</b>	<b>£50,817</b>	<b>£110,134</b>	<b>£110,134</b>	<b>£116,666</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 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 8.4.1 to 8.4.4 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 2015/2016 financial year. Where costs have been taken from research completed in previous years, they have been inflated to 2015/2016. 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 & Holmes, L. (2013) *Unit Costs of Support Care*, The Fostering Network, London.

**8.4.1 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	£1,325	£2,650
LAC 2 – care plan	Once a fortnight	£250	£500
LAC 3 – ongoing placement support	Six months in total	£3,038	£18,230
LAC 4 – return home	Once	£431	£431
LAC 6 – review	Twice	£643	£1,285
<b>Total social care case management costs per year</b>			<b>£23,097</b>

### 8.4.2 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	£207	£2,487
CiN 6 – planning and review	3 times	£239	£716
<b>Cost of social care case management activity</b>			<b>£3,203</b>
Additional service costs (out of London)			
Drug and alcohol treatment services	Once a fortnight	£126	£3,265
<b>Total social care case management and service costs per year</b>			<b>£6,468</b>

### 8.4.3 Child C – high level of Child in Need support and 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 this specialist placement. 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	£249	£498
LAC 3 – ongoing placement support	10 months	£12,408	£124,076
LAC 4 – return home	Once	£431	£431
LAC 6 – review	Twice	£643	£1,285
Support foster care – ongoing	2 months	£720	£1,440
Support foster care – referral	Once	£410	£410
<b>Total social care case management costs per year</b>			<b>£128,141</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].

#### 8.4.4 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. This 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	£1,122	£3,366
CiN 4 – close case	Once	£103	£103
<b>Total social care case management costs per year</b>			<b>£3,468</b>

## 8.5 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 8.5.1 and 8.5.2. 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 (8.5.1) shows that, for Family A, the costs would have been much higher if the local authority had been required to provide looked-after placements. The cost to look after the three children in local authority foster care for one year is £133,589 which is nearly nine times higher than the estimated social care costs of providing support care for the same duration (£14,916).

The second case study (8.5.2) shows that the total estimated cost to look after Child B in local authority foster care for one year is £47,956 – four times higher than the estimated social care costs of providing support care for the same duration (£11,860).

<sup>1</sup> The Fostering Network & 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.

### 8.5.1 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	£407	£256	£152
2 Ongoing support	(£235 x 12) and (£113 x 12)	£2,820	£1,354
2 Ongoing support	[(£153/7) x 26] x 3 + [(£440/7) x 26] x 3		£6,606
3 Review	£85 x 8 and £71 x 8	£681	£565
4 Case closure	£289	£253	£35
<b>Total</b>		<b>£4,010</b>	<b>£8,713</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	£519	£519
Housing support	Once a fortnight	£32	£837
Budgeting advice	Once a fortnight	£32	£837
<b>Total cost of other support or services</b>			<b>£2,193</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	£1,002
2: Care plans: Updated three times following reviews for each of the children	£2,224
3: Maintain the placements: Support and placement costs (£804 per child per week)	£128,450
6: Review: Held on three occasions during the year	£1,913

### 8.5.2 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	£255	£152
2.Ongoing support	(£227 x 12) and (£108 x 12)	£2,816	£1,346
2.Ongoing support	[(£148/7) x 42] and [(£424/7) x 42]		£3,557
3.Review	(£82 x 8) and £68	£681	£571
4.Case closure	£279	£253	£35
<b>Total</b>		<b>£4,006</b>	<b>£5,661</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	£519	£519
Housing support	Six sessions	£32	£837
Budgeting advice	Once a fortnight	£32	£837
<b>Total cost of other support or services</b>			<b>£2,193</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	£1,001
2. Care plans: Updated three times following reviews	£2,224
3. Maintain the placements: Support and placement costs (£793 per week)	£42,817
6. Review: Held on three occasions during the year (3 x £614)	£1,912
<b>Total</b>	<b>£47,956</b>

## 8.6 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 2015/2016 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 = £310 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 = £22,177 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 £645 by the end of the notional 12-month period.

**Group 3: Average cost per person = £42,518 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 £3,200 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 = £43,810 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.

## 8.7 Residential parenting assessments

The following tables illustrate examples of the support given to families 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 were 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. Each illustrates different RPA support package and the outcome for the families over a 12-month period during 2011 and 2012, along with 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., & 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 another 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	£446	£2,226
CiN – 5 core assessment	Once	£635	£635
CiN – 8 legal activity	Once	£2,432	£2,432
Cost of CiN social care case management activity			<b>£5,293</b>
LAC – 1 child becomes looked-after	Once	£1,040	£1,040
LAC – 5 find subsequent placement	Once	£329	£329
LAC – 3 ongoing support, in RPA (per day)	143 days	£41 (per day)	£5,949
LAC – 3 ongoing support, first 3 months of placement (per day)	90 days	£8 (per day)	£721
LAC – 3 ongoing support, LA foster care (per day)	99 days	£55 (per day)	£5,407
LAC – 3 fee & allowance foster care in LA (per week)	14 weeks	£169 (per week)	£2,367
LAC – 6 review	Once	£661	£661
LAC – 2 care planning	Once	£257	£257
LAC – 7 legal activity	Once	£4,475	£4,475
Cost of LAC social care case management activity			<b>£21,208</b>
<b>Total cost of all social care case management activity</b>			<b>£26,501</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)	£69,127
Drug & rehab programme	20 weeks	£54	£1,093
Parent psychiatric assessment	Once	£136	£138
<b>Total cost of service provision</b>			<b>£70,359</b>
<b>Total costs of support for Family A</b>			<b>£96,860</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 finished 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.

Social process costs	Frequency/ length	Unit cost	Sub-total
CiN – 3 ongoing support	5 days	£14.44	£74
CiN – 8 legal activity	Once	£2,432	£2,432
Cost of CiN social care case management activity			<b>£2,506</b>
LAC – 1 child becomes looked-after	Once	£643	£643
LAC – 3 ongoing support, in RPA	135 days	£34 (per day)	£4,535
LAC – 3 ongoing support, placed with parent	156 days	£34 (per day)	£5,241
LAC – 3 ongoing support, first 3 months of placement	90 days	£8.25 (per day)	£721
LAC – 6 review	Once	£661	£661
LAC – 2 care planning	Once	£257	£257
LAC – 7 legal activity	Once	£4,475	£4,475
LAC – 4 ongoing support	Once	£433	£433
Cost of LAC social care case management activity			<b>£16,966</b>
Total cost of all social care case management activity			<b>£19,473</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
Total cost of service provision			<b>£47,781</b>
Total costs of support for Family B			<b>£67,254</b>

## Family C

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 had 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 father was asked to leave due his aggressive behaviour with staff and other service users, and the mother left with him. Thus the RPA lasted only 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	£208 (per month)	£1,147
CiN – 5 core assessment	Once	£635	£635
<b>Cost of CiN social care case management activity</b>			<b>£1,782</b>
LAC – 1 child becomes looked-after	Once	£1,040	£1,040
LAC – 5 find subsequent placement	Once	£329	£329
LAC – 3 ongoing support, during RPA	62 days	£34 (per day)	£2,082
LAC – 3 ongoing support, LA foster care	157 days	£55 (per day)	£8,575
LAC – 3 ongoing support, first 3 months of placement	90 days	£8 (per day)	£721
LAC – 3 additional support for care order	55 days	£10 (per day)	£587
LAC – 3 fee & allowance foster care in LA	23 weeks	£169 (per week)	£3,889
LAC – 6 review	Twice	£661	£1,323
LAC – 2 care planning	Twice	£257	£513
LAC – 7 legal	Once	£4,475	£4,475
<b>Cost of LAC social care case management activity</b>			<b>£23,534</b>
<b>Total cost of all social care case management activity</b>			<b>£25,316</b>
RPA initiated	8 weeks	£1,368 per week	£10,944
<b>Total cost of service provision</b>			<b>£10,944</b>
<b>Total costs of support for Family C</b>			<b>£36,260</b>

## 8.8 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. (2014) 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, aged over 70, based in Nottingham and Leicester and 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 2015/2016 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)	£1,682 (£3,355)	£1,605 (£3,108)
Inpatient care (b)	119 (2)	£1,155 (£3,142)	£1,055 (£2,899)
Day case care	71 (1)	£142 (£410)	£151 (£456)
Outpatient care	358 (3)	£377 (£401)	£384 (£361)
Critical care (c)	3 (1)	£8 (£98)	£14 (£133)
Ambulance service	17 (2)	£19 (£116)	£15 (£82)
Intermediate care	5 (Not applicable)	£11 (£164)	£3 (£41)
Mental health care	28 (4)	£40 (£193)	£47 (£189)
Social care	76 (4)	£164 (£763)	£223 (£933)
<b>Total costs (exc. primary care)</b>	<b>377 (5)</b>	<b>£1,917 (£3,570)</b>	<b>£1,894 (£3,413)</b>
Primary care (d)	243 (6)	-	£241 (£253)
Consultations	113 (3)	-	£31 (£46)
Home visits	42 (7)	-	£26 (£106)
Procedures	25 (3)	-	£4 (£21)
Other events (e)	202 (22)	-	£56 (£59)
Medication	232 (21)	-	£113 (£144)
Wound dressings	64 (4)	-	£11 (£34)
<b>Total costs including primary care (g)</b>	<b>248 (7)</b>	<b>-</b>	<b>£2,135 (£3,465)</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))

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.

<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 mean cost for these high cost patients across all services excluding primary care was £6,139, and £6,520 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: £6,139 versus £1,916; mean total cost including primary care: £6,520 versus £2,135).

**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 (n = 63)
Hospital care	62 (6)	£5,180 (£4,563)
Inpatient care (b)	52 (3)	£4,024 (£4,654)
Day case care	24 (1)	£479 (£776)
Outpatient care	61 (4)	£619 (£373)
Critical care (c)	3 (1)	£58 (£261)
Ambulance service	5 (2)	£32 (£124)
Intermediate care	2 (not applicable)	£13 (£83)
Mental health care	12 (4)	£132 (£320)
Social care	27 (4)	£781 (£1,728)
<b>Total costs (excl. primary care)</b>	<b>63 (9)</b>	<b>£6,139 (£4,647)</b>
Primary care (d)	27 (11)	£381 (£387)
Consultations	26 (3)	£29 (£47)
Home visits	16 (12)	£64 (£194)
Procedures	4 (1)	£1 (£5)
Other events (e)	53 (28)	£83 (£78)
Medication	57 (32)	£183 (£206)
Wound dressings	22 (5)	£19 (£48)
<b>Total costs including primary care</b>	<b>63 (14)</b>	<b>£6,520 (£4,610)</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))

## 8.9 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	£522	£7,130	66%	65,624	£7,958
Inpatient emergency	£371	£5,067	47%	54,577	£6,800
Inpatient non-emergency	£99	£1,351	12%	58,165	£1,702
Outpatient	£43	£582	5%	50,155	£849
A&R	£10	£130	1%	48,000	£199
<b>Social care</b>	<b>£270</b>	<b>£3,684</b>	<b>34%</b>	<b>20,330</b>	<b>£13,271</b>
Residential and nursing care	£216	£2,954	28%	10,896	£20,164
Home care	£42	£571	5%	10,970	£3,813
Other	£12	£159	1%	4,084	£2,851
<b>Total</b>	<b>£792</b>	<b>£10,814</b>	<b>100%</b>	<b>73,243</b>	<b>NA</b>

NB The total cost per decedent for any of the services is total costs of the service/the number of people who died. The total cost per user is total costs of the services/number of users of that service.

