# 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 £112.2 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	2015/2016 value	Notes	
estimation			
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. 3.4.5.6.7 A weighted average fee for Englan reflecting the distribution of single and shared rooms was taken from Laing & Buisson Care Homes Complete Dataset 2015/16.8 Care home fees have been split into their component parts by Laing & Buisson (2015).9 For nursing care for frail elderly people, direct costs (staff: ancillary support, and non-staff: repairs and maintenance at hom 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		No current studies indicate how external services are used by nursing	
B. Community nursing		home residents. See previous editions of this volume for sources of	
C. GP services		information.	
D. Other external services			
E. Personal living	£24.90 per week	The Department for Work and Pensions (DWP) personal allowance for	
expenses		people in residential care or a nursing home is £24.90.2 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>	

#### Unit costs available 2015/2016

£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>&</sup>lt;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 20161.

<sup>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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/201402market-stability-report.pdf [28 November 2016].

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

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

<sup>&</sup>lt;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 [accessed 29 November 2016].

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

<sup>&</sup>lt;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
External service		staff costs, and indirect costs (corporate overheads) form 8.7 per cent.  No current studies indicate how external services are used by residential
B. Community nursing		care home residents. See previous editions of this volume for sources of
C. GP services		information.
D. Other external services		
E. Personal living	£24.90 per week	The Department for Work and Pensions (DWP) personal allowance for
expenses	12 iiso per week	people in residential care or a nursing home is £24.90.9 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>

#### Unit costs available 2015/2016

£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>&</sup>lt;sup>51</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>&</sup>lt;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>&</sup>lt;sup>3</sup> Institute of Public Care (2014) *The stability of the care market and market oversight in England*, <a href="http://www.cqc.org.uk/sites/default/files/201402-market-stability-report.pdf">http://www.cqc.org.uk/sites/default/files/201402-market-stability-report.pdf</a> [28 November 2016].

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

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

<sup>&</sup>lt;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 [accessed 29 November 2016].

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

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

<sup>&</sup>lt;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 uprated using the PSS pay & prices inflator.

Costs and unit estimation	2015/2016 value	Notes
Capital costs		Based on the new-build and land requirements for local authority
A. Buildings and oncosts	£89 per week	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	£957 per week	The median estimate is taken from ASC-FR 2014/15 uprated using the PSS
expenditure (minus capital)		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		No current studies indicate how external services are used by residential
F. Community nursing		care home residents. See previous editions of this volume for sources of
G. GP services		information.
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 £24.90.4 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)	Based on ASC-FR 2014/15 data. <sup>1</sup>
	1.45 x (D)	

#### Unit costs available 2015/2016

£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>&</sup>lt;sup>1</sup> NHS Digital (2016) Adult Social Care Finance Return (ASC-FR), NHS Digital, Leeds. <a href="http://www.content.digital.nhs.uk/catalogue/PUB22240">http://www.content.digital.nhs.uk/catalogue/PUB22240</a> [accessed 28 November 2016].

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

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

<sup>&</sup>lt;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>&</sup>lt;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 uprated 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		Based on the new-build and land requirements for local authority day
A. Buildings and oncosts	£6.00 per client attendance	care facilities (which do not distinguish client group). 4 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 uprated 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.
Unit costs available 2015/2	2016	
£61 per client attendance (	includes A to D); £13	per client hour; £46 per client session lasting 3.5 hours.

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

 $<sup>^{\</sup>rm 2}$  NHS Digital (2014) PSS EX1 2013/14, NHS Digital, Leeds.

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

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

<sup>&</sup>lt;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>&</sup>lt;sup>1</sup> NHS Digital (2015) Adult Social Care Finance Return (ASC-FR) Guidance, NHS Digitalhttp://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-build extra-care housing schemes located across England.¹ 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, <a href="http://www.pssru.ac.uk/project-pages/unit-costs/2011/index.php">http://www.pssru.ac.uk/project-pages/unit-costs/2011/index.php</a>.

All costs have been uprated from 2008 to current prices using the appropriate inflators. The mean cost of living in extracare 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
Support costs	£10 per resident per week	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).
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 uprated using the Retail Price Index.
D. Health and social service costs		Estimates of health and social service costs were made combining resource use information reported by 465 residents six months after admission, with the appropriate unit costs taken from the respective local authorities or, where appropriate, from national sources. <sup>3</sup>
Health services	£72 per resident per week	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	

### Unit costs available 2015/2016

£182 accommodation, housing management and support costs; £288 accommodation, housing management, support and living expenses; £469 total cost (A to D).

<sup>&</sup>lt;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.

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. [accessed 18 October 2016]

<sup>&</sup>lt;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. 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.

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 <a href="http://www.londonhp.nhs.uk/wp-content/uploads/2011/03/Dementia-Services-Guide.pdf">http://www.londonhp.nhs.uk/wp-content/uploads/2011/03/Dementia-Services-Guide.pdf</a>.

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. 4,5 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.
Unit costs available 2015/20	, ,	,
Total annual cost £862,586;	total cost per hour £428;	cost per client £1,218.

<sup>&</sup>lt;sup>1</sup> Department of Health (2011) Commissioning services for people with dementia, <a href="http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/D">http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/D</a>
H 127381 [accessed 9 October 2014].

<sup>&</sup>lt;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, <a href="http://dementianews.wordpress.com/2011/05/12/nice-commissioning-guide-memory-assessment-services/">http://dementianews.wordpress.com/2011/05/12/nice-commissioning-guide-memory-assessment-services/</a> [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>&</sup>lt;sup>4</sup> Building Cost Information Service (2015) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

<sup>&</sup>lt;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). 1,2

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.

£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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;sup>4</sup> NHS Digital (2015) NHS staff earnings estimates to June 2016, NHS Digital, Leeds.

<sup>&</sup>lt;sup>5</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

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

<sup>&</sup>lt;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 uprated 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 £
MENTAL HEALTH SERVICES		1 1 1 1 1 1 1	- <b>F F 1</b>
Mental health care clusters (per bed day)	£373	NA	NA
Mental health care clusters (per bed day), including			
carbon emissions 59 kgCO2e)	£376		
Mental health care clusters (initial assessment)	£300	£190	£342
Mental health care clusters (initial assessment),			
including carbon emissions 47 kgCO2e)	£302		
All drug and alcohol services (adults and children)	£130	£95	£150
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
Mental health specialist teams (per care contact)	£121	£96	£145
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
Secure mental health services (per bed day)	£528	£471	£591
Low-level secure services	£423	£376	£462
Medium-level secure services	£503	£453	£554
Specialist mental health services (per bed day)	£358	£284	£399
Eating disorder (adults) – admitted	£461	£373	£528
Mother and baby units – admitted	£693	£619	£755

<sup>&</sup>lt;sup>1</sup> Department of Health (2015) NHS reference costs 2014-2015, <a href="https://www.gov.uk/government/publications/nhs-reference-costs-2014-to-2015">https://www.gov.uk/government/publications/nhs-reference-costs-2014-to-2015</a> [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 uprated 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 £764.¹ 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

### Unit costs available 2015/2016

£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>&</sup>lt;sup>1</sup> NHS Digital (2016) Adult Social Care Finance Return (ASC-FR), NHS Digital, Leeds. <a href="http://www.content.digital.nhs.uk/catalogue/PUB22240">http://www.content.digital.nhs.uk/catalogue/PUB22240</a> [accessed 28 November 2016].

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

<sup>&</sup>lt;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 uprated 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	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
	week	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)	£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 £636.¹ 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.
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 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.

#### Unit costs available 2015/2016

£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>&</sup>lt;sup>1</sup> NHS Digital (2016) Adult Social Care Finance Return (ASC-FR), NHS Digital, Leeds. <a href="http://www.content.digital.nhs.uk/catalogue/PUB22240">http://www.content.digital.nhs.uk/catalogue/PUB22240</a> [accessed 28 November 2016].

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

<sup>&</sup>lt;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), 1 this table uses the Personal Social Services Expenditure return (PSS EX1)2 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	£26 per client	The median cost per client week has been taken from PSS EX1 2013/14 <sup>1</sup>
expenditure (minus capital)	attendance	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	
20114011 History III	1.88 x B 1.09 x D	Relative London costs are drawn from the same source as the base data.
Unit costs available 2015/	2016	
£34 per client attendance	(includes A to D); £8.	20 per client hour; £29 per client session lasting 3.5 hours.

