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PSSRU

Unit Costs of
Health & Social
Care 2019

Compiled by Lesley Curtis
and Amanda Burns

Unit Costs of Health and Social Care 2019

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Introduction to the Unit Costs of Health and Social Care publication

The first Unit Costs of Health & Social Care volume was published in 1992. It has always been funded by the Department of Health (DOH), now the Department of Health and Social Care (DHSC), with small amounts of funding provided by the Department for Education (DfE). We ensure our costs are of good quality by applying established cost estimation methods and principles.

Unit costs should:

- **Be consistent** across different economic analyses, to avoid inconsistency in unit costs used which could feed into inconsistency in decisions proposed.
- **Be comprehensive**, in that they consider long-run marginal costs as well as obvious direct costs such as salaries. Long-run marginal costs include the initial qualifications cost of staff and the cost of building, heating and running the buildings in which they work. These long-run costs are often substantial. Excluding them would underestimate the long-run cost of decisions made.
- **Be clearly documented**, so that it is clear what judgments have been made in constructing them, so that they can be used in an informed way.

What are unit costs and why are they important?

Unit costs represent the total expenditure incurred to produce one unit of output. In health and social care, this could be the cost of one hour of a nurse or GP's time, or a face-to-face appointment with a social worker or perhaps a speech therapist. It could also be a week in a residential care or nursing home or the cost of a day care attendance. Unit costs are important because they support organisations' assessments of performance and value for money. In other words, they can help providers achieve the most efficient use of resources.

How we calculate costs

Our approach to cost estimation is grounded in economic theory and is both transparent and flexible. Our cost estimation approach is shown below and more information is available in our presentation which can be found at <https://www.pssru.ac.uk/project-pages/unit-costs/unit-costs-2018/>

Cost estimation approach

- Financial implications of all service components are included
- Unit costs reflect the long-run marginal opportunity cost for that service
- A "bottom-up" approach is taken – users can substitute their own data for any component
- Sources of information are fully referenced
- Unit costs account for the fact that care staff do not spend all their time with clients
- Regional weightings are given where possible

How do we find our information?

Our Advisory Group, who we meet with annually, guides our work and provides valuable leads. The Advisory Group consists of representatives from DHSC and DfE, economists from research units, and representatives from the Social Care Institute for Excellence (SCIE) and the National Institute for Health and Care Excellence (NICE). We perform a literature search for new studies and draw information from secondary sources of data, as well as working with organisations to estimate unit costs for specific services. Occasionally we commission our own research.

Throughout the year we prepare the volume by:

- Identifying where our unit costs could be improved or updated
- Identifying gaps where new unit costs estimations are required
- Identifying data sources or research to derive new unit costs
- Responding to government priorities, new policies or practice developments

In the past, we have worked closely with Foundations, the National Body for Home Improvements who helped us to calculate the total cost of supplying and fitting a variety of home adaptations. We also conducted a survey with the assistance of the General Dental Council/Department of Health and Social Care and the Chief Dental Officer for England, to identify the unit cost of dental services.

What information is included?

We begin the volume with an author-produced preface introducing the reader to the year's work and any new additions or changes. We also summarise this year's new schema and identify schema which have been withdrawn due to our policy of only publishing work which is less than ten years old. We then have a number of articles from external authors relating to cost information and sometimes a guest editorial which focuses on overarching and timely policy issues. These papers are provided free-of-charge and we are very grateful to all those who contribute their time and expertise to ensuring a wide range of interesting items. All guest editorials and articles since 2003 can be viewed in our articles database <https://www.pssru.ac.uk/ucarticles/>

Section I of the report covers services used by particular client groups. For many of the groups, we include the cost of residential care and day care and we differentiate where possible between local authority and private sector providers. Chapter 6, the children's services chapter includes information on adoption and foster care, together with the costs of more specialised services such as counselling and advocacy. Chapter 7 contains average costs for elective and non-elective hospital admissions as well as outpatient attendances and other more specialised services such as inpatient and outpatient palliative care. These have been drawn from the NHS reference costs. The costs for specialist neuro-rehabilitation services, screening interventions for sexually transmitted infections and self-management programmes are also found in this chapter.

Whereas our usual approach is to present the unit costs for particular services or professionals, Chapter 8 contains our care-package costs. Here the unit of interest is the individual and the combination of services they use. Examples of care packages are health care support received by people requiring mental health support and care packages for people at the end of their lives.