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	£7,130	£3,684	£10,815
No diagnoses	22,118	£3,510	£4,528	£8,038
Any diagnosis	51,125	£8,695	£3,319	£12,015
Hypertension	21,241	£9,732	£3,046	£12,777
Cancer	19,934	£10,193	£1,423	£11,616
Injury	17,540	£10,501	£4,425	£14,926
Atrial fibrillation	13,567	£9,832	£3,607	£13,439
Ischaemic heart disease	13,213	£9,974	£3,073	£13,047
Respiratory infection	11,136	£10,914	£2,447	£13,360
Falls	10,560	£9,648	£5,602	£15,250
Congestive heart failure	10,474	£10,021	£3,490	£13,512
Chronic obstructive pulmonary disease	9,392	£9,790	£2,750	£12,540
Anaemia	9,210	£11,495	£3,317	£14,812
Diabetes	8,697	£10,006	£3,425	£13,431
Cerebrovascular disease	8,290	£9,853	£4,559	£14,411
Peripheral vascular disease	6,780	£11,352	£3,038	£14,390
Dementia	6,735	£8,218	£9,765	£17,983
Renal failure	6,570	£11,457	£3,506	£14,963
Angina	6,549	£10,714	£3,107	£13,821
Mental disorders, not dementia	4,814	£10,745	£3,947	£14,692
Iatrogenic conditions	4,190	£15,486	£2,768	£18,253
Asthma	3,480	£10,400	£2,713	£13,113
Alcoholism	2,437	£9,485	£1,267	£10,752
Non-rheumatic valve disorder	2,059	£11,678	£2,392	£14,070

## **II. COMMUNITY-BASED HEALTH CARE STAFF**



## 9. Scientific and professional staff

The table overleaf provides the unit costs for community-based allied health professionals (bands 4-8) 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>. Examples of roles by band are shown below and in more detail by job type in Chapter 18. Reference should also be made to the explanatory notes when interpreting the unit costs.

<b>Job titles by band</b>	
<b>Band 2</b>	Clinical support worker (Physiotherapy, Occupational therapy, Speech and language therapy).
<b>Band 3</b>	Clinical support worker (higher level) (Physiotherapy, Occupational therapy, Speech and language therapy).
<b>Band 4</b>	Occupational therapy technician, Speech and language therapy assistant/associate practitioner, Podiatry technician, Clinical psychology assistant practitioner, Pharmacy technician.
<b>Band 5</b>	Physiotherapist, Occupational therapist, Speech and language therapist, Podiatrist, Clinical psychology assistant practitioner (higher level), Counsellor (entry level).
<b>Band 6</b>	Physiotherapist specialist, Occupational therapist specialist, Speech and language therapist specialist, Podiatrist specialist, Clinical psychology trainee, Counsellor, Pharmacist, Arts therapist (entry level).
<b>Band 7</b>	Physiotherapist (advanced), Specialist physiotherapist (Respiratory problems), Specialist physiotherapist (Community), Physiotherapy team manager, Speech and language therapist (advanced), Podiatrist (advanced), Podiatry team manager, Clinical psychologist, Counsellor (specialist), Arts therapist.
<b>Band 8a</b>	Physiotherapist principal, Occupational therapist principal, Speech and language therapist principal, Podiatrist principal.
<b>Band 8a-b</b>	Physiotherapist consultant, Occupational therapist consultant, Clinical psychologist principal, Speech and language therapist principal, Podiatric consultant (surgery), Arts therapist principal.
<b>Band 8a-c</b>	Counsellor professional manager, Counsellor consultant, Consultant speech and language therapist.
<b>Band 8c-d</b>	Clinical psychologist consultant, Podiatric Consultant (surgery), Head of arts therapies, Arts therapies consultant.
<b>Band 8d-9</b>	Clinical psychologist consultant (Professional), Lead/head of psychology services, Podiatric consultant (surgery) Head of Service.

## 9. Scientific and professional staff

### A Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change bands 2-8b of the July 2015-June 2016 NHS staff earnings estimates for allied health professionals.<sup>1</sup> See NHS terms and conditions of service handbook for information on payment for unsocial hours.<sup>2</sup> 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 £33,175; hospital occupational therapists, £32,098; speech and language therapists, £33,483; dieticians, £33,030.

### 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>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE).<sup>4</sup> To calculate the cost per hour including qualifications for each profession, the appropriate expected annual cost shown in chapter 19 should be 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.

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>5,6</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. Please note that, when calculating the costs for a community pharmacist, the capital cost provided should be replaced by £4,065.

### 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>7</sup>

### G Working time

Working hours for each AFC band have been calculated by deducting sickness absence days as reported for NHS staff groups<sup>8</sup> and training/study days from 225 working days.

### 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>4,5,9</sup>

<sup>1</sup> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>2</sup> NHS Employers (2016) *NHS Terms and Conditions of Service Handbook (Agenda for Change)*, <http://www.nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook>. [accessed 17 October 2016]

<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), 2015.

<sup>5</sup> Building Cost Information Service (2016) *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> NHS Digital (2016), *NHS sickness absence rates by staff group, April 2015-March 2016*, NHS Digital, Leeds.

[http://content.digital.nhs.uk/article/2021/Website-](http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top)

[Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top](http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top) [accessed 13 October 2016].

<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].

## 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 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8a	Band 8b
<b>A Wages/salary</b>	£16,706	£18,640	£21,413	£23,319	£31,351	£38,786	£46,095	£55,295
<b>B Salary oncosts</b>	£3,532	£4,070	£4,841	£5,370	£7,603	£9,670	£11,702	£14,260
<b>C Qualification</b>	See note							
<b>D Overheads</b>								
Management, admin and estates staff	£4,958	£5,564	£6,432	£7,029	£9,544	£11,872	£14,160	£17,041
Non-staff	£7,731	£8,675	£10,029	£10,960	£14,881	£18,510	£22,079	£26,570
<b>E Capital overheads</b>	£2,656	£2,656	£2,656	£4,583	£4,583	£4,583	£4,583	£4,583
<b>F Travel</b>	See note							
<b>G Working time</b>	45.6 weeks (1,569 hours) per year, 37.5 hours per week	45.6 weeks (1,569 hours) per year, 37.5 hours per week	45.6 weeks (1,569 hours) per year, 37.5 hours per week	42.7 weeks (1,603 hours) per year, 37.5 hours per week	42.7 weeks (1,590 hours) per year, 37.5 hours per week	42.7 weeks (1,590 hours) per year, 37.5 hours per week	42.7 weeks (1,590 hours) per year, 37.5 hours per week	42.7 weeks (1,590 hours) per year, 37.5 hours per week
<b>H Ratio of direct to indirect time</b>								
<b>I London multiplier</b>	1.54 x E							
Non-London multiplier	0.97 x E							
<b>Unit costs available 2015/2016</b>								
Cost per working hour	<b>£23</b>	<b>£25</b>	<b>£30</b>	<b>£32</b>	<b>£42</b>	<b>£52</b>	<b>£62</b>	<b>£74</b>



## **10. Nurses, doctors and dentists**

10.1 Nurses

10.2 Nurse (GP practice)

10.3 General practitioner

10.4 Telephone triage – GP-led and nurse-led

10.5 NHS dentist – performer-only

10.6 Dentist – providing-performer

10.7 NHS dental charges



## 10. Nurses

### A. Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change band 2-8b of the July 2015-June 2016 NHS staff earnings estimates for nurses.<sup>1</sup> See NHS terms and conditions of service handbook for information on payment for unsocial hours.<sup>2</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all community nurses is £31,902.<sup>1</sup> See section V for further information on pay scales.

### B. Salary oncosts

Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.

### C. Qualifications

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 table 19 for more details.

### D. Overheads

Taken from the 2013/14 financial accounts for ten community trusts. See 2015 edition 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 community health facilities, 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, declining to 3 per cent after 30 years.

### 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>7</sup>

### G. Working time

Working hours for each AFC band have been calculated by deducting sickness absence days<sup>8</sup> as reported for NHS staff groups and training/study days from 225 working days.

### H. Ratio of direct to indirect time

Based on a study by Ball & Philippou (2013),<sup>9</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 administrative tasks, 5 per cent on management, 14 per cent travelling, with a further 1 per cent on other duties. See Ball & Philippou (2013)<sup>9</sup> for more detail and for information on other bands of nurses. Also see the McKinsey report,<sup>10</sup> for comparative purposes.

<sup>1</sup> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>2</sup> NHS Employers (2016) *NHS Terms and Conditions of Service Handbook (Agenda for Change)*, <http://www.nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook>. [accessed 17 October 2016]

<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), 2015.

<sup>5</sup> Building Cost Information Service (2016) *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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<sup>9</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>10</sup> Department of Health (2010) *Achieving world class productivity in the NHS, 2009/10-2013/14: The McKinsey Report*, Department of Health, London.

## 10.1. Nurses

This table provides the annual and unit costs for nurses. 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 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8a	Band 8b
<b>A Wages/salary</b>	£16,706	£18,640	£20,399	£25,902	£32,114	£38,550	£45,204	£53,944
<b>B Salary oncosts</b>	£3,532	£4,070	£4,559	£6,088	£7,815	£9,605	£11,455	£13,884
<b>C Qualification</b>	See note							
<b>D Overheads</b>								
Management, admin and estates staff	£4,958	£5,563	£6,114	£7,837	£9,782	£11,797	£13,881	£16,618
Non-staff	£7,731	£8,675	£9,534	£12,220	£15,253	£18,395	£21,644	£25,911
<b>E Capital overheads</b>	£1,269	£1,269	£1,269	£3,889	£3,889	£3,889	£3,889	£3,889
<b>F Travel</b>			See note					
<b>G Working time</b>	42.4 weeks (1,553 hours) per year, 37.5 hours per week	42.4 weeks (1,553 hours) per year, 37.5 hours per week	42.4 weeks (1,553 hours) per year, 37.5 hours per week	42.4 weeks (1,573 hours) per year, 37.5 hours per week				
<b>H Ratio of direct to indirect time</b>								
<b>I London multiplier</b>	1.55 x E							
Non-London multiplier	0.97 x E							
<b>Unit costs available 2015/2016</b>								
Cost per working hour	<b>£22</b>	<b>£24</b>	<b>£29</b>	<b>£36</b>	<b>£44</b>	<b>£52</b>	<b>£61</b>	<b>£73</b>

## 10.2 Nurse (GP practice)

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£25,902 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 of the July 2015-June 2016 NHS staff earnings estimates for nurses. <sup>1</sup> See NHS terms and conditions of service handbook for information on payment for unsocial hours. <sup>2</sup> See section V for further information on pay scales.
B. Salary oncosts	£6,088 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£11,251 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 table 19 for more details.
D. Overheads		
Management and administration	£7,838 per year	Taken from the 2013/14 financial accounts for 10 community trusts. See the Preface of the 2015 edition 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)	£12,752 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>5</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	£3,862 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, declining to 3 per cent after 30 years. <sup>6,7</sup>
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 1,573 hours per year: 225 working days minus sickness absence <sup>9</sup> and training/study days as reported for all NHS staff groups.
Ratio of direct to indirect time on: face-to-face contacts		No current information available. See previous editions of this volume for sources of information.
Duration of contact		No current information available. See previous editions of this volume for sources of information.
Patient contacts		No current information available. See previous editions of this volume for sources of information.
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.		

<sup>1</sup> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>2</sup> NHS Employers (2016) *NHS Terms and Conditions of Service Handbook (Agenda for Change)*, <http://www.nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook>. [accessed 17 October 2016]

<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> 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>6</sup> Building Cost Information Service (2016) *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> NHS Digital (2016), *NHS sickness absence rates by staff group, April 2015-March 2016*, NHS Digital, Leeds. <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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].