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

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

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

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

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

<sup>&</sup>lt;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.
Unit costs available 2015/	<b>'2016</b>	
£32 per client attendance	(includes A to D); £8	per client hour; £27 per client session lasting 3.5 hours.

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

 $<sup>^{\</sup>rm 2}$  Based on research carried out by PSSRU in 2014.

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

 $<sup>^{\</sup>rm 4}$  Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>&</sup>lt;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.¹ 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).¹ Another study² 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		Taken from the 2013/14 financial accounts for 10 community trusts.
Management, administration and estates staff	£23,596 per year	Management and other non-care staff costs were 24.5 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£36,790 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.
Unit costs available 2015/20	016 (costs including qu	alifications given in brackets)

<sup>&</sup>lt;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>&</sup>lt;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>&</sup>lt;sup>3</sup> NHS Digital (2015) NHS staff earnings estimates to June 2015 (not publicly available), NHS Digital, Leeds.

<sup>&</sup>lt;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>&</sup>lt;sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

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

<sup>&</sup>lt;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, <a href="http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/">http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/</a> [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 uprated 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	£114	£87	£62	£60	£74	£79
advocates assessments						
Court protection costs	£43	£43	£43	£43	£43	£43
Total costs	£1,696	£968	£1,119	£2,021	£1,255	£1,412

<sup>&</sup>lt;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.
Unit costs available 2015/	<b>2016</b>	· · · · · · · · · · · · · · · · · · ·
£52 per hour, £86 per hou	r of direct contact, £	173 per session, £14 per service user.

<sup>&</sup>lt;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>&</sup>lt;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>&</sup>lt;sup>3</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

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

<sup>&</sup>lt;sup>5</sup> Contracted hours are taken from NHS Careers (2014) *Pay and benefits*, National Health Service, London. <a href="http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/">http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/</a> [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 uprated using the appropriate inflators.

The full report can be downloaded at:

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>&</sup>lt;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>&</sup>lt;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 comorbid 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 uprated 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, <u>www.nta.nhs.uk</u>.

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

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

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

<sup>&</sup>lt;sup>4</sup> National Treatment Agency for Substance Misuse (2010) NDTMS dataset G, definition, business definition for adult drug treatment providers, <a href="http://www.nta.nhs.uk/core-data-set.aspx/">http://www.nta.nhs.uk/core-data-set.aspx/</a> [accessed 9 October 2014].

## 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, porterage, transport, waste disposal, security, finance, human resources, personnel, communications and corporate charges.
Unit costs available 2015	/2016	
£153 per patient day or £	1,074 per patient wee	ek

<sup>&</sup>lt;sup>1</sup> National Treatment Agency for Substance Misuse (2010) *NDTMS dataset G, definition, business definition for adult drug treatment providers*, <a href="http://www.nta.nhs.uk/core-data-set.aspx">http://www.nta.nhs.uk/core-data-set.aspx</a> [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 uprated 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 uprated 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, porterage, transport, waste disposal, security, finance, human resources, personnel, communications and corporate charges.
Unit costs available 2015/2	2016	
£55 per patient week		

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

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

<sup>&</sup>lt;sup>3</sup> Department of Health (2015) *NHS reference costs 2013-2014*, <a href="https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014">https://www.gov.uk/government/publications/nhs-reference-costs-2013-to-2014</a> [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.1

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		

£45 (£52) per hour of clinic consultation

<sup>&</sup>lt;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.

<sup>&</sup>lt;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-andreward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook.

<sup>&</sup>lt;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>&</sup>lt;sup>5</sup> Personal communication with the Department of Health and Health Education England (HEE), 2014.

<sup>&</sup>lt;sup>6</sup> Monitor (2016) NHS Foundation Trusts: Consolidation (FTC) files 2014/15, https://www.gov.uk/government/publications/nhs-foundation-trust-accountsconsolidation-ftc-files-201415.

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

<sup>&</sup>lt;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.nhscareers.nhs.uk/working-in-thenhs/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>
Unit costs available 2015	/2016	
f81 per client attendance	(includes A to D): f1	7 per client hour; £60 per client session lasting 3.5 hours.

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

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

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

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

 $<sup>^{\</sup>rm 5}$  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	Project A: supervision from a service manager for 2 hours per month (24 hours per year)  Project 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 Indirect overheads	£3,948 per year £8,685 per year	Premises costs (office, stationery, utilities etc.) are estimated at 7 per cent of salary costs. <sup>2</sup> 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	Project A: advocates required 20 hours of national advocacy training.  Project B: NVQ level 4 management and national advocacy qualification required.
E. Training	No costs available	Project A: further training consisted of 8 hours by Family Rights Group plus additional training to individual requirements.  Project 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	Project A: average travel time per intervention = 70 minutes, range (40-120 minutes) Project 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.

#### Unit costs available 2015/2016

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>&</sup>lt;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: 10.111.bld.12089.

<sup>&</sup>lt;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>&</sup>lt;sup>3</sup> Local Government Association (2016) Local Government workforce survey 2014/15, research report, March 2016. <a href="http://www.local.gov.uk/documents/10180/11627/Workforce+Survey+2014-15+report+Final.pdf/185ef91c-b4be-46a3-b854-b43c25c8df2a">http://www.local.gov.uk/documents/10180/11627/Workforce+Survey+2014-15+report+Final.pdf/185ef91c-b4be-46a3-b854-b43c25c8df2a</a>.
[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 & Buisson¹ 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)² 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			
estimation	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>&</sup>lt;sup>1</sup> Laing & Buisson (2011) Illustrative cost models in learning disabilities social care provision, Department of Health, London.

<sup>&</sup>lt;sup>2</sup> NHS Digital (2016) Adult Social Care Finance Return (ASC-FR), NHS Digital, Leeds <a href="http://www.content.digital.nhs.uk/catalogue/PUB22240">http://www.content.digital.nhs.uk/catalogue/PUB22240</a> [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>

Costs and unit	This example is of a two-be	edded supported living	This example is of a three-bedded supported		
estimation	home in the North West of	England, using	living home in the North West of England, using		
	budgeted costs (average of	f 94 hours of support)	budgeted costs (average o	f 85.7 hours of	
			support)		
Income	Per person fee/cost per	2 residents	Per person fee/cost	3 residents	
	week (including	Total per year	per week (including	Total per year	
	oncosts)		oncosts)		
INCOME					
Fees	£936	£97,348	£936	£146,022	
COSTS					
Direct staff costs					
Senior support	£218	£22,671	£273	£42,757	
staff	1218	122,071	1273	142,737	
Support staff	£372	£38,779	£302	£47,231	
Sub-total	£590	£61,450	£576	£89,988	
Waking nights					
Sleep-in staff	£113	£11,222	£72	£11,222	
Manager	£40	£4,070	£92	£14,496	
Sub-total	£153	£15,292	£164	£25,718	
Recruitment	£5	£515	£5	£746	
Training	£12	£1,336	£12	£2,056	
Other staff	£16	C1 700	£20	C2 004	
overheads	110	£1,709	£20	£3,004	
Total staff	£776	COO 202	6777	C121 F12	
support costs	1//6	£80,302	£777	£121,512	
Management					
costs-area,	£121	£13,276	£128	£20,101	
division, central					

<sup>&</sup>lt;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 has prepared in 2015, in collaboration with three members of the Autism Alliance <a href="http://autism-alliance.org.uk/about-us/the-alliance">http://autism-alliance.org.uk/about-us/the-alliance</a>, 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 uprated 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.