Section I: services for

- Older people
- Those requiring mental health support
- Those with learning disability or physical support needs
- People who abuse drugs and alcohol
- Children and young adults

And

- Hospital services
- Care packages for people with a range of needs

Sections II, III and IV present the costs for professionals and teams of professionals who can provide support for all client groups. They are divided in the volume according to whether staff are health or social care professionals and whether they are hospital or community based.

In section V you will find other useful information such as inflation indices, NHS staff earning estimates, training costs and care home fees. You can also find further information in our blog <https://www.pssru.ac.uk/blog/category/unit-costs/page/6/>

Section II: community-based health care staff such as nurses, GPs and dentists

Section III: community-based social care staff e.g. social workers or home care workers

Section IV: hospital-based staff including doctors and scientific and professional staff

Section V: supporting information, such as inflation indices, NHS staff earnings, training costs

All volumes dating back to 2003 can be downloaded in PDF format from the PSSRU website either in sections or the whole volume.

The *Unit Cost of Health & Social Care (UCH&SC)* is available on the PSSRU website: <https://www.pssru.ac.uk/>.

There are also links for the following:

- UCH&SC volumes from 2003 can be downloaded as a whole publication or in sections
- Excel spreadsheets that summarise unit costs by professional groups
- There is a database of around 65 articles that have previously been published in the UCH&SC volumes: <https://www.pssru.ac.uk/ucarticles/>
- Our blogs can also be found on the website at [Home | PSSRU](#).

Preface

Lesley Curtis

In 2016 at the start of a new contract, our research contacts at the Department of Health and Social Care (DHSC) consulted with analytical colleagues to find out how well the *Unit Costs of Health and Social Care* (UCH&SC) volumes met their needs. They also asked for suggestions on ways to enhance our unit cost calculations and whether new unit costs were likely to be required to support policy initiatives. With new priorities about to be established for the UCH&SC volumes, it is a timely opportunity to reflect on how the volume has expanded in response to this consultation.

Some suggestions could be dealt with in the 2016 edition; per day residential care costs were provided in the care homes schema for older people and for people requiring mental health support (see: 1.1-1.3; 2.2) as well as costs per week, so that easy comparisons could be made with NHS bed days. Also the duration of GP consultations could be updated thanks to new information published by the Royal College of General Practitioners in 2018. This enabled us to provide an insight into the reasons for the reduction of the net ingredient cost over time and to see how this has affected estimates made for the prescription cost per GP consultation in the UCH&SC volumes (see 2018 volume, pages 19-22). Although there was a request for calculations to be expressed more precisely than to the nearest pound, this was not considered appropriate given that all costs are averages for England and to provide this level of detail may be misleading.

A focus on different aspects of sexual health services was one of the consultation priorities and in Chapter 7 we have added the costs of HIV and AIDs treatments, related support services, family planning services and the treatment of genito-urinary (GUM) conditions drawn from the reference costs data collection. We have also identified and presented work from a study led by Louise Jackson and colleagues (2014), which explored the costs and outcomes of sexually transmitted infection screening interventions targeting men in football club settings (Chapter 7). Despite not having a detailed costing, attention was also drawn to work by Crawford et al. (2014) which provided a cost for brief advice and input given for excessive alcohol consumption among people attending sexual health clinics. This year, James Moore and Paula Baraitser have written an article intended as a resource for those planning to cost or commission online sexual health resources. This is described in more detail below.

Unit costs for abortion services were also requested and this year we have included a variety of costs relating to abortions of varying degrees of complexity encompassing day cases as well as longer hospital stays. A guide to fees for private and NHS funded abortions is also provided.

As a result of the Government's emphasis on empowering patients and targeted prevention set out in the Five Year Forward View (NHS, 2014, p. 10-13), requests were made for the cost of self-management support groups. Thus our 2017 edition included three new schema: self-management support using a digital health system for chronic obstructive pulmonary disease, nurse-facilitated self-management support for people with heart failure and their family carers, and the Diabetes Education and Self-Management Programme.