## 10.3 General practitioner

### 10.3a General practitioner — cost elements

Costs and unit estimation	2015/2016 value	Notes (for further clarification see Commentary)
A. Net remuneration	£103,800 per year	Average income before tax for GPMS contractor GPs for England. <sup>1</sup>
B. Practice expenses:		
Direct care staff	£23,082 per year	Ninety one per cent of FTE equivalent practitioners (excluding GP registrars & GP retainers) employed 0.58 FTE nurse (including practice nurses, advanced level nurses and extended role and specialist nurses (includes salary and oncosts)). <sup>2,3</sup>
Administrative and clerical staff	£37,673 per year	Each FTE equivalent practitioner (excluding GP registrars & GP retainers) employed 1.36 FTE administrative and clerical staff <sup>1,2</sup> (includes salary and oncosts).
Office & general business	£10,007 per year	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 3.02 members of staff (including practice nurses, other patient care staff, plus administrators and clerical staff). <sup>1,2</sup>
Premises	£15,120 per year	Office & general business, premises, and other expenses calculated as the ratio of GP salary costs to all GP employees salary costs.
Other: includes advertising, promotion and entertainment	£16,099 per year	
Car and travel	£1,200 per year	Based on information taken from the GP earnings and expenses report. <sup>1,2</sup>
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		No estimates available.
E. Capital costs:		
Premises	£15,463 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, declining to 3 per cent after 30 years. <sup>6,7</sup>
Working time	42 weeks per year 41.4 hours per week	Based on information taken from the 8 <sup>th</sup> National GP Worklife Survey. <sup>8</sup> Respondents to this survey reported working an average of 41.4 hours per week and a mean number of 7.2 sessions.
Ratio of direct to indirect time:		
face-to-face time (excludes travel time)	1:0.61	Based on information taken from the 8 <sup>th</sup> National GP Worklife Survey, <sup>8</sup> direct patient care (surgeries, clinics, telephone consultations & home visits) took 62 per cent of a GP's time. Indirect patient care (referral letters, arranging admissions) absorbed 19.7 per cent of time. General administration (practice management, PCO meetings etc.) formed 8.4 per cent of time, 3.5 per cent was spent on external meetings with other activities (continuing education/development, research, teaching etc.) taking 6.3 per cent of a GP's time. No information on the percentage time allocated to out of surgery visits.
Patient-related time	1:0.22	
<b>Consultations:</b>		
Surgery	9.22 minutes	Based on a study carried out by Hobbs et al. (2016) of 398 English general practices (101.8 million consultations) between April 2007 and March 2014, <sup>9</sup> the mean duration of a GP surgery consultation was 9.22 minutes. Based on research carried out by Elmore et al. (2016) <sup>10</sup> in which 440 video-recorded consultations were analysed from 13 primary care practices in England, the mean consultation length was 10.22 minutes.
<b>Unit costs for 2015/2016 are given in table 10.3b</b>		

<sup>1</sup> NHS Digital (2016) *GP earnings and expenses 2014/15*, NHS Digital, Leeds. <http://content.digital.nhs.uk/catalogue/PUB21314> [accessed 19 October 2016].

<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> Building Cost Information Service (2016) *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> Gibson, J., Checkland, K., Coleman, A., Hann, M., McCall, R., Spooner, S. & Sutton, M. (2015) *Eighth national GP worklife survey*, University of Manchester, Manchester. <http://www.population-health.manchester.ac.uk/healththeconomics/research/Reports/EighthNationalGPWorklifeSurveyreport/EighthNationalGPWorklifeSurveyreport.pdf>. [accessed 17 October 2016]

<sup>9</sup> Hobbs, R. Bankhead, C. Mukhtar, T., Stevens, S. Perera-Salazar, R. Holt, T., & Salisbury, C. (2016) Clinical workload in UK primary care: a retrospective analysis of 100 million consultations in England, 2007-14, *The Lancet*, 387, 10035, 2323-2330. <http://www.sciencedirect.com/science/article/pii/S0140673616006206>. [accessed 17 October 2016]

<sup>10</sup> Elmore, N., Burt, J., Abel, G., Maratos, F., Montague, J., Campbell, J. & Roland, M. (2016) Investigating the relationship between consultation length and patient experience: a cross-sectional study in primary care, *British Journal of General Practice*, DOI: 10.3399/bjgp 16X687733.

**10.3b General practitioner — unit costs**

Unit cost 2015/2016	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)	£263,897	£222,445	£240,815	£199,362
Annual (excluding travel)	£252,697	£221,245	£239,615	£198,162
Per hour of GMS activity <sup>1</sup>	£147	£124	£134	£111
Per hour of patient contact <sup>1</sup>	£236	£199	£216	£179
Per minute of patient contact <sup>1</sup>	£3.90	£3.30	£3.60	£3.00
Per surgery consultation lasting 9.22 minutes <sup>1</sup>	£36	£31	£33	£27
Per patient contact lasting 9.22 minutes (including carbon emissions (5 KgCO <sub>2</sub> e) <sup>2</sup> (carbon costs less than £1)	£36	£31	£33	£27
Prescription costs per consultation (net ingredient cost)	£28 <sup>3</sup>			
Prescription costs per consultation (actual cost)	£26.70 <sup>3</sup>			
Actual cost including carbon emissions (5 KgCO <sub>2</sub> e) <sup>2</sup>	£27.00 <sup>2,3</sup>			

**10.3c General practitioner — commentary**

**General note about GP expenditure.** NHS England, the Government, and the British Medical Association's General Practitioners Committee reached agreement on changes to the GP contract in England for 2016/17, which took effect from 1 April 2016: <https://www.england.nhs.uk/2016/02/gp-contract-16-17/>.

**Allowing for whole-time equivalence (FTE).** The NHS Health & Social Care Information Centre has estimated that the number of FTE practitioners (excluding GP registrars, GP retainers and locums) has reduced from 30,251 in 2014 (revised from 32,628) to 29,271 in 2015.<sup>4</sup> FTE practice staff included 15,398 practice nurses (includes specialist nurses, advanced level nurses, 9,149 direct patient care staff and 63,728 administrative and clerical.<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 1.18 FTE administrative and clerical staff (63,728/53,818).

**Direct care staff.** On average in 2016, approximately 91 per cent of FTE equivalent practitioners (excluding GP registrars & GP retainers)<sup>5</sup> employed 0.53 FTE nursing staff (15,398/29,271). 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>6</sup> Post-graduate education costs have been calculated using information provided by the Department of Health and Health Education England.<sup>7</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>8</sup>

<sup>1</sup> Excludes travel.

<sup>2</sup> Costs provided by Imogen Tennison, Sustainable Development Unit. Costs are <£1 for carbon emissions per patient contact lasting 9.22 minutes. Contact: [Imogen.tennison@nhs.net](mailto:Imogen.tennison@nhs.net) for more information.

<sup>3</sup> Personal communication with the Prescribing and Primary Care Group at the HSCIC, 2016; 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]

<sup>4</sup> NHS Digital (2016) *General Practice Trends in the UK to 201*, NHS Digital, Leeds. <http://content.digital.nhs.uk/catalogue/PUB20503>.

<sup>5</sup> Based on personal correspondence with the Chairman of the East Midlands Regional Council, British Medical Association (2015).

<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> Personal communication with the Department of Health and Health Education England (HEE), 2015.

<sup>8</sup> NHS Employers (2006) *Modernising medical careers: a new era in medical training*, NHS Employers, London.

**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 shown separately and accounts for half of GP emissions. A carbon price of £44 per tonne of carbon dioxide emission has been used to value these externalities in line with the mix of traded and non-traded emissions and 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 £28 (net ingredient cost (NIC)) and £26.70 (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 (plus on-cost for appliance contractors). The NIC does not take account of dispensing costs, fees or prescription charges income. The prescription cost per consultation has been calculated by first dividing the number of prescriptions per GP by the number of consultations per GP (35,798/10,714)<sup>1,2</sup> to give the number of prescriptions per GP consultation (2.86) and multiplying this by the actual cost per GP prescription (£8.00)<sup>3</sup> and the NIC per GP prescription (£8.20). The total NIC and actual cost of GP prescriptions were £9,026,066,193 and £8,385,203,756 respectively.

**Activity.** Hobbs and colleagues (2016)<sup>3</sup> carried out a retrospective analysis of GP and nurse consultations of non-temporary patients registered at 398 English general practices between April 2007 and March 2014. They used data from electronic health records routinely entered in the Clinical Practice Research Datalink, and linked CPRD data to national datasets. The dataset comprised 101,818,352 consultations and 20,626,297 person-years of observation. The mean duration of GP surgery consultations increased by 6.7%, from 8.65 minutes to 9.22 minutes during that time. Estimates in previous volumes using the 2006/07 UK general practice workload survey<sup>4</sup> were estimated by dividing the average length of sessions by the average number of patients seen, therefore including interruptions and time spent waiting for patients to arrive/leave the room.

<sup>1</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>2</sup> Personal communication with the Prescribing and Primary Care Group at NHS Digital, 2016

<sup>3</sup> Hobbs, R. Bankhead, C. Mukhtar, T., Stevens, S. Perera-Salazar, R. Holt, T., & Salisbury, C. (2016) Clinical workload in UK primary care: a retrospective analysis of 100 million consultations in England, 2007-14, *The Lancet*, 387, 10035, 2323-2330. <http://www.sciencedirect.com/science/article/pii/S0140673616006206>.

<sup>4</sup> Information Centre (2007) 2006/07 General Practice Workload Survey, Primary Care Statistics, Information Centre, Leeds.

## 10.4 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 10.1 & 10.2), a detailed breakdown of the costs is provided below. Mean costs per intervention were £14.60 (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	Notes	GP-led triage	Notes
	2015/2016 value		2015/2016 value	
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 10.2)	£103,800	Average income before tax. See 10.3.
B. Overheads				
staff overheads	£7,838 per year	See schema 10.2	£37,673	See schema 10.3(excludes a cost for direct care staff)
non-staff	£12,752 per year	See schema 10.2	£42,427	
C. Qualifications	£11,251 per year	See schema 10.2	£41,452	See schema 10.3
D. Capital	£3,858 per year	See schema 10.2	£15,463	See schema 10.3
E. Other costs				
Staff training	£5,690 per year	Taken from table 25 of Campbell & colleagues) <sup>2</sup> and uprated using the HCHS pay and prices inflator	£3,170	Taken from table 25 of Campbell & colleagues) <sup>2</sup> and uprated using the HCHS pay and prices inflator
Computer decision support software	£7,882 per year			
Working time	42 weeks per year 37.5 hours per week	Based on 1,573 hours per year	44 weeks per year 41.7 hours per week	Based on 1,800 hours per year
Ratio of direct to indirect time on:				
face-to-face contact	1:0.30	See schema 10.2	1:0.61	See schema 10.3
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)	£67,689 (£81,261)		£240,815 (£243,985)	
Cost per hour of face-to-face contact excluding 'other costs' (E) (including set-up costs)	£56 (£72.70)		£216 (£219)	
Cost per intervention excluding 'other costs' (E) (including other costs)	£6.10 (£7.90)		£14.40 (£14.60)	

<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 ESTEEM trial), *Health Technology Assessment*. DOI 10.3310/hta 19130.

## 10.5 NHS dentist – performer-only

A performer-only dentist is a qualified dentist who works in a provider-performer practice (eg. a local dental practice). They are sometimes referred to as Associates.<sup>1</sup> In 2015/16, there were 20,640 performer-only 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 260 practices with some or all NHS activity. See Preface of 2015 edition for more information. The costs below apply only to performer-only dentists with registered NHS activity. Dentists who performed only private dentistry have been excluded (n=50). Further work will take place in 2017 to explore expenditure by business type.

Costs and unit estimation	2015/2016 value	Notes
A. Net remuneration	£59,900 per year	This is the average taxable income (average gross earnings less average total expenses) for self-employed primary care performer-only dentists in 2014/15. <sup>3</sup> It has not been possible to identify an inflator to provide estimated net remuneration for 2015/16.
B. Practice expenses: Direct care staff	£52,825 per year	Salary expenditure is declared as an expense in the Dental Earnings and Expenses report. <sup>2</sup> The PSSRU survey (see 2015 edition for survey information) found that on average (median) each FTE dentist (carrying out some or all NHS activity) employs 1.30 of a dental nurse, 0.12 of a hygienist/dental therapist, 0.19 of a practice manager (AFC band 6) and 0.42 of 'other' staff (AFC band 2) (e.g. receptionist, dental technician, cleaner).
Office and general business	£4,500 per year	All office and general business, premises and other expenses including advertising promotion and entertainment are based on expenditure taken from the Dental Earnings and Expenses report. <sup>2</sup>
Premises	£3,000 per year	'Premises' includes insurance, repairs, maintenance, rent and utilities.
Car and travel	£900 per year	
Other	£22,400 per year	'Other' includes a variety of expenses, including laboratory costs, materials costs, advertising, promotion and entertainment costs.
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		Assumed to be included as rent (see above). 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, <sup>5</sup> annuitised capital costs would be £7,692 per annum.
F. Equipment costs	£ 5,283 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 £141,437 or £43,951 per FTE dentist. Costs have been annuitised over ten years, the most frequently-cited replacement time. For dentists providing NHS dentistry alone (sample=30), equipment was valued at £65,409 per practice or £23,031 per FTE dentist (£2,769 when annuitised over ten years). (See 2015 edition for PSSRU survey information.)
Working time	42.9 weeks per year 36 hours per week.	The average total number of weekly hours worked by performer-only dentists in 2013/14 was 6. <sup>6</sup> The average total number of weekly NHS hours worked was 26.7. On average, dentists took 5 days of sickness leave and 4.5 weeks annual leave. Unit costs are based on 1,548 hours. <sup>6</sup>
Ratio of direct to indirect time: clinical time	1:0.26	Based on information taken from the 2014/15 <i>Dental working hours</i> survey, performer-only dentists spent 79.2 per cent of their working time on clinical activities. <sup>6</sup>
<b>Unit costs available 2015/2016</b>		
£96 per hour; £121 per hour of patient contact, £97 per hour (with 17 kgCO <sub>2</sub> e) <sup>7</sup> ; £122 per hour of patient contact (with 21 kgCO <sub>2</sub> e). <sup>7</sup>		

<sup>1</sup> NHS Business Services Authority (2014) *NHS General Dental Practitioners* (GDS/PDS Providers and Performers), [http://www.nhsbsa.nhs.uk/Documents/Pensions/GDP\\_Pensions\\_Guide\\_V3\\_032014.pdf](http://www.nhsbsa.nhs.uk/Documents/Pensions/GDP_Pensions_Guide_V3_032014.pdf) [accessed 30 November 2016].