£44,933 per	Based on actual salaries of care staff, including support workers, service co-ordinators,
	Resed on actual salaries of care staff including support workers, service co-ordinators
	based on actual salaries of care stail, including support workers, service co-ordinators,
client year	team leaders, waking night support and sleep-in workers. Therapists are included in this
	cost (includes positive behaviour and communications therapists).
£6,401 per	Employer's national insurance contribution plus employer's contribution to
client year	superannuation.
£9,635 per	Support staff and management included administrators, cooks and managers. Staff
client year	costs were 19 per cent of direct care salary costs.
£11,035 per	Non-staff overheads formed in total 21 per cent of direct care salary costs. They Include
client year	training (2%), supplies and services (5%), maintenance (4%), utilities (3%), staff travel (0.1%), rent (5%) and other (2%).
£12 754 por	Indirect overheads include general management and support services such as finance
-	and human resource departments. On average, these costs comprised 33 per cent of
chefft year	direct care salary costs.
£3,899 per	This includes an amount for groceries, household provisions, clothing and medical
client year	expenses, comprising 8 per cent of direct care salary costs.
£23,752 per	This includes the costs for 37.5 hours per week per person of separately based
client year	specialist day care with a ratio of one member of staff for every two clients attending.
24 hours per	
day, 365	
days per	
year.	
65	This cost was based on the expenditure for 65 clients.
	client year £9,635 per client year £11,035 per client year £12,754 per client year £3,899 per client year £23,752 per client year 24 hours per day, 365 days per year.

#### Unit costs available 2015/2016

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 uprated 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	

#### Unit costs available 2015/2016

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

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

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

<sup>&</sup>lt;sup>4</sup> PayingForCare (2016) *Types of state and local authority support*, <a href="http://www.payingforcare.org/types-of-state-and-local-authority-support">http://www.payingforcare.org/types-of-state-and-local-authority-support</a>. [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 uprated 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 £24.90.4 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	

#### Unit costs available 2015/2016

£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>&</sup>lt;sup>1</sup> NHS Digital (2016) Adult Social Care Finance Return (ASC-FR), NHS Digital, Leeds. <a href="http://www.content.digital.nhs.uk/catalogue/PUB22240">http://www.content.digital.nhs.uk/catalogue/PUB22240</a> [accessed 28 November 2016].

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

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

<sup>&</sup>lt;sup>4</sup> PayingForCare (2016) *Types of state and local authority support*, <a href="http://www.payingforcare.org/types-of-state-and-local-authority-support">http://www.payingforcare.org/types-of-state-and-local-authority-support</a>. [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 uprated 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 uprated 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. 1,3,4
Unit costs available 2015,		3 per client hour; £64 client per session lasting 4.8 hours.

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

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

<sup>&</sup>lt;sup>3</sup> Building Cost Information Service (2016) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

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

## 6. Services for children and their families

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

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

We have drawn on the *NHS Trust and Primary Care Trusts combined* dataset to report the costs of selected children's health services. All costs have been uprated 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 2014/15.1

	National average	Lower quartile	Upper quartile
COMMUNITY SERVICES, average cost per one-to-one		quartile	quartile
session (group)			
Therapy services			
Physiotherapy	£87 (£94)	£55 (£65)	£128 (£107)
Occupational therapy	£135 (£138)	£106 (£95)	£195 (£157)
Speech therapy services	£133 (£138) £89 (£95)	£67 (£74)	£109 (£117)
Speech therapy services	169 (193)	107 (174)	1109 (1117)
Community health services – nursing, average cost per			
care contact/group session			
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	£46 (£53)	£35 (£5)	£64 (£82)
single professional			
School-based children's health core (other) services – one to	£54 (£54)	£34 (£36)	£62 (£66)
one			
Elective inpatient (paediatrics), average cost per stay	£2,990	£1,503	£3,948
OUTPATIENT ATTENDANCES, average cost per attendance			
Paediatrics	£199		
Paediatric consultant-led outpatient attendances	£210		
Paediatric non-consultant-led outpatient attendances	£157		
SPECIALIST PALLIATIVE CARE, average cost per bed day			
Hospital specialist palliative care support	£289	£100	£137
CHILD AND ADOLESCENT MENTAL HEALTH SERVICES,			
average cost per patient contact			
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>&</sup>lt;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\_-

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 2014/15.3
		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. 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 2014.6
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. 1,2,3
Unit costs available 2015/20	016	

Omit 00303 dvandbie 2013/2010

£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>&</sup>lt;sup>1</sup> Building Cost Information Service (2016) Surveys of tender prices, Royal Institute of Chartered Surveyors, London.

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

<sup>&</sup>lt;sup>3</sup> Department for Education (2015) *Underlying data of the section 251 data archive: outturn summary 2014-15*, Department for Education, London. <a href="https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data">https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data</a> [accessed 26 April 2015].

<sup>&</sup>lt;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. <a href="https://www.gov.uk/government/uploads/system/uploads/attachment">https://www.gov.uk/government/uploads/system/uploads/attachment</a> data/file/359277/SFR36 2014 Text.pdf.

<sup>&</sup>lt;sup>5</sup> CoramBaaF (2016) Statistics:England, <a href="http://www.corambaaf.org.uk/res/statengland">http://www.corambaaf.org.uk/res/statengland</a>. [accessed 1 November 2016].

<sup>&</sup>lt;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.

### 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).

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 m² per person.¹ 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 251³ 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).⁴ 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
D. Agency overheads		category).  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. 1,2,3
Unit costs available 2015/2	016	
60 777		1 1 4 1 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

£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>&</sup>lt;sup>1</sup> Building Cost Information Service (2016) Surveys of tender prices, Royal Institute of Chartered Surveyors, London.

 $<sup>^{\</sup>rm 2}$  Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>&</sup>lt;sup>3</sup> Department for Education (2015) *Underlying data of the section 251 data archive: outturn summary 2014-15*, Department for Education, London. <a href="https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data">https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data</a> [accessed 26 April 2015].

<sup>&</sup>lt;sup>4</sup> CoramBaaF (2016) Statistics:England, <a href="http://www.corambaaf.org.uk/res/statengland">http://www.corambaaf.org.uk/res/statengland</a>. [accessed 1 November 2016].

<sup>&</sup>lt;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.

## 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
Costs and unit estimation  A. Boarding out allowances, administration and the costs of social worker and other support staff who support foster carers	£579 per child per week	Using Section 251 data and dividing total expenditure for all foster care (including children placed with family and friends, own-provision, private, other public and voluntary foster care) of £1,540,322,446³ 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)⁴, 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 & prices inflator). One authority reported expenditure but no care days and was deleted from the analysis.  Using Section 251 data³ 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 & 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).
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	
London multiplier	year 1.13 x A	Relative London costs are drawn from the same source as the base data. <sup>3</sup>
Unit costs available 2015/2		instance and an action in some source as the state duta.
		es support but including education).

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

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

<sup>&</sup>lt;sup>3</sup> Department for Education (2015) *Underlying data of the section 251 data archive: outturn summary 2014-15,* Department for Education, London. <a href="https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data">https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data</a> [accessed 26 April 2015].

<sup>&</sup>lt;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. <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/359277/SFR36">https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment\_data/file/359277/SFR36</a> 2014 Text.pdf

<sup>&</sup>lt;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>&</sup>lt;sup>6</sup> CoramBaaF (2016) Statistics:England, <a href="http://www.corambaaf.org.uk/res/statengland">http://www.corambaaf.org.uk/res/statengland</a>. [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	2015/2016	Notes
estimation	value	
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.
Unit costs available 2015	/2016	
Cost per week £7,794; cos	st per hour £46.39 (if	working 24/7).

<sup>&</sup>lt;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, <a href="http://public.ukcrn.org.uk/search/StudyDetail.aspx?StudyID=6597">http://public.ukcrn.org.uk/search/StudyDetail.aspx?StudyID=6597</a> [accessed 9 October 2013].

<sup>&</sup>lt;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 (<a href="http://mstservices.com/">http://mstservices.com/</a>).

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. 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.
Unit costs available 2015	5/2016	
£51 per hour; £122 per th	nerapy session.	

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup> Contracted hours are taken from NHS Careers (2015) *Pay and benefits, National Health Service,* London, <a href="http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/">http://www.nhscareers.nhs.uk/working-in-the-nhs/pay-and-benefits/</a> [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. Barrett and Petkova summarise CBT costs over 21 studies in a short article in the 2013 edition of this publication.

Costs and unit	2015/2016 value	Notes
estimation		
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. 6
Length of contact	55 minutes	Average duration of CBT session. <sup>6</sup>
Unit costs available 2015/2	2016	
£97 cost per CBT session.		

<sup>&</sup>lt;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>&</sup>lt;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.

 $<sup>^{\</sup>rm 3}$  Land costs researched for PSSRU by the Valuation Office Agency in 2013.