Video consultation costs were also a topic of interest and contact was made with Barts Health NHS Trust who, since 2011, have been exploring the use of video consultations via Skype for patients who do not need to physically come to the hospital (<https://bartshealth.nhs.uk/virtual-consultations>). Unfortunately no unit costs are available and to date we have not been able to identify any other work in this area.

Another clear strand of work over the last five years has been our collaborations with charities and other organisations which have enabled us to include or update the costs of several new services. These include: the peer intern (Chapter 11), advocacy for children with additional/multiple needs and counselling for children with mental or emotional difficulty (Chapter 6), supported-living homes for adults with autism and complex needs (Chapter 4), home adaptations (Chapter 7) and costs associated with the treatment of perinatal anxiety and depression (Chapter 2). Literature searches have also resulted in many additions such as interventions for

the management of obsessive compulsive disorder (Chapter 8) and positive behavioural support for adults (Chapter 4).

We have also continued to search for ways of improving underlying data. For example, an analysis of the *Foundation Trusts: Consolidated Accounts, 2016* improved the accuracy of our hospital-based services; we found that overheads for NHS hospital-based services were lower than those for community-based services. Actuarial valuations produced by the administrators of the Local Government Pension Scheme (LGPS) have been analysed twice to enable us to update the rate employers contribute to superannuation for local government employees and new sources of information have been found for land costs. We also instigated and maintained contact with the Sustainable Development Unit (SDU) which is enabling us to include the environmental costs for more services every year thereby assisting with the goals set in 'Fit for the Future' (<https://www.sduhealth.org.uk/policy-strategy/what-is-sustainable-health.aspx>).

Web-based improvements

Over the last three years, we have developed new web-based facilities to better support our users. We now have an online unit cost database of unit costs for health and social care professionals (<https://www.pssru.ac.uk/project-pages/unit-costs/unit-costs-2018/>) and an accessible library of unit costs articles published in previous volumes (<https://www.pssru.ac.uk/project-pages/unit-costs/>). Comments from readers and download statistics over the last few years suggest that both have been well received. We are now planning to develop a time series of unit costs for many professional groups.

Our first video presentation giving an introduction to the *Unit Costs of Health and Social Care* was added to our website in 2018. This year, we have included the text to this first presentation and a second presentation focusing on methods will be made available next year.

Guest editorials and articles

Our guest editorial this year has been written by Candice Goold (Costing Lead at NHS England and NHS Improvement) and focuses on the introduction of patient-level costing (PLICS) which has replaced the national schedule of reference costs. As well as discussing the theory of patient-level costing and why it is preferable to service-level costing, an example is provided of where patient-level data has been used to assess the costs of different delivery modes for patient care.

In our first article (referred to briefly above), James Moore and Paula Baraitser have mapped the pathway for the delivery of online sexual health services and have generated a list of cost areas which should be considered when developing standard unit costs. This will be a useful resource for those carrying out an economic evaluation or costing services as none of the other articles found in the authors' literature search take into account the quality of care.

Our second article by Emma Frew and colleagues presents detailed information from three evaluations of obesity interventions for children and families. Further information on the hidden costs of obesity and the implications for long-term care can be found in Olena Nizalova's blog which is published on PSSRU's website <https://www.pssru.ac.uk/blog/the-hidden-costs-of-obesity-implications-for-long-term-care/>.

New work

Supported housing and specialised supported housing

To update our work on supported housing found in Chapter 4, we have drawn on two Laing and Buisson reports. Included in the same schema (4.3) are costs for a sub-category of supported housing known as specialised supported housing, which are properties developed in partnership with local authorities or the health service and are exempt from social rent requirements.

New ratio of direct to indirect time

We have included the costs of face-to-face time for an alcohol health worker (chapter 3) thanks to a study by John Marsden et al. (2019). They found that for every hour of face-to-face time, an additional 28 minutes of non face-to-face time was required.

Multi-professional clinical medication reviews in care homes for older people (CAREMED)

In last year's report, Tracey Sach's article focussed on whether two different methods of collecting primary and social care resource use data produces similar results. This year, information has been drawn from the same study (CAREMED) to provide a breakdown of the costs for providing patients' medication in care homes. Travel costs for review meetings have been included.

Dementia Memory Service

A study carried out by Mark Pennington et al. (2016) has provided the costs of assessing and supporting 1,353 people with suspected dementia from 69 Memory Assessment Services. This can be found in our care packages chapter (8).