<sup>2</sup> NHS Digital (2016) *A guide to NHS dental publications*, <http://content.digital.nhs.uk/catalogue/PUB21701/nhs-dent-stat-eng-15-16-rep.pdf> [accessed 20 October 2016].

<sup>3</sup> NHS Digital (2016) *Dental earnings and expenses 2014/15, additional analysis*, <http://content.digital.nhs.uk/catalogue/PUB21315/dent-earn-expe-2014-15-addi-rep.pdf> [accessed 24 November 2016].

<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 (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>6</sup> NHS Digital (2016) *Dental working hours, 2014/15 & 2015/16*, <http://content.digital.nhs.uk/catalogue/PUB21316/dent-work-hour-1415-1516-rep.pdf> [accessed 20 October 2016].

<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.

## 10.6 Dentist – providing-performer

The costs below relate to a providing-performer, which is a dentist who holds a General Dental Services contract and/or a Personal Dentist Services agreement with the NHS. They also act as a performer, delivering dental services themselves (see 10.5). In 2014/15, there were 3,449 providing-performer 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 260 practices with some or all NHS activity. The costs below apply only to providing-performer dentists with registered NHS activity. Dentists who performed only private dentistry have been excluded (n=50). Further work will take place in 2017 to explore expenditure by business type.

Costs and unit estimation	2015/2016 value	Notes
A. Net remuneration	£118,300 per year	This is the average taxable income of self-employed primary care providing-performer dentists in 2014/15. <sup>2</sup> It has not been possible to identify an inflator to provide estimated net remuneration for 2015/16.
B. Practice expenses: Direct care staff	£52,825 per year	As salary expenses for performer-only dentists are declared as an expense by Providing-Performer dentists, <sup>3</sup> to avoid double counting, employee expenses have been calculated using the PSSRU survey (see 2015 edition for survey information). This found that on average (median) each FTE dentist (carrying out some or all NHS activity) employs 1.30 of a dental nurse, 0.12 of a hygienist/dental therapist, 0.19 of a practice manager (AFC band 6) and 0.42 of 'other' staff (AFC band 2) (e.g. receptionist, dental technician, cleaner).
Office and general business	£7,103 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</i> report <sup>2</sup> and adjusted to take account of the number of dentists per practice (2.9)
Premises	£7,828 per year	'Premises' includes insurance, repairs, maintenance, rent and utilities.
Car and travel	£1,900 per year	
Other	£44,379 per year	'Other' includes a variety of expenses, including laboratory costs, materials costs, advertising, promotion and entertainment costs.
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		Assumed to be included as rent (see above). 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, <sup>5</sup> annuitised capital costs would be £7,692 per annum.
F. Equipment costs	£ 5,283 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 £141,437 or £43,951 per FTE dentist. Costs have been annuitised over ten years, the most frequently-cited replacement time. For dentists providing NHS dentistry alone (sample=30), equipment was valued at £65,409 per practice or £23,031 per FTE dentist (£2,769 when annuitised over ten years). (See 2015 edition for PSSRU survey information.)
Working time	43 weeks per year 41.4 hours per week.	The average total number of weekly hours worked by providing-performer dentists in 2014/15 was 41.4, with 25.6 hours devoted to NHS work. <sup>7</sup> On average dentists took 4.9 days of sickness leave and 4.4 weeks annual leave. Unit costs are based on 1,781 hours. <sup>7</sup>
Ratio of direct to indirect time:	1:0.38	Based on information taken from the 2014/15 <i>Dental working hours survey</i> , <sup>6</sup> providing-performer dentists spent 72.4 per cent of their working time on clinical activities.
Clinical time		
<b>Unit costs available 2015/2016</b>		
£133 per hour; £184 per hour of patient contact; £134 per hour (with 19 kgCO <sub>2</sub> e) <sup>7</sup> ; £185 per hour of patient contact (with 27 kgCO <sub>2</sub> e). <sup>7</sup>		

<sup>1</sup> NHS Digital (2016) *A guide to NHS dental publications*, <http://content.digital.nhs.uk/catalogue/PUB21701/nhs-dent-stat-eng-15-16-rep.pdf> [accessed 20 October 2016].

<sup>2</sup> NHS Digital (2016) *Dental earnings and expenses 2014/15, additional analysis*, <http://content.digital.nhs.uk/catalogue/PUB21315/dent-earn-expe-2014-15-addi-rep.pdf> [accessed 24 November 2016].

<sup>3</sup> NHS Digital (2016, p.11) *Dental earnings and expenses 2014/15, initial analysis*, <https://www.gov.uk/government/statistics/dental-earnings-and-expenses-2014-to-2015-initial-analysis> [accessed 24 November 2016].

<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 (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>6</sup> NHS Digital (2016) *Dental working hours, 2014/15 & 2015/16*, <http://content.digital.nhs.uk/catalogue/PUB21316/dent-work-hour-1415-1516-rep.pdf> [accessed 20 October 2016].

<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.

## 10.7 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 2016.

Treatment Band	Charges from 1 April 2016	
Emergency dental treatment	£19.70	This covers emergency care in a primary care NHS dental practice such as pain relief or a temporary filling.
Band 1	£19.70	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	£53.90	This covers everything listed in Band 1 above, plus any further treatment such as fillings, root canal work or removal of teeth.
Band 3	£233.70	This covers everything listed in Bands 1 and 2 above, plus crowns, dentures and bridges.

See: <http://www.nhs.uk/NHSEngland/AboutNHSServices/dentists/Pages/nhs-dental-charges.aspx> 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	2015/2016 value	Notes
A. Salary	£40,043 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 adjusted to reflect the pay increments for social workers reported in the Local Government Earnings Surveys 2009 to 2014 <sup>2</sup> and the National Minimum Dataset for Social Care (NMDS-SC). <sup>3</sup>
B. Salary oncosts	£12,422 per year	Employer's national insurance is included, plus 20 per cent of salary for employer's contribution to superannuation. <sup>4</sup>
C. Qualifications	£27,481 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). <sup>5</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>6</sup> No costs are available.
E. Overheads		
Direct overheads	£15,215 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	£8,394 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>7</sup>
F. Capital overheads	£2,641 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>8,9</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
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>10</sup>
Working time	40.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.5 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. <sup>11</sup> Unit costs are based on 1,513 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>12</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 1.59 x F	Allows for the higher costs associated with London compared to the national average cost. <sup>1,8,9</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>8,9</sup>
<b>Unit costs available 2015/2016 (costs including qualifications given in brackets)</b>		
£52 (£70) per hour; £72 (£98) 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> Skills for Care (2016) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 20 October 2016].

<sup>4</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>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> 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>7</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>8</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>9</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2014.

<sup>10</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>11</sup> Local Government Association (2016) *Local government workforce survey 2014/15*, [http://www.local.gov.uk/workforce/-/journal\\_content/56/10180/7843334/ARTICLE/](http://www.local.gov.uk/workforce/-/journal_content/56/10180/7843334/ARTICLE/) [accessed 20 October 2016].

<sup>12</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	2015/2016 value	Notes
A. Salary	£31,288 per year	Information taken from the National Minimum Data Set for Social Care 2016 <sup>1</sup> showed that the mean basic salary for a social worker working in adult services was £31,288.
B. Salary oncosts	£9,463 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	£27,481 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	£11,818 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	£6,520 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	£2,641 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, declining to 3 per cent after 30 years.
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	40.9 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 8.5 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 1,513 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 1.59 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 2015/2016 (costs including qualifications given in brackets)</b>		
£40 (£57) per hour; £55 (£79) per hour of client-related work.		

<sup>1</sup> Skills for Care (2016) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 20 October 2016].

<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 (2016) *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 (2016) *Local government workforce survey 2014/15*, [http://www.local.gov.uk/workforce/-/journal\\_content/56/10180/7843334/ARTICLE/](http://www.local.gov.uk/workforce/-/journal_content/56/10180/7843334/ARTICLE/) [accessed 20 October 2016].

<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	2015/2016 value	Notes
A. Salary	£29,854 per year	Information taken from the National Minimum Data Set for Social Care 2016 <sup>1</sup> showed that the mean basic salary for a social worker working in children's services was £29,854.
B. Salary oncosts	£8,978 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	£27,481 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	£11,261 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	£6,213 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	£2,641 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, declining to 3 per cent after 30 years.
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	40.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.5 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 1,513 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 1.59 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 2015/2016 (costs including qualifications given in brackets)</b>		
£39 (£57) per hour; £54 (£79) per hour of client-related work.		

<sup>1</sup> Skills for Care (2016) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 20 October 2016].

<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 (2016) *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 (2016) *Local government workforce survey 2014/15*, [http://www.local.gov.uk/workforce/-/journal\\_content/56/10180/7843334/ARTICLE](http://www.local.gov.uk/workforce/-/journal_content/56/10180/7843334/ARTICLE) [accessed 20 October 2016].

<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., McDermid, 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	2015/2016 value	Notes
A. Salary	£23,220 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 as reported in this volume.
B. Salary oncosts	£6,736 per year	Employer's national insurance is included, plus 20 per cent of salary for contribution to superannuation. <sup>1</sup>
C. Overheads		
Direct overheads	£8,687 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	£4,793 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>2</sup>
D. Capital overheads	£2,641 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>3,4</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
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>5</sup>
Working time	40.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.5 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. <sup>6</sup> Unit costs are based on 1,513 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>1,3,4</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>3,4</sup>
<b>Unit costs available 2015/2016</b>		
£30 per hour.		

<sup>1</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>2</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>3</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2014.

<sup>4</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>5</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>6</sup> Local Government Association (2016) *Local government workforce survey 2014/15*, [http://www.local.gov.uk/workforce/-/journal\\_content/56/10180/7843334/ARTICLE](http://www.local.gov.uk/workforce/-/journal_content/56/10180/7843334/ARTICLE) [accessed 20 October 2016].

## 11.5 Community occupational therapist (local authority)

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£30,886 per year	Information taken from the National Minimum Data Set for Social Care 2016 <sup>1</sup> showed that the mean basic salary for an occupational therapist was £30,886.
B. Salary oncosts	£9,327 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	£5,965 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	£11,662 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	£6,434 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	£2,641 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, declining to 3 per cent after 30 years.
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 8.5 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. <sup>8</sup> Unit costs are based on 1,513 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 1.59 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 2015/2016 (costs including training given in brackets)</b>		
£40 (£44) per hour.		

<sup>1</sup> Skills for Care (2016) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 20 October 2016].

<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 (2016) *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 Association (2016) *Local government workforce survey 2014/15*, [http://www.local.gov.uk/workforce-/journal\\_content/56/10180/7843334/ARTICLE](http://www.local.gov.uk/workforce-/journal_content/56/10180/7843334/ARTICLE) [accessed 20 October 2016].