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

<sup>&</sup>lt;sup>5</sup> Contracted hours are taken from NHS Careers (2016) *Pay and benefits, National Health Service,* London, <a href="https://www.healthcareers.nhs.uk/about/careers-nhs/nhs-pay-and-benefits/">https://www.healthcareers.nhs.uk/about/careers-nhs/nhs-pay-and-benefits/</a> [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>&</sup>lt;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.¹ 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 uprated 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>&</sup>lt;sup>1</sup> Thomas, C. (2013) Adoption for looked-after children: messages from research, British Association for Adoption & Fostering (BAAF).

<sup>&</sup>lt;sup>2</sup> Department for Education (2015) *Underlying data of the section 251 data archive: outturn summary 2014-15*, Department for Education, London. <a href="https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data">https://www.gov.uk/government/publications/section-251-outturn-2014-to-2015-data</a> [accessed 26 April 2015].

<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/uploads/system/uploads/attachment data/file/412156/S251 budget guide 2015 to 2016.pdf.

<sup>&</sup>lt;sup>4</sup> Department for Education (2016) *Children looked-after in England including adoption*, year ending 29 September 2016, see <a href="https://www.gov.uk/government/uploads/system/uploads/attachment">https://www.gov.uk/government/uploads/system/uploads/attachment</a> data/file/556331/SFR41 2016 Text.pdf [accessed 2 November 2016].

<sup>&</sup>lt;sup>5</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/359277/SFR36\_2014\_Text.pdf.

<sup>&</sup>lt;sup>6</sup> 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). 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. Timeuse 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>&</sup>lt;sup>1</sup> Selwyn, J., Sempik, J., Thurston, P. & Wijedasa, D. (2009) *Adoption and the inter-agency fee*, Centre for Child and Family Research, <a href="http://www.bristol.ac.uk/sps/research/projects/current/rk6582a/rk6582afinalreport.pdf">http://www.bristol.ac.uk/sps/research/projects/current/rk6582a/rk6582afinalreport.pdf</a> [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>&</sup>lt;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.

	Local authority		Volu	ntary	All	
Adoption	adoption agencies		adoption	agencies	adoption agencies	
sub-	'Standard'	'Difficult to	'Standard'	'Difficult to	'Standard'	'Difficult to
processes	case	place' case	case	place' case	case	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	£2489	£3025	£1606	£3013	£1964	£3428
for adoption						
support						

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

#### Helping birth families

A study undertaken by Neil & colleagues (2010)¹ 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 uprated using the PSS pay & prices inflator.

Birth relatives were reported to have used 8.35 support services (range 0 to 70) over the 12-month study period at an average cost of £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

 $\underline{\text{http://webarchive.nationalarchives.gov.uk/20130123124929/http://www.education.gov.uk/childrenandyoungpeople/families/adoption/a00212027/.}$ 

#### 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>&</sup>lt;sup>1</sup> Neil, E., Cossar, J., Lorgelly, P. & Young, J. (2010) Helping birth families: a study of service provision, costs and outcomes. <a href="http://www.adoptionresearchinitiative.org.uk/study5.html">http://www.adoptionresearchinitiative.org.uk/study5.html</a> [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, <a href="http://www.education.gov.uk/childrenandyoungpeople/families/adoption/a00212027/">http://www.education.gov.uk/childrenandyoungpeople/families/adoption/a00212027/</a> [accessed 9 October 2013].

<sup>&</sup>lt;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, <a href="http://www.adoptionresearchinitiative.org.uk/summaries/ARi summary 8.pdf">http://www.adoptionresearchinitiative.org.uk/summaries/ARi summary 8.pdf</a> [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
Total cost of services	£3,120	£1,076	£6,883
Financial support	£4,358	£0	£23,363
Total cost (services and financial support)	£7,478	£1,449	£24,439

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>&</sup>lt;sup>1</sup> Department of Education (2013) Statutory guidance on adoption, For local authorities, voluntary adoption agencies and adoption support agencies, <a href="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</a> [accessed 30 November 2016].

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

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

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

<sup>&</sup>lt;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 <a href="http://www.adoptionresearchinitiative.org.uk/study6.html">http://www.adoptionresearchinitiative.org.uk/study6.html</a> [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 uprated 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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;sup>3</sup> Ward, H., Holmes, L. & Soper, J. (2008) Costs and Consequences of Placing Children in Care, Jessica Kingsley, London.

<sup>&</sup>lt;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	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

	Costs per case considered £					
Panel	Panel member	Social worker	Principal manager	Administrator	Lead professional	Total cost per case
CAF panel	£87				£145	£232
Short-breaks panel	£119	£66		£140		£325
Joint commissioning panel	£44	£74	£87	£100		£305

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

<sup>&</sup>lt;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	Notes
	Cost per case	
High needs		
Adult mental health (60%; fortnightly);	£9,638	Based on Farmer et al. (2011) <sup>3</sup> and Meltzer et al. (2003) <sup>5</sup> .
Drug and alcohol services (50%, fortnightly);		Based on Farmer et al. (2011) <sup>3</sup> and Meltzer et al. (2003) <sup>5</sup>
Parenting support (80%; weekly);		Based on Farmer et al. $(2011)^3$ and costs for a family support worker (see table 11.8).
CAMHS (45%, fortnightly).		Based on Farmer et al. (2011) <sup>3</sup> and Meltzer et al. (2003). <sup>5</sup>
Medium needs		
Parenting support	£1,667	80 per cent of parents receive parenting support, fortnightly, for one year (Farmer et al., 2011). <sup>3</sup>
CAMHS		45 per cent of children receive CAMHS services, monthly, for one year (Meltzer et al., 2003). <sup>5</sup>
Low needs		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.
Social care support		
High needs	£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>
Medium needs	£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.
Low needs	£1,226	Comprises ongoing support as an open Child in Need case for 6 months at a low level.
Unit costs available 2015/2016		
£5,843 average weighted cost per case.		

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

<sup>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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. 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. See Holmes & McDermid in Curtis (2010) for detailed information on methods.

#### 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 uprated to current prices using the appropriate inflators.

Table 1 Short break service costs

Service type	Unit	Avera; 2015/20	Range 2015/2016 value		
		Mean cost	Median cost	2015/2016 value	
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	£125a-£4,082b	

<sup>&</sup>lt;sup>a</sup> Short break of two 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
Referral and assessment processes		
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
Ongoing support		
Ongoing support	£84	£109
Reviews	£213	£288

<sup>&</sup>lt;sup>b</sup> Short break of seven days

<sup>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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
Total	5.29 hours

<sup>&</sup>lt;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	Estimated costs of boa at LSCB	Coat of subsurvey	
	(staffing, including Chair) per year	Estimated cost per meeting	Estimated cost per year	Cost of subgroups
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
Average cost	£164,642	£13,617	£88,488	£82,183

<sup>\*</sup>Figure does not include the time spent in the meeting.

<sup>&</sup>lt;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)¹ 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 <a href="http://www.education.gov.uk/commissioning-toolkit">http://www.education.gov.uk/commissioning-toolkit</a>. 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 uprated 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	£6,456	£6,291	£1,210	£11,041
supervision time)				
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
Total per person assuming 10 per group	£938	£899	£262	£1,457
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	£21	£24	£14	£39
sessions delivered)				
Per person estimate including a component for training	£958	£922	£276	£1,496
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
Per person per programme estimate including a component for training and supervisor cost	£1,008	£972	£304	£1,568

<sup>&</sup>lt;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>&</sup>lt;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)

	Median	Mean	Low	High
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
Total costs (including preparation, supervision, materials etc.)	£2,102	£2,860	£761	£5,753
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
Total including training component	£2,129	£2,891	£774	£5,814
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
Per person per programme estimates including training and supervisor cost	£2,168	£2,937	£800	£5,882

# 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.	Staff cost £7,885 Programme cost £171 Total £8,056
The <b>Cygnet programme</b> is a group-delivered parent-training programme for parents of children with Autistic Spectrum Conditions, age 7 to 18.	Cygnet 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.	Staff cost £3,994 Programme cost £182 Total £4,176
The Confident Parenting Programme 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.	Staff cost £4,135 Programme cost £241 Total cost £4,376
Riding the Rapids 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.	Staff cost £3,209 Programme cost £271 Total cost £3,480
The Promoting Better Sleep Programme 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.	Staff cost £1,911 Programme cost £118 Total cost £2,029

<sup>&</sup>lt;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). 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 sixweekly 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 Green Book: National Agreement on Pay and Conditions of Service. 10
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. 11 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. 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. 3,9,10
Unit costs available 2015/201	16 (costs including qualit	fications given in brackets)
£52 (£70) per hour; £442 (£59	95) per review; £494 (£66	55) (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>&</sup>lt;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.
<a href="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</a> (accessed 8 July 2014).