Reference Costs

This year, our guest editorial introduced above discusses the gradual move away from service-level costing to patient-level costing (PLICS). Due to the timings of the annual release of hospital data however, this year's costs remain at the service-level and have been updated to current values using the new NHS cost inflation index discussed below.

In Chapter 2 we report on adult mental health costs and have included some additional costs in this volume including specialist psychosexual teams. We have also added a second schema to our children's services' Chapter 6 which separates out the costs of mental health services for children and incorporates the drug and alcohol services which relate solely to children. Additionally in Chapter 7 we have added some new reference costs for abortion services.

Routine activities

Qualification costs

To improve the accuracy of our cost estimates for qualifying in certain professions, we first need to annuitise the investment in a way that reflects the expected return over time. But over what period should this expected return be measured? An important element is the number and distribution of years that health service professionals would use their training – their 'expected working life'. To estimate the expected annual cost of training in previous volumes, data on working lives were calculated using the 2001 Census and the Labour Force Survey. See articles: Curtis, Moriarty & Netten (2010), Curtis, Robinson & Netten (2009).

Unfortunately the most current Census (2011) no longer includes the variables necessary for us to carry out this analysis so the new estimates are not directly comparable to those noted in UCH&SC in Section V. Nevertheless, we have been able to update the estimates for medical/dental professionals, nurses and social workers using the April 2018-March 2019 Labour Force Survey (LFS) data. We have found that the expected working life of a social worker has increased from 8 years to 19 years in just over ten years, possibly as a result of councils encouraging and supporting experienced professionals back into employment (<https://www.theguardian.com/social-care-network/2016/nov/17/ive-returned-older-and-wiser-the-social-workers-coming-back-to-practice>). This is reflected in the annual cost of qualifying social workers which, using the previous estimate of a social worker's working life was £25,417 in 2018, compared to £9,707 in 2019, using the most recent LFS. The expected working life of a nurse has also risen from 17 years (using the LFS 2003-2006) to 24 years (using the LFS 2017-2018); Burtney and Buchanan's report (2015) suggest reasons why this might be the case. On the other hand, we have found that the expected working life of medical practitioners has reduced from 26 to 22 years. Although, we were unable to separate medical practitioners from dentists

using the Labour Force Survey data, it is very likely that medical practitioners are working for fewer years as a result of the changes in the pension rules. Indeed it has been reported that an increasing proportion of GPs have been working less than 37.5 hours per week over the past five years. See:

<http://www.pulsetoday.co.uk/news/gp-topics/employment/more-than-two-thirds-of-gps-work-less-than-full-time-says-official-data/20037483.article>; <https://www.telegraph.co.uk/news/2018/02/01/gps-retire-early-amid-clampdown-multi-million-pension-pots/>.

NHS Cost Inflation Index

Until 2016/17, inflation faced by the NHS was measured by the Hospital and Community Health Services (HCHS) Index. The HCHS was a weighted average of two separate inflation indices, the Pay Cost Index (PCI) which measured pay inflation and the Health Service Cost Index (HSCI) which measured non-pay inflation. The Pay Cost Index and the Health Service Cost Index were weighted by the proportion of HCHS expenditure on each. Following a review of departmental analytical products, the HSCI index, and thus the HCHS inflator, was discontinued.

Last year, in collaboration with the DHSC, we constructed a new Health Services (HS) index to ensure that we could present a relevant inflation index in this volume. This has been superseded by the NHS Cost Inflation Index (NHSCII), to be used this year to update health services. See Section V, 15.3 for further details.

Local authority overheads

We are aware that the information we have drawn on to estimate local authority overheads is now ten years old and would normally be withdrawn from the volume. However, given that overheads are key to the social care unit costs, in the absence of any new sources, we have continued to use the same work. We urge our readers to contact us if they know of any recent information we could use, or from which this information can be gleaned. Additionally, if any local authorities are willing to work with us to estimate council overheads, we would be grateful if they could get in touch.

Blogs and other useful information

This year, three new Unit Costs blogs have been published on the PSSRU website (<https://www.pssru.ac.uk/blog/category/unit-costs/>)

New and innovative children's services in UCR 2018 (Amanda Burns),

The unit costs of professionals – free database now available (Unit Costs' team),

101 uses for a *Unit Costs of Health & Social Care* volume (Amanda Burns)

What have we taken out?