## 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, 2016).<sup>1</sup> Based on PSS EX1 2013/2014,<sup>2</sup> and using the PSS inflators, the mean hourly cost of all home care including LA-funded and independent provision was £18, the mean hourly cost of LA home care was £40, and the mean hourly cost was £16 for independent sector provision. See Mickelborough (2011)<sup>3</sup> for more information on the domiciliary care market. The new ASC-FR return (see Preface for more information) currently provides two rates for home care: one for the hourly rate of in-house home care provision (£30.75) and one for the average hourly rate paid to external providers of home care services (£14.28).<sup>4</sup> NHS Digital do not analyse the rate further by primary support reason or age group.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£13,932 per year	The median annual salary for a public and independent sector care worker in October 2016 was £13,932 (£7.38 gross hourly salary). A senior home care worker would earn £17,829 per year (£8.20 gross hourly salary). <sup>1</sup>
B. Salary oncosts	£3,597 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	£5,083 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	£2,805 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 and 8 statutory leave days. Five days for study/training and 8.5 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. <sup>7,8</sup> Unit costs are based on 1,551 hours per year.
Ratios of direct to indirect time on:		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>8</sup> the proportion of total time spent with clients is approximately 80 per cent.
Face-to-face contact	1:0.25	
Duration of visit		Sixty-three per cent of local authority commissioned home care visits lasted 16-30 minutes. Ten per cent of visits lasted under 15 minutes, and 16 per cent were longer than 46 minutes. <sup>9</sup>
Service use	7 hours per week (364 hours per year)	In England, 673,000 people used domiciliary care in 2014/15, and 249 million hours of domiciliary care were delivered. On average, individual service users received 370 hours of home care in 2014/15 (7.1 hours per week). The average local authority-commissioned home care per person per week was 12.8 hours. <sup>8</sup>
Price multipliers for unsocial hours <sup>3</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 2015/2016</b>		
<b>Based on the price multipliers for independent sector home care provided for private purchasers:</b>		
£20 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 (£27 per day-time weekend, £25 per night-time weekday, £27 per night-time weekend).		
<b>Based on the price multipliers for independent sector home care provided for social services:</b>		
£20 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 (2016) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 20 October 2016].

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

<sup>3</sup> Mickelborough, P. (2011) *Domiciliary care*, UK Market Report, Laing & Buisson, London.

<sup>4</sup> NHS Digital (2016) *Personal Social Services: Expenditure and Unit Costs, England – 2015-16 [NS]*, <http://www.content.digital.nhs.uk/catalogue/PUB22240> [accessed 28 November 2016].

<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> United Kingdom Home Care Association (UKHCA) (2015) *A Minimum Price for HomeCare*. [http://www.ukhca.co.uk/pdfs/AMPFHC\\_150719.pdf](http://www.ukhca.co.uk/pdfs/AMPFHC_150719.pdf) [accessed 20 October 2016].

<sup>9</sup> United Kingdom Home Care Association (UKHCA) (2016) *An overview of the domiciliary care sector in the United Kingdom*, Home Care Association Limited. <http://www.ukhca.co.uk/pdfs/MarketOverviewV352016FINAL.pdf> [accessed 20 October 2016].

## 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	2015/2016 value	Notes
A. Wages/salary	£30,436 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	£9,175 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, declining to 3 per cent after 30 years. (See Preface for more information).
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 8.5 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 1,513 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.
Face to-face contact		
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 2015/2016</b>		
£40 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 21 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 £6,448 (£3,293-£10,398) and in the other £5,465 (£1,137-£14,914).<sup>2</sup> These costs have been uprated using the PSS pay and prices inflator.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£23,774 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 as reported in this volume.
B. Salary oncosts	£6,923 per year	Employer's national insurance is included, plus employer's contribution to superannuation (20%). <sup>4</sup>
C. Training		No information available.
D. Overheads		
Direct overheads	£8,902 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	£4,911 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	£2,641 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, declining to 3 per cent after 30 years. (See Preface for more information).
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>8</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 8.5 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. <sup>9</sup> Unit costs are based on 1,550 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>9</sup>
<b>Unit costs available 2015/2016</b>		
£30 per hour; £52 per hour of client-related work.		

<sup>1</sup> McDermid, 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 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>5</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>6</sup> Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>7</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>8</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>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].

## 11.9 Time banks

Rushey Green time bank is the first UK time bank to be based in a health care setting; it has established a reputation for pioneering work in this field. It services five hubs across Lewisham. 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/>. 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>1,2</sup>

When these costs were estimated, Rushey Green timebank was serviced by a manager who was partly funded through a match-funding programme (£11.09 per hour).<sup>3</sup> The detailed costs below are based on this service but reflect a fully funded time-bank servicing 360 members.<sup>4</sup> Using these data, cost per member would then decrease from £331 to £238 (or from £294 to £212 using the match-funding voluntary rate). All costs have been updated to 2015/16 levels using the PSS inflators.

Costs and unit estimation	2015/2016 value	Notes
A. Salaries	£86,255 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>5</sup> for a PO2-3 and 1 PT and 1 FT SO1 (Senior officers, 35 and 30 hours per week).
B. Oncosts	£12,766 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	£1,808 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	£2,913 per year	
Volunteer expenses	£503 per year	
Events	£2,009 per year	
Training costs	£901 per year	This includes the training of staff, volunteers and board members.
Workshops/consultancy	£2,512 per year	
<b>Indirect overheads</b>	£3,014 per year	This includes human resources, legal, payroll and accounts.
D. Travel costs	£804 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	£3,858 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, declining to 3 per cent after 30 years.
Equipment costs	£1,808 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 membership to over 500 by March 2015.
<b>Unit costs available 2015/2016</b>		
Total annual cost if fully funded (actual cost using voluntary match-funding rates) £119,151 (£105,981)		
Annual cost per member based on 360 members (actual cost using match-funding rate) £331 (£294)		

<sup>1</sup> Bauer, A., Fernandez, 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>2</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>3</sup> Rushey Green Community Projects, Funding example, <http://rgcommunityprojects.wordpress.com/apply-for-funding/funding-example/>.

<sup>4</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>5</sup> National Joint Council (NJC) Salary scales for Local Government Services, *NJC paycales 2015-16*, [http://www.nottinghamshire.gov.uk/media/2265/local-government-salary-scales-2015\\_16.pdf](http://www.nottinghamshire.gov.uk/media/2265/local-government-salary-scales-2015_16.pdf) [accessed 20 October 2016].



## **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 adult services
- 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 £135. Costs have been updated to 2015/16 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	2015/2016 value	Notes
A. Wages/salary	£31,321 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	£7,657 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Overheads Management, administration and estates staff Non-staff	£9,550 per year £14,890 per year	Taken from the 2013/14 financial accounts for 10 community trusts. 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.
D. Capital overheads	£3,896 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, declining to 3 per cent after 30 years.
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>1</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 2015/2016</b>		
£43 per hour per team member; £67,313 annual cost of team member		

<sup>1</sup> Public Health England (2016) *Adult mental health service mapping atlases for England 2000-2003*, (full datasets to 2009 can be downloaded using this link), [http://www.nepho.org.uk/mho/publications/AMH\\_service\\_mapping\\_atlases](http://www.nepho.org.uk/mho/publications/AMH_service_mapping_atlases) [accessed 29 November 2016].

<sup>2</sup> Rethink Mental Illness (2016) *Community Mental Health Teams (CMHTs)*, <https://www.rethink.org/diagnosis-treatment/treatment-and-support/cmhts> [accessed 29 November 2015].

<sup>3</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>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> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>7</sup> Building Cost Information Service (2016) *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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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 £191. Costs have been updated to 2015/16 price levels using the HCHS pay and prices inflators.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£27,152 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	£6,876 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 Management, administration and estates staff	£8,337 per year	Taken from the 2013/14 financial accounts for 10 community trusts. 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	£12,999 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	£3,896 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, declining to 3 per cent after 30 years.
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 2015/2016</b>		
£38 per hour per team member; £59,259 annual cost of team member		

<sup>1</sup> Public Health England (2016) *Adult mental health service mapping atlases for England 2000-2003*, (full datasets to 2009 can be downloaded using this link), [http://www.nepho.org.uk/mho/publications/AMH\\_service\\_mapping\\_atlases](http://www.nepho.org.uk/mho/publications/AMH_service_mapping_atlases) [accessed 29 November 2016].

<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> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>4</sup> Building Cost Information Service (2016) *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 Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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 £191 per team contact. Costs have been updated to 2015/16 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	2015/2016 value	Notes
A. Wages/salary	£28,224 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	£6,858 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 Management, administration and estates staff	£8,595 per year	Taken from the 2013/14 financial accounts for 10 community trusts. 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	£13,401 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.
E. Capital overheads	£3,889 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, declining to 3 per cent after 30 years.
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 mapping exercise <sup>1</sup> 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 2015/2016 (costs including qualifications given in brackets)</b>		
£39 per hour per team member; £60,975 annual cost of team member; £30,487 average cost per case		

<sup>1</sup> Public Health England (2016) *Adult mental health service mapping atlases for England 2000-2003*, (full datasets to 2009 can be downloaded using this link), [http://www.nepho.org.uk/mho/publications/AMH\\_service\\_mapping\\_atlases](http://www.nepho.org.uk/mho/publications/AMH_service_mapping_atlases) [accessed 29 November 2016].

<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> NHS Digital (2016) *NHS staff earnings estimates, 12-month period from July 2015 to June 2016* (not publicly available), NHS Digital, 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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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 £129. Costs have been updated to 2015/16 price levels using the HCHS pay and prices inflators.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£26,867 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	£6,361 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.
Management, administration and estates staff	£8,141 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	£12,693 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	£3,896 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, declining to 3 per cent after 30 years.
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 2015/2016 (costs including qualifications given in brackets)</b>		
£37 per hour per team member; £55 per hour of patient contact; £57,958 annual cost of team member; £8,279 average cost per case		

<sup>1</sup> Rethink Mental Illness (2016) *Assertive Outreach*, <https://www.rethink.org/diagnosis-treatment/treatment-and-support/assertive-outreach> [accessed 29 November 2016].

<sup>2</sup> Public Health England (2016) *Adult mental health service mapping atlases for England 2000-2003*, [http://www.nepho.org.uk/mho/publications/AMH\\_service\\_mapping\\_atlases](http://www.nepho.org.uk/mho/publications/AMH_service_mapping_atlases) [accessed 29 November 2016].

<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> NHS Digital (2016) *NHS staff earnings estimates, 12-month period from July 2015 to June 2016* (not publicly available), NHS Digital, Leeds.

<sup>6</sup> Building Cost Information Service (2016) *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., Ryrrie, 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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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>1</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>2</sup> NHS reference costs<sup>3</sup> report the mean average cost for an early intervention team contact was £182. Costs have been updated to 2015/16 price levels using the HCHS pay and prices inflators. See McCrone et al. (2008) for more information on early intervention teams.<sup>4</sup> See section V for further information on pay scales.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary	£28,180 per year	Based on median 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> Loss of earnings based on the minimum wage has been assumed for volunteers. <sup>6</sup>
B. Salary oncosts	£6,894 per year	Employer's national insurance is included, plus 14 per cent of salary for employer's contribution to superannuation.
C. Training		
D. Overheads Management, administration and estates staff	£8,593 per year	Taken from the 2013/14 financial accounts for 10 community trusts. 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	£13,398 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	£3,896 per year	Based on the new-build and land requirements of an NHS office and shared facilities. <sup>7,8</sup> Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
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>9</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>7,8,10</sup>
Non-London multiplier	0.96 x E	Allows for lower costs associated with working outside London. <sup>7,8</sup>
<b>Unit costs available 2015/2016 (costs including qualifications given in brackets)</b>		
£39 per hour; £60,962 annual cost of team member; £6,774 average cost per case		

<sup>1</sup> Rethink Mental Illness (2016) 'Lost Generation' – protecting Early Intervention in Psychosis services, <https://www.rethink.org/living-with-mental-illness/early-intervention> [accessed 29 November 2016].

<sup>2</sup> Public Health England (2016) *Adult mental health service mapping atlases for England 2000-2003*, (full datasets to 2009 can be downloaded using this link), [http://www.nepho.org.uk/mho/publications/AMH\\_service\\_mapping\\_atlases](http://www.nepho.org.uk/mho/publications/AMH_service_mapping_atlases) [accessed 29 November 2016].

<sup>3</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>4</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>5</sup> NHS Digital (2016) *NHS staff earnings estimates, 12-month period from July 2015 to June 2016* (not publicly available), NHS Digital, Leeds.