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

<sup>&</sup>lt;sup>4</sup> Thurley, D. (2011) Local government pension scheme, 2010 onwards, House of Commons, London.

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

 $<sup>^{\</sup>rm 9}$  Land costs researched for PSSRU by the Valuation Office Agency in 2013.

<sup>&</sup>lt;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/ [accessed 9 October 2013].

<sup>&</sup>lt;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 [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 <a href="http://incredibleyears.com/programs/teacher/classroom-mgt-curriculum/">http://incredibleyears.com/programs/teacher/classroom-mgt-curriculum/</a>. 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
Start-up costs		
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.
Group leaders		
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.
Teachers attending programme		
Supply cover	£9,743 per year	Supply cover provided for the 10 teachers attending the course at £162 per day for 6 days.
Incredible Years professional		
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
Unit Costs for 2015/2016	<u>'</u>	
Start-up costs £2,938 (exclu	ding airfare and acco	ommodation for Incredible Years trainer).
Cost per programme for 10	teachers excluding s	tart-up costs £25,773.
Cost per teacher excluding s	start-up costs £2,577	

<sup>&</sup>lt;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 uprated 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 2012-2013.1

Elective/non elective Health Care Resource Group (HRG) data, average cost per episode  Elective inpatient stays  Elective inpatient stays (inc. carbon impact 760 kgCO2e)² £3,685  Non-elective inpatient stays (long stays)  Non-elective inpatient stays (long stays) (inc. carbon 603 kgCO2e)  E2,926  Non-elective inpatient stays (short stays) (inc. carbon 603 kgCO2e)  E2,926  Non-elective inpatient stays (short stays) (inc. carbon 128 kgCO2e)  E621  Day cases HRG data (finished consultant episodes)  Weighted average of all stays (inc. carbon 148 kgCO2e)  Outpatient attendances³  Weighted average of all outpatient attendances finc. carbon 28 £135  Weighted average of all outpatient attendances (inc. carbon 28 £136 kgCO2e)  PALLIATIVE CARE  Inpatient – specialist palliative care (adults only), average cost per bed day  Inpatient – hospital specialist palliative care support (adults and children)  Outpatient – medical specialist palliative care attendance (adults and children)  Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls  F7		National	Lower quartile	Upper quartile
Elective inpatient stays Elective inpatient stays (inc. carbon impact 760 kgCO <sub>2</sub> e) <sup>2</sup> E3,685  Non-elective inpatient stays (long stays) Non-elective inpatient stays (long stays) (inc. carbon 603 kgCO <sub>2</sub> e) E2,900 E2,111 E3,404 Non-elective inpatient stays (long stays) Non-elective inpatient stays (short stays)  E616  £490 £885   Day cases HRG data (finished consultant episodes)  Weighted average of all stays Weighted average of all stays (inc. carbon 128 kgCO <sub>2</sub> e)  E713 £489 £847  Outpatient attendances³ Weighted average of all outpatient attendances (inc. carbon 28 f136 kgCO <sub>2</sub> e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance £98 £57 £164  AMBULANCE SERVICES (Weighted average of attendances) Calls £77 £6 £8 Hear and treat and refer £36 £27 £44 See and treat and refer (including carbon 30 kgCO <sub>2</sub> e) £181 £2,920 £2,111 £3,404 £2,920 £2,111 £3,404 £490 £855 £2,711 £3,404 £490 £855 £847 £84 £89 £847 £89	Flactive /non elective Health Care Resource Group (HPG) data	average	quartile	quartile
Elective inpatient stays Elective inpatient stays (inc. carbon impact 760 kgCO2e)²  Ron-elective inpatient stays (long stays) Non-elective inpatient stays (long stays) Non-elective inpatient stays (long stays) (inc. carbon 603 kgCO2e)  Ron-elective inpatient stays (short stays) Non-elective inpatient stays (short stays)  fe1616 fe84  fe105 fe105 fe105 fe105 fe105 fe105 fe105 fe105 fe105 fe106 fe106 fe106 fe107 fe106 fe107 fe106 fe108 fe108 fe108 fe108 fe108 fe108 fe109 fe109 fe109 fe109 fe109 fe109 fe109 fe1000 fe2,920 fe1000 fe2,920 fe1000 fe2,920 fe1000 fe2,920 fe101 fe1000 fe2,920 fe101 fe1000 fe2,920 fe101 fe	• • • •			
Elective inpatient stays (inc. carbon impact 760 kgCO <sub>2</sub> e) <sup>2</sup> Non-elective inpatient stays (long stays) Non-elective inpatient stays (long stays) (inc. carbon 603 kgCO <sub>2</sub> e)  Non-elective inpatient stays (short stays) (inc. carbon 128 kgCO <sub>2</sub> e)  E616  Day cases HRG data (finished consultant episodes) Weighted average of all stays Weighted average of all stays (inc. carbon 148 kgCO <sub>2</sub> e)  Untatient attendances <sup>3</sup> Weighted average of all outpatient attendances Weighted average of all outpatient attendances Weighted average of all outpatient attendances (inc. carbon 28 kgCO <sub>2</sub> e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  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	= : :	£3 653	£2 /172	£4 088
Non-elective inpatient stays (long stays) Non-elective inpatient stays (long stays) (inc. carbon 603 kgCO <sub>2</sub> e)  Non-elective inpatient stays (short stays) Ron-elective inpatient stays (short stays) Non-elective inpatient stays Short stays stay		· ·	12,472	14,088
Non-elective inpatient stays (long stays) (inc. carbon 603 kgCO2e)    F2,926	Liective impatient stays (inc. carbon impact 700 kgcOze)	13,083		
Non-elective inpatient stays (long stays) (inc. carbon 603 kgCO2e)    F2,926	Non-elective inpatient stays (long stays)	£2.900	£2.111	£3.404
Non-elective inpatient stays (short stays) Non-elective inpatient stays (short stays) (inc. carbon 128 kgCO₂e)  Day cases HRG data (finished consultant episodes) Weighted average of all stays Weighted average of all stays (inc. carbon 148 kgCO₂e)  Outpatient attendances³ Weighted average of all outpatient attendances Weighted average of all outpatient attendances (inc. carbon 28 kgCO₂e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children) AMBULANCE SERVICES (Weighted average of attendances) Calls  £ 7		•	,	
Non-elective inpatient stays (short stays) (inc. carbon 128 kgCO2e)  Day cases HRG data (finished consultant episodes)  Weighted average of all stays Weighted average of all stays (inc. carbon 148 kgCO2e)  Outpatient attendances³ Weighted average of all outpatient attendances Weighted average of all outpatient attendances (inc. carbon 28 kgCO2e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance felse for files (adults and children)  AMBULANCE SERVICES (Weighted average of attendances) Calls Hear and treat and refer files fi	Tion elective inputions stays (iong stays) (inclical soft oos ingooze)	22,320		
Non-elective inpatient stays (short stays) (inc. carbon 128 kgCO2e)  Day cases HRG data (finished consultant episodes)  Weighted average of all stays Weighted average of all stays (inc. carbon 148 kgCO2e)  Outpatient attendances³ Weighted average of all outpatient attendances Weighted average of all outpatient attendances (inc. carbon 28 kgCO2e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance felse for files (adults and children)  AMBULANCE SERVICES (Weighted average of attendances) Calls Hear and treat and refer files fi	Non-elective inpatient stays (short stays)	£616	£490	£855
Day cases HRG data (finished consultant episodes) Weighted average of all stays Weighted average of all stays (inc. carbon 148 kgCO <sub>2</sub> e)  Outpatient attendances³ Weighted average of all outpatient attendances Weighted average of all outpatient attendances (inc. carbon 28 kgCO <sub>2</sub> e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance function for the first function for the first function for the first function funct		£621		
Weighted average of all stays Weighted average of all stays (inc. carbon 148 kgCO <sub>2</sub> e)  Cutpatient attendances³ Weighted average of all outpatient attendances Weighted average of all outpatient attendances (inc. carbon 28 kgCO <sub>2</sub> e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  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	, , , , , , , , , , , , , , , , , , , ,			
Weighted average of all stays (inc. carbon 148 kgCO₂e)       £719         Outpatient attendances³       £135         Weighted average of all outpatient attendances (inc. carbon 28 kgCO₂e)       £136         PALLIATIVE CARE         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         AMBULANCE SERVICES (Weighted average of attendances)       £7       £6       £8         Calls       £7       £6       £8         Hear and treat and refer       £36       £27       £44         See and treat and refer (including carbon 30 kgCO₂e)       £184 (£185)       £151       £202	Day cases HRG data (finished consultant episodes)			
Outpatient attendances³ Weighted average of all outpatient attendances (inc. carbon 28 f136 kgCO₂e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults f156 f105 f154 and children) Outpatient – non-medical specialist palliative care attendance f28 f57 f164  AMBULANCE SERVICES (Weighted average of attendances)  Calls f7 f6 f8 f8 f8 f27 f444 See and treat and refer (including carbon 30 kgCO₂e) f184 (£185) f151 f202	Weighted average of all stays	£713	£489	£847
Weighted average of all outpatient attendances Weighted average of all outpatient attendances (inc. carbon 28 kgCO <sub>2</sub> e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (fadults and children) Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls Hear and treat and refer find find find find find find find find	Weighted average of all stays (inc. carbon 148 kgCO₂e)	£719		
Weighted average of all outpatient attendances Weighted average of all outpatient attendances (inc. carbon 28 kgCO <sub>2</sub> e)  PALLIATIVE CARE Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (fadults and children) Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls Hear and treat and refer find find find find find find find find				
Weighted average of all outpatient attendances (inc. carbon 28 kgCO <sub>2</sub> e)  PALLIATIVE CARE  Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children)  Outpatient – medical specialist palliative care attendance (adults and children)  Outpatient – non-medical specialist palliative care attendance (for a special speci				
PALLIATIVE CARE  Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance f98 f57 f164 (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls f7 f6 f8 Hear and treat and refer fincluding carbon 30 kgCO₂e) f184 (£185) f151 f202	Weighted average of all outpatient attendances	£135		
PALLIATIVE CARE  Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls  fr  f6  f8  Hear and treat and refer  f36  f27  f44  See and treat and refer (including carbon 30 kgCO <sub>2</sub> e)  f184 (£185)  f151	Weighted average of all outpatient attendances (inc. carbon 28	£136		
Inpatient – specialist palliative care (adults only), average cost per bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls Hear and treat and refer See and treat and refer (including carbon 30 kgCO2e)  £397 £289 £540  £540  £540  £551 £86 £105 £105 £154  £156 £105 £157 £164  £164  £186 £27 £44 £186 £27 £44 £186 £27 £44	kgCO₂e)			
bed day Inpatient – hospital specialist palliative care support (adults and children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls 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	PALLIATIVE CARE			
Inpatient – hospital specialist palliative care support (adults and children)  Outpatient – medical specialist palliative care attendance (adults and children)  Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls  Hear and treat and refer  See and treat and refer (including carbon 30 kgCO2e)  £108  £108  £105  £105  £105  £105  £164  £164  £164  £165  £27  £44  £202	Inpatient – specialist palliative care (adults only), average cost per	£397	£289	£540
Children) Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls Hear and treat and refer See and treat and refer (including carbon 30 kgCO <sub>2</sub> e)  £156 £156 £157 £164  £164  £186 £27 £44  £202	bed day			
Outpatient – medical specialist palliative care attendance (adults and children) Outpatient – non-medical specialist palliative care attendance £98 £57 £164 (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  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	Inpatient – hospital specialist palliative care support (adults and	£108	£51	£86
and children) Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls Hear and treat and refer See and treat and refer (including carbon 30 kgCO <sub>2</sub> e)  £57 £164  £57 £164  £57 £164  £184 £17 £6 £8 £27 £44 £44 £202	children)			
Outpatient – non-medical specialist palliative care attendance (adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls Hear and treat and refer See and treat and refer (including carbon 30 kgCO2e)  £184 (£185) £151 £202	Outpatient – medical specialist palliative care attendance (adults	£156	£105	£154
(adults and children)  AMBULANCE SERVICES (Weighted average of attendances)  Calls 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	and children)			
AMBULANCE SERVICES (Weighted average of attendances)  Calls Hear and treat and refer See and treat and refer (including carbon 30 kgCO <sub>2</sub> e)  £184 (£185) £151 £202	Outpatient – non-medical specialist palliative care attendance	£98	£57	£164
Calls $\frac{1}{1}$	(adults and children)			
Hear and treat and refer $£36$ $£27$ $£44$ See and treat and refer (including carbon 30 kgCO <sub>2</sub> e) $£184$ (£185) $£151$ $£202$	AMBULANCE SERVICES (Weighted average of attendances)			
See and treat and refer (including carbon 30 kgCO $_2$ e) £184 (£185) £151 £202	Calls	£7	£6	£8
	Hear and treat and refer	£36	£27	£44
	See and treat and refer (including carbon 30 kgCO₂e)	£184 (£185)	£151	£202
			£208	£262
All Ambulance Services £98 £85 £108		, ,	£85	£108