<sup>6</sup> Gov.UK (2016) *The national minimum and living wage*, <https://www.gov.uk/national-minimum-wage/what-is-the-minimum-wage> [accessed 17 November 2016].

<sup>7</sup> Building Cost Information Service (2016) *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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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].

## 12.6 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 2015/2016 price levels using the appropriate inflators.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary plus oncosts	£37,812 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	£ 9,264 per year	Taken from the 2013/14 financial accounts for 10 community trusts. 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	£14,444 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	£3,896 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, declining to 3 per cent after 30 years.
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:		
Patient-related work	1:0.63	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%).
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 2015/2016</b>		
£42 per hour per team member; £68 per hour per patient-related activity; £86 per hour per team member face-to-face contact; £65,416 annual cost of team member; £4,503 average cost per case		

<sup>1</sup> YoungMinds (2016) *Children and people services*, [http://www.youngminds.org.uk/for\\_parents/services\\_children\\_young\\_people/camhs](http://www.youngminds.org.uk/for_parents/services_children_young_people/camhs) [accessed 29 November 2016].

<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 costs for this table have been updated to current prices.

<sup>4</sup> Building Cost Information Service (2016) *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 Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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. Multi-disciplinary generic teams, as the name implies, were largely staffed by a range of mental health professionals. The average size of multi-disciplinary 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	2015/2016 value	Notes
A. Wages/salary plus oncosts	£50,330 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	£12,331 per year	Taken from the 2013/14 financial accounts for 10 community trusts. 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	£19,226 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	£3,896 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, declining to 3 per cent after 30 years. 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:		
Patient-related work	1:0.63	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%), administration and management (23%), consultation and liaison (13%) and clinical (49%).
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 2015/2016</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; £4,895 average cost per case		

<sup>1</sup> YoungMinds (2016) *Children and people services*, [http://www.youngminds.org.uk/for\\_parents/services\\_children\\_young\\_people/camhs](http://www.youngminds.org.uk/for_parents/services_children_young_people/camhs) [accessed 29 November 2016].

<sup>2</sup> The CAMHS mapping data are no longer being collected so costs for this table have been updated to current prices.

<sup>3</sup> Building Cost Information Service (2016) *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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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 returned in 2008 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 2015/2016 price levels using the appropriate inflators.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary plus oncosts	£36,400 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	£8,918 per year	Taken from the 2013/14 financial accounts for 10 community trusts. 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	£13,905 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	£3,896 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, declining to 3 per cent after 30 years. 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 1,565 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. <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%), administration and management (23%), consultation and liaison (13%) and clinical (49%).
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 2015/2016</b>		
£40 per hour per team member; £66 per hour of patient-related activity; £83 per hour of face-to-face contact; £3,967 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 costs for this table have been updated to current prices.

<sup>3</sup> Building Cost Information Service (2016) *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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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 for 2008 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 2015/2016 price levels using the appropriate inflators.

Costs and unit estimation	2015/2016 value	Notes
A. Wages/salary plus oncosts	£39,517 per year	Average salary for a team based on national CAMHS data. <sup>1,2</sup>
B. Overheads		
Management, administration and estates staff	£9,682 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	£15,095 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	£3,896 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, declining to 3 per cent after 30 years. 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. <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%), administration 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 2015/2016</b>		
£44 per hour per team member; £71 cost per hour per team member for patient-related activities; £90 cost per hour per team member for face-to-face contact; £6,093 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 costs for this table have been updated to current prices.

<sup>3</sup> Building Cost Information Service (2016) *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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<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 adult services

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, medium 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 in 2007/2008. The team has no case-holding responsibilities or budget but works to co-ordinate transition for young people with very complex needs.

At that time, the team supported 184 young people. The average cost per working hour (including steering group) is £59 (£62) and the cost per case per year is £979 and £1,033 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	£88,382
Social worker/social work assistant	1.5 WTE	£85,361
Other support and supervision	<0.1	£6,352
<b>Total for staff</b>		<b>£180,095</b>
Steering group	Total hours per year	£ per year
Managers: children's services	56	£2,857
Managers: adult services	42	£2,075
Managers: health	32	£1,940
Managers: education/training	60	£3,159
<b>Total for steering group</b>		<b>£10,031</b>
<b>TOTAL COST</b>		<b>£190,126</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 was based in a small unitary authority and was launched in June 2005. At the time of the study, the co-ordinator worked 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 undertook personal care planning and was in regular contact with the transition co-ordinator. This transition service had 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 supported 203 young people of whom 79 had complex needs and 124 had moderate intellectual disabilities. The cost per working hour for the team (including strategic management group) was £24 (£28) 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	£47,798
Transition co-ordinator supervision	0.02	£1,076
<b>Some of the virtual team members</b>		
Social workers in children's team	0.35	£16,942
Practice managers in children's teams	0.05	£2,979
Social workers in adult team	0.28	£13,382
Connexions advisor	0.03	£1,833
Adult operational director	0.05	£3,601
Divisional manager	<0.01	£626
<b>Total</b>		<b>£88,238</b>
<b>Strategic Management Group (meets monthly)</b>	<b>Total hours per year</b>	<b>£ per year</b>
Managers: children's services	99	£3,869
Managers: adult services	77	£3,875
Managers: education/training	22	£1,142
Area managers: connexions	22	£889
Managers: health	88	£4,393
Subtotal for Strategic Management Group		<b>£14,168</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	£5,903
Managers: adult services	116	£4,710
Managers: health	215.6	£8,892
Education services managers	235	£1,004
Connexions	22	£895
Voluntary organisations personnel	44	£1,158
<b>Subtotal for transition sub-groups</b>		<b>£22,562</b>
<b>TOTAL COST</b>		<b>£110,800</b>

### 12.10.3 Transition services for children: high cost

At the time of the study, this transition team was 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 supported 76 young people. The average costs per working hour (including steering group) is £40 (£41) 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	£23,818
Social workers/key workers	0.75	£36,007
Nurse (cyp)/trainee psychologist	0.70	£36,705
Connexions TPAs	1.00	£42,268
<b>Adult services</b>		
Manager adult team	0.60	£35,338
Social worker (adult)	0.80	£38,237
Senior practitioner	0.75	£44,176
Nurse (adult)	0.80	£39,455
Supervision (various managers, not included above)	0.08	£5,574
<b>Subtotal for children's services</b>		<b>£301,579</b>
<b>Steering group and sub-groups</b>		
	<b>Total hours per year</b>	<b>£ per year</b>
Managers: children's services	33	£1,723
Managers: adult services	14	£724
Managers: education/training	12	£571
Services managers: local authority	42	£911
Connexions	22.5	£1,702
<b>Subtotal for steering group</b>		<b>£5,631</b>
<b>TOTAL COST</b>		<b>£307,210</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 were 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 shows 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 £1,692 to £2,297 at 2015/2016 prices.

Costs and unit estimation	2015/2016 value	Notes
A. Salary plus oncosts	£2,452,343 per year	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	£904,351 per year	Administrative and management costs accounted for between 2 and 25 per cent of the total for the four sites.
Office and training costs	£48,703 per year	The costs of uniforms and training costs are included here. These accounted for 1 per cent of the total.
C. Indirect overheads	£168,924 per year	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	£7,243 per year	Information supplied by the local authority and annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
Equipment costs	£2,714 per year	Based on information supplied by the local authority.
E. Travel	£434,763 per year	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 2015/2016</b>		
£22 per hour; £43 per hour of contact; £2,131 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

The table overleaf provides the unit costs for hospital based scientific and professional staff, 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 by band are shown below and in more detail by job type in Chapter 18. Reference should also be made to the explanatory notes when interpreting the unit costs.

<b>Job titles by band</b>	
<b>Band 2</b>	Clinical support worker (Physiotherapy, Occupational therapy, Speech and language therapy).
<b>Band 3</b>	Clinical support worker (higher level) (Physiotherapy, Occupational therapy, Speech and language therapy).
<b>Band 4</b>	Occupational therapy technician, Speech and language therapy assistant/associate practitioner, Podiatry technician, Clinical psychology assistant practitioner, Pharmacy technician.
<b>Band 5</b>	Physiotherapist, Occupational therapist, Speech and language therapist, Podiatrist, Clinical psychology assistant practitioner (higher level), Counsellor (entry level).
<b>Band 6</b>	Physiotherapist specialist, Occupational therapist specialist, Speech and language therapist specialist, Podiatrist specialist, Clinical psychology trainee, Counsellor, Pharmacist, Arts therapist (entry level).
<b>Band 7</b>	Physiotherapist (advanced), Specialist physiotherapist (Respiratory problems), Specialist physiotherapist (Community), Physiotherapy team manager, Speech and language therapist (advanced), Podiatrist (advanced), Podiatry team manager, Clinical psychologist, Counsellor (specialist), Arts therapist.
<b>Band 8a</b>	Physiotherapist principal, Occupational therapist principal, Speech and language therapist principal, Podiatrist principal.
<b>Band 8a-b</b>	Physiotherapist consultant, Occupational therapist consultant, Clinical psychologist principal, Speech and language therapist principal, Podiatric consultant (surgery), Arts therapist principal.
<b>Band 8a-c</b>	Counsellor professional manager, Counsellor consultant, Consultant speech and language therapist.
<b>Band 8c-d</b>	Clinical psychologist consultant, Podiatric Consultant (surgery), Head of arts therapies, Arts therapies consultant.
<b>Band 8d-9</b>	Clinical psychologist consultant (Professional), Lead/head of psychology services, Podiatric Consultant (surgery) Head of Service.

## 13. Hospital-based scientific and professional staff

### A Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change bands 2-8b of the July 2015-June 2016 NHS staff earnings estimates for allied health professionals.<sup>1</sup> See *NHS terms and conditions of service handbook* for information on payment for unsocial hours.<sup>2</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for all physiotherapists is £33,175; occupational therapists £32,098; speech and language therapists, £33,483 dietitians, £33,030; and radiographers (Diagnostic & Therapeutic), £33,049.

### 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>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE).<sup>4</sup> To calculate the cost per hour including qualifications for each profession, the appropriate expected annual cost shown in chapter 19 should be divided by the number of working hours. This can then be added to the cost per working hour.

Note that the cost of the clinical placement for pharmacists has been provided by Dr Lynne Bollington.<sup>5</sup> 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

Taken from *NHS foundation trusts accounts: consolidated (FTC) files 2014/15*.<sup>6</sup> See Preface for more information.

Management and other non-care staff costs were 24.2 per cent of direct care salary costs and included administration and estates staff.

Non-staff costs were 43.1 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>7,8</sup>

### 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>9</sup>

### G Working time

Working hours for each AFC band have been calculated by deducting sickness absence days as reported for NHS staff groups<sup>10</sup> and training/study days from 225 working days.

### H Ratio of direct to patient-related time

See 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 hospital-based staff.

<sup>1</sup> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>2</sup> NHS Employers (2016) *NHS Terms and Conditions of Service Handbook (Agenda for Change)*, <http://www.nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook>. [accessed 17 October 2016]

<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), 2015.

<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> Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415>. [accessed 17 October 2016]

<sup>7</sup> Building Cost Information Service (2016) *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> 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>10</sup> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

## 13. Hospital-based scientific and professional staff

This table provides the annual and unit costs for hospital-based scientific and professional staff. See notes facing for assistance in interpreting each cost item and the beginning of this chapter for examples of roles in each band.

<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>	<b>Band 8b</b>
<b>A Wages/salary</b>	£16,706	£18,640	£21,413	£23,319	£31,351	£38,786	£46,095	£55,295
<b>B Salary on-costs</b>	£3,532	£4,070	£4,841	£5,370	£7,603	£9,670	£11,702	£14,260
<b>C Qualification</b>								
<b>D Overheads</b>								
Management, admin and estates staff	£4,898	£5,496	£6,353	£6,943	£9,427	£11,726	£13,987	£16,832
Non-staff	£8,723	£9,788	£11,315	£12,365	£16,789	£20,885	£24,911	£29,978
<b>E Capital overheads</b>								
-physiotherapists/OTs	£4,104	£4,104	£4,104	£6,314	£6,314	£6,314	£6,314	£6,314
-radiographers	£4,104	£4,104	£4,104	£8,836	£8,836	£8,836	£8,836	£8,836
-dietitians/speech and language therapists (or other professionals with a small treatment space or sharing facilities).	£4,104	£4,104	£4,104	£4,672	£4,672	£4,672	£4,672	£4,672
<b>F Travel</b>								
<b>G Working time</b>	42.4 (1,592 hours) per year, 37.5 hours per week	42.4 (1,592 hours) per year, 37.5 hours per week	42.7 (1,592 hours) per year, 37.5 hours per week	42.7 (1,603 hours) per year, 37.5 hours per week	42.7 (1,603 hours) per year, 37.5 hours per week	42.7 (1,603 hours) per year, 37.5 hours per week	42.7 (1,603 hours) per year, 37.5 hours per week	42.7 (1,603 hours) per year, 37.5 hours per week
<b>H Ratio of direct to indirect time</b>								
<b>I London multiplier</b>	1.56xE							
Non-London multiplier	0.97xE							
<b>Unit costs available 2015/2016</b>								
<b>Cost per working hour</b>								
-physiotherapists/OTs	<b>£24</b>	<b>£27</b>	<b>£30</b>	<b>£34</b>	<b>£45</b>	<b>£55</b>	<b>£64</b>	<b>£77</b>
-radiographers	<b>£24</b>	<b>£27</b>	<b>£30</b>	<b>£35</b>	<b>£46</b>	<b>£56</b>	<b>£66</b>	<b>£78</b>
-dietitians/speech and language therapists	<b>£24</b>	<b>£27</b>	<b>£30</b>	<b>£33</b>	<b>£44</b>	<b>£54</b>	<b>£63</b>	<b>£76</b>

## 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 below for examples of roles in each band.

<b>Job titles by band</b>	
<b>Band 2</b>	Clinical support worker nursing (hospital)
<b>Band 3</b>	Clinical support worker higher level nursing (hospital/mental health)
<b>Band 4</b>	Nurse associate practitioner acute, Nursery nurse (neonatal)
<b>Band 5</b>	Nurse, Nurse (mental health)
<b>Band 6</b>	Nurse specialist/team leader
<b>Band 7</b>	Nurse advanced/team manager
<b>Band 8a</b>	Modern matron
<b>Bands 8a-c</b>	Nurse consultant
<b>Bands 8c-8d &amp; 9</b>	Nurse/Midwife consultant higher level

## 14. Hospital-based nurses

### A Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change bands 2-8b of the July 2015-June 2016 NHS staff earnings estimates for nurses.<sup>1</sup> See *NHS terms and conditions of service handbook* for information on payment for unsocial hours.<sup>2</sup> The Electronic Staff Records (ESR) system shows that the mean basic salary for a staff nurse is £29,618; a matron is £45,493, and a nurse manager is £47,181.

### 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>3</sup> Current cost information has been provided by the Department of Health and Health Education England (HEE).<sup>4</sup> To calculate the cost per hour including qualifications for each profession, the appropriate expected annual cost shown in chapter 19 should be divided by the number of working hours. This can then be added to the cost per working hour.

### D Overheads

Taken from *NHS foundation trusts accounts: consolidated (FTC) files 2014/15*.<sup>5</sup> See Preface for more information.

Management and other non-care staff costs were 24.2 per cent of direct care salary costs and included administration and estates staff.

Non-staff costs were 43.1 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>6,7</sup>

### F Working time

Working hours for each AFC band have been calculated by deducting sickness absence days as reported for NHS staff groups<sup>8</sup> and training/study days from 225 working days.

### G Ratio of direct to patient-related time

Taken from the McKinsey report commissioned by the Department of Health in 2009,<sup>9</sup> hospital nurses are estimated to spend 41 per cent of their time on patient care, and 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.

<sup>1</sup> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>2</sup> NHS Employers (2016) *NHS Terms and Conditions of Service Handbook (Agenda for Change)*, <http://www.nhsememployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook>. [accessed 17 October 2016]

<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), 2015.

<sup>5</sup> Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415>. [accessed 17 October 2016]

<sup>6</sup> Building Cost Information Service (2016) *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 Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<sup>9</sup> Department of Health (2010) *Achieving a world class productivity in the NHS, 2009/10-2013/14: the McKinsey report*, Department of Health, London.

## 14. Hospital-based nurses

This table provides the annual and unit costs for hospital-based nurses (see the notes facing for assistance in interpreting each cost item). See also the beginning of this chapter for examples of roles in each band.

<b>Hospital-based nurses</b>									
Refer to notes on facing page for references	<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>	<b>Band 9</b>	
<b>A Wages/salary</b>	£16,706	£18,640	£20,399	£25,902	£32,114	£38,550	£45,204	£88,860	
<b>B Salary oncosts</b>	£3,532	£4,070	£4,559	£6,088	£7,815	£9,605	£11,455	£23,591	
<b>C Qualifications (see notes)</b>									
<b>D Overheads</b>									
Management, admin and estates staff	£4,898	£5,496	£6,040	£7,742	£9,663	£11,653	£13,711	£27,213	
Non-staff	£8,723	£9,788	£10,757	£13,788	£17,210	£20,755	£24,420	£48,466	
<b>E Capital overheads</b>	£1,895	£1,895	£1,895	£1,895	£3,065	£3,065	£3,065	£2,065	
<b>F Working time</b>	42.2 weeks (1,583 hours) per year, 37.5 hours per week	42.4 weeks (1,590 hours) per year, 37.5 hours per week	43 weeks (1,611 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week					
<b>G Ratio of direct to indirect time on : Face to face contacts</b>	<b>NA</b>	NA	NA	1:1.44	1:1.44	1:1.44	NA	NA	
<b>H London multiplier</b>	1.55 x E	1.55 x E	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	0.97 x E	0.97 x E	
<b>Unit costs available 2015/2016</b>									
Cost per working hour	£23	£25	£28	£35	£44	£53	£62	£122	
Cost per hour of patient contact				£86	£108	£130			

## 15. Hospital-based doctors

The table overleaf provides the unit costs for hospital doctors and replaces the individual schema usually found in this section. See Preface for more information on changes to the presentation of our estimates. Reference should be made to the explanatory notes when interpreting the unit costs. See below for examples of work performed under each title

<b>Work performed under each job title</b>	
<b>Foundation doctor FY1</b>	Foundation doctors are a grade of medical practitioner undertaking a two-year, general postgraduate medical training programme which forms the bridge between medical school and specialist/general practice training. They have the opportunity to gain experience in a series of posts in a variety of specialty and healthcare settings. <sup>1</sup>
<b>Foundation doctor FY2</b>	
<b>Registrar</b>	A registrar is a specialist in training for medical consultancy. <sup>2</sup>
<b>Associate specialist</b>	An associate specialist grade is normally reached by doctors taking a non-consultant career path involving becoming a staff grade after being a foundation doctor <sup>2</sup>
<b>Consultant: medical, surgical and psychiatric</b>	Consultants are senior hospital-based physicians or surgeons who have completed all of their specialist training and been placed on the specialist register in their chosen speciality. A consultant typically leads a team of doctors which comprises specialty registrars and foundation doctors, all training to work in the consultant's speciality, as well as other "career grade" doctors such as clinical assistants, clinical fellows, speciality doctors, associate specialists and staff grade doctors. <sup>2</sup>

<sup>1</sup> NHS, UK (2016) The Foundation Programme, <http://www.foundationprogramme.nhs.uk/pages/home>.

<sup>2</sup> Prospects (2016) Job profile, hospital doctors, <https://www.prospects.ac.uk/job-profiles/hospital-doctor>.

## 15. Hospital-based doctors

### A. Wages/salary

The mean basic salary for hospital doctors has been taken from the July 2015-June 2016 Electronic Staff Record (ESR).<sup>1</sup> See NHS terms and conditions of service handbook for information on payment for unsocial hours and shift work.<sup>2</sup> See section V for further information on pay scales.

### 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 hospital doctors. These 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, specialty registrar training involves three years' full-time post-graduate training with at least two of the years in a specialty training programme. Associate specialist training involves at least four years' full-time post-graduate training and consultants training requires six years in a specialty hospital setting.<sup>5</sup>

### D. Overheads

Taken from *NHS foundation trusts accounts: consolidated (FTC) files 2014/15*.<sup>6</sup> See Preface for more information.

Management and other non-care staff costs were 24.2 per cent of direct care salary costs and included administration and estates staff.

Non-staff costs were 43.1 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.<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, declining to 3 per cent after 30 years.

### F. Working time

Working hours for each AFC band have been calculated by deducting sickness absence days as reported for NHS staff groups<sup>9</sup> and training/study days from 225 working days. 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>

### G. London and non-London multiplier

The London multiplier allows for the higher costs associated with London and the non-London multiplier allows for the lower costs associated with working outside London.<sup>7,8,11</sup>

<sup>1</sup> NHS Digital (2016) NHS staff earnings estimates, 12-month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

<sup>2</sup> NHS Employers (2016) *NHS Terms and Conditions of Service Handbook (Agenda for Change)*, <http://www.nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook>.

<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> Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415>.

<sup>7</sup> Building Cost Information Service (2016) *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> NHS Digital, *NHS sickness absence rates by staff group, April 2015-March 2016*, <http://content.digital.nhs.uk/article/2021/Website-Search?productid=21447&q=annual+sickness+absence&sort=Relevance&size=10&page=1&area=both#top> [accessed 13 October 2016].

<sup>10</sup> Provided by the Department of Health, 2009.

## 15. Hospital-based doctors

This table provides the annual and unit costs for hospital-based doctors (see the notes facing for assistance in interpreting each cost item). See also the beginning of this chapter for examples of work performed under each title.

Hospital-based doctors							
Refer to notes on facing page for references	Foundation doctor FY1	Foundation doctor FY2	Registrar	Associate specialist	Consultant: medical	Consultant: surgical	Consultant: psychiatric
<b>A Wages/salary</b>	£22,703	£27,970	£37,315	£79,250	£87,449	£89,046	£89,804
<b>B Salary oncosts</b>	£5,199	£6,663	£9,261	£20,646	£23,198	£23,642	£23,858
<b>C Qualifications</b>	£24,295	£27,414	£38,697	£45,381	£58,533	£58,533	£58,533
<b>D Overheads</b>							
Management, admin and estates staff	£6,752	£8,381	£11,271	£24,241	£26,777	£27,270	£27,505
Non-staff	£12,026	£14,927	£20,074	£43,173	£47,689	£48,568	£48,986
<b>E Capital overheads</b>	£4,228	£4,228	£4,228	£4,228	£5,295	£5,295	£5,295
<b>F Working time</b>	44.4 weeks (2,133 hours) per year 48 hours per week	44.4 weeks (2,133 hours) per year 48 hours per week	42.4 weeks (2,037 hours) per year 48 hours per week	42.4 weeks (1,698 hours) per year 40 hours per week	42.3 weeks (1,838 hours) per year 43.3 hours per week	42.3 weeks (1,838 hours) per year 43.3 hours per week	42.3 weeks (1,838 hours) per year 43.3 hours per week
<b>G London multiplier</b>	1.14 x (A to B) 1.56 x F	1.14 x (A to B) 1.56 x F	1.14 x (A to B) 1.56 x F				
<b>H Non-London multiplier</b>	0.97 x F	0.97 x F	0.97 x F				
<b>Units costs available 2015/2016 (costs including qualifications in brackets)</b>							
Cost per working hour	£24 (£35)	£29(£42)	£40(£59)	£101(£128)	£104 (£135)	£105 (£137)	£106 (£138)
Cost per working hour, 56-hr week	£20 (£30)	£25(£36)	£35(£51)				
Cost per working hour, 40-hr week	£29 (£42)	£35(£50)	£48(£71)	£101(£128)			



## **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
2005	206.1	7.7	194.1	2.2
2006	219.8	6.7	202.7	4.4
2007	228.7	4.0	210.9	4.0
2008	243.5	6.5	212.9	0.9
2009	236.9	-2.7	218.0	2.4
2010	239.5	1.1	228.4	4.8
2011	251.7	5.2	239.4	4.8
2012	252.7	0.4	246.8	3.1
2013	257.5	1.9	253.4	2.7
2014	274.4	6.6	257.5	1.6
2015	283.2	3.2	260.6	1.2

### 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>3</sup>	
		Index (1995=100)	Annual % increases
2004/05	2.7	156	7.2
2005/06	2.7	166	6.4
2006/07	3.0	170	2.7
2007/08	2.4	187	9.8
2008/09	2.7	191	2.3
2009/10	1.4	172	-10.3
2010/11	1.8	169	-1.8
2011/12	1.4	176	4.2
2012/13	2.1	181	3.0
2013/14	1.7	191	5.5
2014/15	1.6	205	7.5
2015/16	0.1	210 (E)	2.2 (E)

<sup>1</sup> Building Cost Information Service (2016) *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 1 November 2016].