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup> Costs of carbon emissions provided by Imogen Tennison, Sustainable Development Unit. Contact Imogen.tennison@nhs.net for more information.

<sup>&</sup>lt;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. 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 uprated 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 Self- or attendant-propelled Active user Powered	£287 £716 £1,432	£64 £160 £321	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
Revenue costs  Maintenance - non-powered	11,432	£31	out by the time their first users ceased to need them.  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.
- powered Agency overheads		£122	No estimate of management overhead costs is available. They are likely to be minimal.

#### Unit costs available 2015/2016

£95 per self or attendant propelled chair per year; £191 per active user per chair per year; £443 per powered chair per year.

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

<sup>&</sup>lt;sup>2</sup> UK wheelchairs- <a href="https://www.uk-wheelchairs.co.uk/">https://www.uk-wheelchairs.co.uk/</a>

## 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 (<a href="http://www.foundations.uk.com/about-home-improvement-agencies/">http://www.foundations.uk.com/about-home-improvement-agencies/</a>), 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 uprated 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)
Total	52				

<sup>&</sup>lt;sup>1</sup> See <a href="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</a>).

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	ОТ	HIA	Total time	
	enquiry		administrator		
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

			Average minutes					
	Initial enquiry	ОТ	LA grants officer	HIA technical officer	HIA caseworker	HIA administrator	Total time	
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) <a href="https://www.yhpho.org.uk/PHICED/">http://www.yhpho.org.uk/PHICED/</a>. All costs have been taken directly from the reports and uprated 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 <a href="https://www.kingsfund.org.uk/audio-video/public-health-spending-roi">https://www.kingsfund.org.uk/audio-video/public-health-spending-roi</a>.

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

<sup>&</sup>lt;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. <a href="https://www.ewin.nhs.uk/news/item/2011/changes-in-the-nhs">https://www.ewin.nhs.uk/news/item/2011/changes-in-the-nhs</a> [accessed 9 October 2013].

<sup>&</sup>lt;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>&</sup>lt;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. 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	2015/2016	Notes
Estimation	value	
A. Wages/salary	£285,193	Based on mean Agenda for Change (AfC) salaries for 18 band 3 health care
	per year	assistants (HCAs) 4 who spend 85 per cent of their time on duties related to the
		RRS.
B. Salary oncosts	£62,266	Employer's national insurance is included plus 14 per cent of salary for employer's
	per year	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-	£40,831	Based on information provided by the hospice, supervision was provided by an
ordinator and day	per year	Agenda for Change band 8 nurse (40% of WTE) plus a day to day coordinator (80%
to day co-		of WTE Agenda for Change band 3). Salary and oncosts included in this calculation.
ordinator		
Management,	£17,373	Based on information provided by the hospice, estates and indirect care staff are
administration	per year	assumed to be approximately 5 per cent of direct care salary costs.
and estates staff		
Non-staff	£149,755	Taken from NHS foundation trusts accounts: consolidated (FTC) files 2014/15.5
	per year	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	£3,882 per	Based on the new-build and land requirements of NHS facilities. <sup>6,7</sup> It is assumed
overheads	year	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,
II. Tanual	C122 F27	declining to 3 per cent after 30 years.
H. Travel	£123,537	£12.20 per visit. Based on the average number of visits per patient in 2012 (16.6).
Cacaland	per year 610 per	Number of patients
Caseload	-	Number of patients
Hours and length	year	The service is available 24/7.
of service		THE SCIVICE IS AVAIIABLE 24/1.
Ratio of indirect		No estimates available for percentage of service time spent with patients. Travel
time to direct time		time is high given the area covered by the service (approx 20% of total time).
Number of rapid	16.6 per	Based on the average number of visits per patient in 2012 (610). Episodes vary
response visits	patient	according to need. The average number of referrals was 670 (multiple referrals for
	P4	some people).
Unit costs available 20	15/2016	1
		r of service £79; average cost per patient (referral) £1,119 (£1,019)

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

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

<sup>&</sup>lt;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. 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). 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 <a href="http://www.kcl.ac.uk/lsm/research/divisions/cicelysaunders/research/studies/ukroc/Commissioning-Tools.aspx">http://www.kcl.ac.uk/lsm/research/divisions/cicelysaunders/research/studies/ukroc/Commissioning-Tools.aspx</a> 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

UKROC Services	T	T				
Service level	Mean cost (ranges) per occupied bed day	Mean cost (ranges) per weighted occupied bed day (excluding MFF)				
Service level	(excluding MFF)					
Level 1 - Tertiary 'specialised' rehabilitation services: high cost /	, <u> </u>					
rehabilitation needs that are beyond the scope of their local and	district specialist services. Thes	e are normally provided in				
co-ordinated service networks planned over a regional population	on of 1,000,000-5,000,000 throu	gh specialised				
commissioning arrangements.						
Level 1a - for patients with high physical dependency	£535 (£465 - £613)	£400 (£344 - £440)				
Level 1b - mixed dependency	£477 (£429 - £514)	£356 (£305 - £389)				
<b>Level 1c</b> - mainly physically stable patients with	£637 (£580 - £713)	£480 (£433 - £534)				
cognitive/behavioural disabilities. <sup>a</sup>						
Level 2 – Local (district) specialist services: typically planned over						
advice and support for local general rehabilitation teams. As tert						
some areas of the UK where access is poor, local specialist rehab						
catchment of 750,000,000 -1,000,000, and take a higher proport						
Level 2a - supra-district specialist rehabilitation services	£432 (£317 - £513)	£345 (£226 - £436)				
Level 2b - 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>&</sup>lt;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.

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

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

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

<sup>&</sup>lt;sup>6</sup> Clinical Reference Group Specialist Services Specification (2012) *Specialist rehabilitation for patients with highly complex needs,* London <a href="http://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-d/d02/">http://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-d/d02/</a>) [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).¹ 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)² and uprated using the PSS pay & prices inflator. As no information was available on whether the services had been provided by the local authority or private organisations, we have used the weighted average price.

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

**Day care:** To arrive at a cost per day care attendance, assumptions have to be made about the number of times service users attend per week. New research suggests that older people attend on average 2.49 times per week, people with mental health problems attend on average 2.88 times per week, people with physical disabilities attend on average 2.65 times per week, and 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 (<a href="http://rentright.co.uk/">http://rentright.co.uk/</a>) 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>&</sup>lt;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>&</sup>lt;sup>2</sup> Health & Social Care Information Centre (2015) PSS EX1 2013/14, Health & Social Care Information Centre, Leeds

<sup>&</sup>lt;sup>3</sup> PayingForCare (2016) *Types of state and local authority support*, <a href="http://www.payingforcare.org/types-of-state-and-local-authority-support">http://www.payingforcare.org/types-of-state-and-local-authority-support</a> [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
Home care	0313 2013/2010		
Critical	£303	18 users	Forty-two per cent of the sample of older people
Substantial	£156	74 users	reported the use of home care. The average weekly cost for critical needs users was £303 compared to £156 for
Moderate	£160	26 users	those with moderate needs. The average weekly cost for
Average/total	£180	118 users	all 118 service users was £180 (9 hours per week).
Day care			
Critical	£154	4 users	Twelve per cent of the older participants reported the use
Substantial	£98	24 users	of day care. The average weekly cost for all 35 users was £73.
Moderate	£80	7 users	273
Average/total	£73	35 users	
Benefits			
Critical	£127	15 users	Thirty-seven per cent reported receiving benefits. In total,
Substantial	£88	66 users	the cost of benefits received by critical service users was £127 compared to £99 for moderate service users. The
Moderate	£99	24 users	total average weekly cost for all 105 users was £97.
Average/total	£97	105 users	
Accommodation			
Critical	£193	39 users	The cost of accommodation for those with moderate
Substantial	£159	171 users	needs was 6 per cent higher than those with critical needs. The average weekly cost for accommodation was
Moderate	£204	71 users	£169.
Average/total	£169	281 users	
Total costs			
Critical	£427	39 users	The average weekly cost for all service users was £287.
Substantial	£287	171 users	Support costs for critical service users were 33 per cent higher than costs for moderate service 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
Home care	COSIS 2013/2010		
Critical	£402	28 users	Forty-six per cent of the sample of people with learning
Substantial	£395	47 users	disabilities reported the use of home care. Of those, the average weekly cost for critical users was £402
Moderate	£277	2 users	compared to £277 for those with moderate needs. The
Average/total	£391	77 users	average weekly cost for all 77 service users was £391.
Day care			
Critical	£372	18 users	Twenty-eight per cent of the whole sample of people
Substantial	£54	51 users	with learning disabilities reported the use of day care. The average weekly cost was £61 across the 72 users.
Moderate	£39	3 users	
Average/total	£61	72 users	
Benefits			
Critical	£145	68 users	Seventy-seven per cent reported receiving benefits. In
Substantial	£143	119 users	total, the value of benefits received by critical service users was £144 compared to £151 for moderate service
Moderate	£151	12 users	users. The total average weekly cost for all 199 users
Average/total	£144	199 users	was £144.
Accommodation			
Critical	£193	76 users	The cost of accommodation for those with critical needs
Substantial	£167	159 users	was £193 compared to the cost of those with moderate needs of £70. The average weekly cost for the whole
Moderate	£70	25 users	sample of people with learning disabilities was £166.
Average/total	£166	260 users	
Total costs			
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
Home care			
Critical	£105	4 users	Seven per cent of people with mental health problems
Substantial	£257	5 users	were receiving home care. The average weekly cost for critical users was £105 compared to £80 for moderate
Moderate	£80	1 user	users. The average weekly cost for all 10 service users
Average/total	£180	10 users	was £180.
Day care			
Critical	£74	5 users	Fourteen per cent of people with mental health
Substantial	£77	13 users	problems were receiving day care. The average weekly cost was £76 across all users of day care.
Moderate	£71	2 users	
Average/total	£77	20 users	
Benefits			
Critical	£149	17 users	Seventy-seven per cent service users were receiving
Substantial	£162	73 users	benefits. In total, the value of benefits received by critical service users was £149 compared to £115 for
Moderate	£115	20 users	moderate service users. The total average weekly cost
Average/total	£150	110 users	for all 110 users was £150.
Accommodation			
Critical	£209	22 users	The cost of accommodation for those with critical needs
Substantial	£223	96 users	was £209 compared to the cost of those with moderate needs of £180. The average weekly cost across all users
Moderate	£180	25 users	was £210.
Average/total	£210	143 users	
Total costs			
Critical	£340	22 users	The average weekly cost for all service users was £475.
Substantial	£555	96 users	Support costs for critical users were 22 per cent higher than costs for moderate service 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
Home care	0313 2013/2010		
Critical	£386	31 users	Fifty-six per cent of the total sample of people with
Substantial	£286	136 users	physical disabilities received home care. The average weekly cost for users with critical needs was £386
Moderate	£127	9 users	compared to £127 for those with moderate needs. The
Average/total	£294	176 users	average weekly cost for all users of home care (176 people) was £294.
Day care			
Critical	£173	8 users	Twelve per cent of the people with physical disabilities
Substantial	£182	27 users	were receiving day care. The value of day care received by moderate users was 56 per cent higher than critical
Moderate	£267	2 users	users. The average weekly cost was £184 for all 37 users
Average/total	£184	37 users	of day care.
Benefits			
Critical	£133	72 users	Ninety-four per cent of service users were receiving
Substantial	£182	230 users	benefits. In total, the cost of benefits received by critical service users was £133 per week compared to £171 for
Moderate	£171	17 users	moderate service users. The total average weekly cost
Average/total	£183	297 users	for all 297 service users was £183.
Accommodation			
Critical	£804	52 users	The average weekly cost of accommodation for those
Substantial	£253	245 users	with critical needs was £804 compared to £253 for those with moderate needs. The average weekly cost
Moderate	£253	20 users	was £343.
Average/total	£343	317 users	
Total costs			
Critical	£1,282	52 users	The average weekly care package cost for all service
Substantial	£611	245 users	users was £717 per week. Support costs for critical users were 26 per cent higher than costs for moderate service
Moderate	£495	20 users	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	Number of	Range of costs
	annual cost	patients	
All service users			
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
People with mental health problems			
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
People aged over 75			
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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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). All costs were originally estimated at 2006/2007 prices and have therefore been uprated 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	Total cost
			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
Total service costs	£2,989	£1,438	100.00	83.08
Out-of-pocket expenses	£292	£618		8.11
Productivity losses	£317	£693		8.81
Total costs	£3,598	£1,926		100.00