<sup>2</sup> <http://ons.gov.uk/ons/taxonomy/index.html?nsl=Retail+Prices+Index#tab-data-tables> [accessed 15 October 2016].

<sup>3</sup> Provided by the Department of Health, 2016.

## 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>2</sup>	Pay <sup>1</sup>
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
2015/16	297.0	2.7	0.3

## 16.4 The PSS pay & prices index

Following changes in the collection of the Personal Social Services Expenditure return, and changes to the methodology used to calculate and weigh the pay and workforce data, the methodology used to calculate the PSS inflators has been revised this year.

As in previous years, 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>3</sup> The following occupation groups are used for analysis: managers, social workers, nurses, occupational therapists, community and care workers, administrative/office and ancillary staff. 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 2015 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 year Skills for Care have used a new methodology to produce the average pay and workforce estimates by occupational group in the NMDS-SC. The new methodology produces weighted estimates and cannot be applied to jobs with low numbers.

As in previous years, the index includes an element for capital, which takes into account the pressure from the opportunity cost of capital. The index used is the PUBSEC Tender Price Index of public sector building non-housing supplied by the Royal Institution of Chartered Surveyors (RICS). The HMT GDP deflator is used to deflate prices for non-staff revenue spend in the sector.

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, 2016.

<sup>2</sup> Provided by the Department of Health, 2016. The methodology for the pay cost index was revised in 2011/12 and now uses Electronic Staff Record (ESR) data at occupation code level. Pay cost data are therefore not comparable with earlier years.

<sup>3</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
2005/06	2.3	3.8	2.6
2006/07	3.4	4.5	3.8
2007/08	2.1	3.9	2.3
2008/09	1.6	2.4	1.8
2009/10	1.5	0.2	1.7
2010/11	-0.2	-0.4	-0.3
2011/12	0.1	0.7	0.1
2012/13	0.6	1.2	0.7
2013/14	0.7	1.6	0.8
2014/15	1.4	2.9	1.7
2015/16	-0.2 (E)	0.1 (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
2005/06	3.0	3.7	3.2
2006/07	4.0	4.5	4.2
2007/08	2.7	3.5	2.9
2008/09	2.0	2.4	2.1
2009/10	1.6	1.3	1.7
2010/11	0.2	0.2	0.2
2011/12	-0.2	0.0	-0.2
2012/13	1.4	1.7	1.5
2013/14	0.9	1.2	1.0
2014/15	2.1	2.5	2.2
2015/16	0.0 (E)	0.1 (E)	0.0 (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	-0.5	-0.3
2011/12	0.1	0.8	0.1
2012/13	0.5	1.2	0.6
2013/14	0.7	1.7	0.8
2014/15	1.3	3.0	1.6
2015/16	-0.2 (E)	0.2 (E)	-0.2 (E)

E = estimate.

<sup>1</sup> Provided by the Department of Health, 2016.

## 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	£24,752
Administration and estates staff	£27,134
Healthcare assistants and other support staff	£17,012
Nursing, midwifery and health visiting staff	£29,019
Nursing, midwifery and health visiting learners	£20,105
Scientific, therapeutic and technical staff	£31,560
Healthcare scientists	£29,059

### 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	£20,399
Band 5	£25,902
Band 6	£32,114
Band 7	£38,550
Band 8a	£45,204
Band 8b	£53,944
Band 8c	£63,313
Band 8d	£74,859
Band 9	£88,860

### 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	£21,413
Band 5	£23,319
Band 6	£31,351
Band 7	£38,786
Band 8a	£46,095
Band 8b	£55,295
Band 8c	£65,087
Band 8d	£79,109
Band 9	£95,874

<sup>1</sup> Salaries have been provided by NHS Digital and more specific enquiries relating to pay by grade or staff group should be directed to them: <https://digital.nhs.uk/>.

## 17.4 Mean annual basic pay per FTE for administration and estates by Agenda for Change band, NHS England

	Mean annual basic pay per FTE
Band 1	£15,317
Band 2	£16,817
Band 3	£18,551
Band 4	£21,377
Band 5	£25,497
Band 6	£31,075
Band 7	£37,174
Band 8a	£44,555
Band 8b	£53,260
Band 8c	£63,288
Band 8d	£76,131
Band 9	£91,627

## 17.5 Mean annual basic pay per FTE for all staff groups by Agenda for Change band, NHS England

	Mean annual basic pay per FTE
Band 1	£15,346
Band 2	£16,706
Band 3	£18,640
Band 4	£21,283
Band 5	£25,622
Band 6	£31,759
Band 7	£38,173
Band 8a	£45,093
Band 8b	£53,897
Band 8c	£63,862
Band 8d	£76,832
Band 9	£92,117

## 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	£31,064
Nursery nurses and nursing assistants	£18,201
<b>Science technical &amp; therapeutic staff (ST&amp;T): allied health professionals</b>	
Qualified	£33,517
Unqualified	£19,012
<b>ST&amp;T staff: other</b>	
Qualified	£35,878
Unqualified	£20,005
<b>Ambulance staff</b>	
Qualified	£27,153
Unqualified	£18,687
<b>Former pay negotiating council groups</b>	
Senior managers	£78,500
Managers	£48,376
Administrative & clerical	£22,603
Maintenance & works	£22,097

Source of tables 17.1-17.6: NHS Digital (2016) NHS staff earnings estimates, 12 month period from July 2015 to June 2016 (not publicly available), NHS Digital, Leeds.

### 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

## 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 Table 19.1 after the title of the professional group.<sup>2</sup>

The components of the cost of training health service professionals are for pre-registration and postgraduate 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>3</sup>	Clinical placement	Total investment	Expected annual cost discounted at 3.5%
<b>Scientific and professional</b>					
Physiotherapist (24.3)	£25,454	£42,575	£4,741	£72,770	£5,995
Occupational therapist (23.5)	£25,454	£42,575	£4,741	£72,770	£5,965
Speech and language therapist (24.7)	£27,955	£42,575	£4,741	£75,272	£6,325
Dietitian (23.3)	£25,454	£42,575	£4,741	£72,770	£6,188
Radiographer (24.3)	£30,499	£42,575	£4,741	£77,816	£6,342
Hospital pharmacist (27.6)	£36,549	£54,663	£37,025	£128,237	£10,105
Community pharmacist (27.6)	£36,549	£54,663	£27,436	£118,649	£9,350
<b>Nurses (15.7)</b>	£24,111	£56,767	£4,741	£85,619	£11,251
<b>Social workers (8) (degree)</b>	£24,430	£42,575	£6,850	£73,855	£27,481

<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> Estimates of expected working life have been calculated using the 2001 census.

<sup>3</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 postgraduate centre costs	Total investment	Expected annual cost discounted at 3.5%
Doctors (26)							
Pre-registration training: years 1-5	£44,458	£67,458	£133,082	NA		£244,998	£19,886
Post-graduate							
Foundation officer 1 (included in pre-reg training)	£44,458	£67,458	£133,082	£10,754	£43,570	£299,322	£24,296
Foundation officer 2	£44,458	£67,458	£133,082	£20,780	£49,489	£315,268	£27,415
Registrar group	£44,458	£67,458	£133,082	£40,155	£98,410	£383,563	£38,697
Associate specialist	£44,458	£67,458	£133,082	£48,496	£133,745	£427,240	£45,645
GP	£44,458	£67,458	£133,082	NA	£142,996	£387,995	£41,452
Consultants	£44,458	£67,458	£133,082	£65,598	£199,815	£510,411	£58,533

<sup>1</sup> The method of calculating postgraduate 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

### For-profit care home fees in England

#### Minimum and maximum fees for 2015/16 for single and shared rooms per week

	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	£717	£775	£675		£467	£700	£400	£600
Dementia	£650	£908	£589	£813	£523	£642	£483	£554
Mental health	£886	£1,494	£648	£1,157	£549	£850	£443	£581
Mental health (brain injury rehabilitation)	£1,283	£2,300			£1,438	£1,483		
Mental health (learning disability)	£948	£1,948	£950	£3,000	£836	£1,530	£498	£754
Older people (65+)	£639	£843	£602	£713	£495	£629	£451	£539
Physical disability	£695	£1,267	£605	1,232	£540	£799	£454	£568
Sensory impairment	£1,650	£1,650			£597	£633	£730	£415
Substance misuse problems	£655	£899	£604	£771	£539	£727	£457	£551
<b>Average of all 'for profit' care home fees</b>	<b>£654</b>	<b>£895</b>	<b>£603</b>	<b>£761</b>	<b>£538</b>	<b>£726</b>	<b>£457</b>	<b>£550</b>

### Not-for-profit care home fees in England

#### Minimum and maximum fees for 2015/16 for single and shared rooms per week

	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	£1,400				£1,400			
Dementia			£589	£813		£780	£541	£1,023
Mental health	£682	£841	£766	£852	£580	£669	£586	£700
Mental health (learning disability)	£1,466	£1,748			£916	£1,307	£714	£800
Older people (65+)	£792	£969	£642	£804	£562	£703	£497	£605
Physical disability	£873	£2,323			£861	£1,389	£700	£1,100
Sensory impairment					£732	£981	£450	£458
Substance misuse problems	£1,278				£685	£774	£653	£718
<b>Average of all 'not-for-profit' care home fees</b>	<b>£816</b>	<b>£1,045</b>	<b>£664</b>	<b>£814</b>	<b>£625</b>	<b>£787</b>	<b>£531</b>	<b>£666</b>

## 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 below were provided in June 2013, and to calculate unit costs for this publication, they have been uprated using the latest England and Wales Residential Development Land Index (<http://content.knightfrank.com/research/161/documents/en/q3-2015-3353.pdf>). 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.

Residential land		
Local authority	Town	Weighted value per hectare
South East		
Aylesbury Vale District Council	Aylesbury	£2,178,000
East Midlands		
Northampton Borough Council	Northampton	£1,053,000
East		
Norwich City Council	Norwich	£924,000
North East		
Middlesbrough Borough Council	Middlesbrough	£1,303,780
North West		
Bolton Metropolitan Borough Council	Bolton	£1,265,000
South West		
Cornwall Council	Truro	£1,377,000
West Midlands		
Worcester City Council	Worcester	£1,236,000
Yorkshire and the Humber		
Sheffield City Council	Sheffield	£1,219,000
Outer London		£7,000,000 <sup>1</sup>
Inner London	Hayes	£20,000,000 <sup>1</sup>
England	Excl. outer and inner London	£1,272,500
	Incl. outer and inner London	£3,718,000

<sup>1</sup> No weighted figures available for London.

## 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

**Annuitising** 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 multi-disciplinary 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 oncosts, 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.

**Short-term** The period during which durable assets cannot be immediately added to or removed from the existing stock of resources.

**Time preference rate** The rate at which future costs or benefits are valued in comparison to current or base year's costs or benefits.

## 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.

**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 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

Adult Social Care Finance Return (ASC-FR): <http://content.digital.nhs.uk/datacollections/ASC-FR>

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 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/>

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/>

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.

LaingBuisson: <http://www.laingbuisson.co.uk/>

LaingBuisson, an independent company, provides authoritative data, statistics, analysis and market intelligence on the UK health.

Livability: <http://www.livability.org.uk/>

National Audit Office: <https://www.nao.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/>

NHS Digital: <https://digital.nhs.uk/>

NHS Digital is the new name for the Health & Social Care Information Centre 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.

National Institute for Health and Clinical 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-2014-to-2015>

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/>

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

**2015**

Guest editorial: Implications of the Care Act 2014 on social care markets for older people  
Survey questions on older people's receipt of, and payment for, formal and unpaid care in the community.  
Estimating the unit costs of vision rehabilitation services.  
Review of resource-use measures in UK economic evaluations.

**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

**2015**

Individual placement and support  
Adults with learning disabilities  
Key worker services for disabled children and their families  
Services for children in care  
Services for children in need  
Common assessment framework (CAF)  
Palliative care for children and young people