#### 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>&</sup>lt;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			r care placement Living in private households		
	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
Total annual cost (excluding benefits)	£19,114	£47,921	£73,853	£691	£28,189	£43,075
Total annual cost (including benefits)	£19,114	£47,921	£73,853	£5,128	£32,912	£47,799

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>&</sup>lt;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>&</sup>lt;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	
Total annual cost (excluding benefits)	£1,434	£24,907	£24,907	
Total annual cost (including benefits)	£1,988	£25,461	£25,461	

**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>&</sup>lt;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>&</sup>lt;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 w	ith high-functio	oning ASD	А	Adults with low-functioning ASD			
	Private	Supporting	Residential	Private	Supporting	Residential	Hospital	
	household	people	care	household	people	care		
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	-	-	ı	
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	-	-	ı	
Lost employment (parents)	£4,351	-	-	£4,351	-	-	-	
Sub-total	£16,045	£77,407	£80,609	£16,467	£77,081	£78,598	£89,140	
Lost employment (person with ASD)	£23,365	£23,365	£23,365	£26,434	£26,434	£26,434	£26,434	
Total (excluding benefits)	£39,410	£100,772	£103,975	£42,901	£103,514	£105,032	£115,573	
Benefits	-	-	-	£7,916	£5,102	£5,102	£1,092	
Total (including benefits)	£39,410	£100,772	£103,975	£50,817	£110,134	£110,134	£116,666	

<sup>&</sup>lt;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>&</sup>lt;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. They make use of existing unit costs that have been estimated in previous research studies carried out by the CCFR. 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>&</sup>lt;sup>1</sup> Department for Education (2013) *Data pack: improving permanence for looked-after children*, <a href="http://www.education.gov.uk/a00227754/looked-after-children-data-pack/">http://www.education.gov.uk/a00227754/looked-after-children-data-pack/</a> [accessed 1 October 2013].

<sup>&</sup>lt;sup>2</sup> Ward, H., Holmes, L. & Soper, J. (2008) Costs and consequences of placing children in care, Jessica Kingsley, London.

<sup>&</sup>lt;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>&</sup>lt;sup>4</sup> Holmes, L. & McDermid, S. (2012) *Understanding costs and outcomes in child welfare services*, Jessica Kingsley, London.

<sup>&</sup>lt;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.

Social care processes (case management)					
Process	Frequency	Unit cost	Sub-total		
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		
Total social care case management costs per ye	ear		£23.097		

## 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.

Frequency	Unit cost	Sub-total		
12 months	£207	£2,487		
3 times	£239	£716		
Cost of social care case management activity				
Once a fortnight	£126	£3,265		
	12 months 3 times	12 months £207 3 times £239		

# 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.

Social care processes (case management)				
Process	Frequency	Unit cost	Sub-total	
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	
Total social care case management costs per year	£128,141			

<sup>&</sup>lt;sup>1</sup> Department for Education (2012) *Children in care*, <a href="http://www.education.gov.uk/childrenandyoungpeople/safeguardingchildren/a0068940/children-incare/">http://www.education.gov.uk/childrenandyoungpeople/safeguardingchildren/a0068940/children-incare/</a> [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.

Social care processes (case manageme	ent)		
Process	Frequency	Unit cost	Sub-total
CiN 3 – ongoing support	3 months	£1,122	£3,366
CiN 4 – close case	Once	£103	£103
Total social care case management costs per year			£3,468

## 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 uprated 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>&</sup>lt;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 +		£6,606
	[(£440/7) x 26] x 3		
3 Review	£85 x 8 and £71 x 8	£681	£565
4 Case closure	£289	£253	£35
Total		£4,010	£8,713

#### 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
Total cost of other support or services			£2,193

#### 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	£128,450
week)	
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	(£227 x 12) and (£108 x 12)	£2,816	£1,346
support			
2.Ongoing	[(£148/7) x 42] and [(£424/7) x		£3,557
support	42]		
3.Review	(£82 x 8) and £68	£681	£571
4.Case closure	£279	£253	£35
Total		£4,006	£5,661

#### 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
Total cost of other support or services			£2,193

#### 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
Total	£47,956

## 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 (<a href="http://www.rhn.org.uk/">http://www.rhn.org.uk/</a>).

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. 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 uprated to 2015/2016 prices using the HCHS pay & prices Inflator.

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>&</sup>lt;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. 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, 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>&</sup>lt;sup>1</sup> Munro, E., Hollingworth, K., Meetoo, V., Quy, 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>&</sup>lt;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 ac	tivity		£5,293
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 a	ctivity		£21,208
Total cost of all social care case manageme	ent activity		£26,501
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
Total cost of service provision			£70,359
Total costs of support for Family A			£96,860

#### 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 ac	tivity	·	£2,506
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 a	£16,966		
Total cost of all social care case management activity			£19,473
Service provision costs			•
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			£47,781
Total costs of support for Family B			£67,254

#### 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.

Social process costs	Frequency/length	Unit cost	Sub-total
CiN – 3 medium level – ongoing support	5.5 months	£208 (per month)	£1,147
CiN – 5 core assessment	Once	£635	£635
Cost of CiN social care case management activ	rity		£1,782
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	90 days	£8 (per day)	£721
placement			
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
Cost of LAC social care case management acti	£23,534		
Total cost of all social care case management	£25,316		
RPA initiated	8 weeks	£1,368 per week	£10,944
Total cost of service provision			£10,944
Total costs of support for Family C	£36,260		

## 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. 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)
Total costs (exc. primary care)	377 (5)	£1,917 (£3,570)	£1,894 (£3,413)
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)
Total costs including primary care (g)	248 (7)	-	£2,135 (£3,465)

SD: standard deviation

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.

a) Mean number of events for inpatient care is based on mean number of episodes, and not number of spells. Mean number of events for 'total' does not include primary care events classed as 'other events', 'medication' or 'wound dressing'.

b) Mean length of hospital stay for those patients with an inpatient admission over the trial period was 12 days.

c) Mean length of intensive care stay for those patients with an intensive care admission was 15 days.

d) Mean number of events for primary care service users only includes face-to-face contacts (i.e. consultations, home visits, and procedures)

e) 'Other events' includes all non-face-to-face entries on the EAR system that require staff time to execute, i.e. administration, telephone calls etc. Entries that were electronic and external to the practice or created by an electronically automated system (i.e. did not require staff time to execute) were excluded from this analysis.

g) Mean number of events includes only face-to-face contacts across all services apart from mental health care (see also point (d))

<sup>&</sup>lt;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 <a href="matth:

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)
Total costs (excl. primary care)	63 (9)	£6,139 (£4,647)
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)
Total costs including primary care	63 (14)	£6,520 (£4,610)

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
Social care	£270	£3,684	34%	20,330	£13,271
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
Total	£792	£10,814	100%	73,243	NA

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>&</sup>lt;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	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			
latrogenic 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			