To comply with the rule of removing schema for which the original data are more than ten years old, this year we have withdrawn the following schema. Although they will no longer be updated, Section V of the volume contains the list of services removed since 2006, which can be downloaded online.

4.3 Residential care homes for adults requiring learning disability support

6.6 End-of-life care at home for children

6.9 Decision-making panels

6.10 Costs of reunification

6.11 Short-break provision for disabled children and their families

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

11.10 Re-ablement services

Acknowledgements

I would like to thank Jennifer Beecham, Amanda Burns, Alan Dargan, Sarah Godfrey and James Cordery for their help provided in compiling and producing this volume. Also many thanks go to the researchers involved in cost work who have drawn our attention to new information, and to our Working Group members (Ross Campbell, Adriana Castelli, Ciara Donnelly, Sebastian Hinde, Emma Mcmanus, Tracey Sach and Jonathan White) for their continued input and support.

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Guest Editorial: Transitioning from reference costs to patient-level costing

Candice Goold, Costing Lead, NHS England and NHS Improvement

The history of costing in the NHS

Secondary care providers have been submitting a reference cost return since 1998 and the National Schedule of Reference Costs (NSRC), (NHS Improvement, 2018) has been compiled annually as a result. Reference costs record the average (aggregated) unit cost to the trust of providing defined services to NHS patients in a given financial year. While comprehensive in terms of its coverage of the sector, it has been criticised for:

- not providing sufficiently granular cost data to lead to changes in sector financial efficiency and transformation, due to the level of aggregation required to make a submission
- a lack of clear instruction and guidance on how to prepare costing returns, leading to inconsistency in the methodology applied by providers
- an absence of clinical engagement in assuring the reference cost returns are an accurate representation of the real pathway costs.

The processes for submitting reference costs – and their accuracy – vary considerably between trusts. Between 2013 and 2015, audits commissioned by NHS Improvement found that more than 50 per cent of acute trusts' submissions were materially inaccurate (Monitor, 2014 & 2015). While more recent audits suggest the quality of reference costs submitted by acute trusts has improved, the fundamental underlying issues remain the same.

Since 2012, NHS England and NHS Improvement has advocated mandating patient-level costs (known as PLICS) rather than reference costs as PLICS offers a much richer source of cost data, linkable at patient level, to improve value in the NHS. A consultation in 2014 (GOV.UK, 2014) covered a detailed plan and timetable for their adoption, and it received positive feedback. In addition, Lord Carter's Review of Operational Productivity (Department of Health, 2016) identified the need for PLICS to support the elimination of unwarranted variation.

The transition in costing methodologies

As a result of this, in 2015, NHS England and NHS Improvement, in partnership with NHS Digital, created the Costing Transformation Programme to address the criticisms levelled at reference costs. The aim was to improve the quality of costing information in the NHS through costing individual patient episodes using a single annual cost collection held in early Summer 2021.

The six-year plan to migrate aggregated costs to patient-level includes the following workstreams:

- **stakeholder engagement (including clinicians)** to educate the wider audience to the uses of costing data and promote the transformation project in all sectors. This will ensure voluntary uptake and support the improvement of data collection and quality.
- **mandating** to ensure consistency in costing methodologies which align across providers to ensure system-level decisions are based on costs from within a clear baseline framework and for the system to understand the impact on providers of the move from aggregation to patient-level costing.
- **developing and implementing costing standards** to reduce the provider inconsistencies through producing fit for purpose costing standards on time and to the quality required and therefore deliver mandatory regulatory framework for costing.
- **single cost collection** transitional voluntary collections to run alongside roadmap and voluntary collections to prepare for a single integrated collection by 2021. This will enable providers who deliver care to more than one sector to undertake one collection, regardless of services being offered.

- **data quality and assurance** to align with the costing standards and mandation process. The programme focused on quality of costing across the sector through cost assurance programme.
- **data outputs and uses** to produce end state products which meet the user's needs for cost data, including NHS England and NHS Improvement statutory powers relating to pricing and the national tariff, Model Hospital, use of resources and Getting It Right First Time (GIRFT). In addition, supporting the provider sector to use PLICS to benchmark costs and drive service improvement and transformation.

The work streams were shaped to counter the critiques levelled at the reference cost collection and to make better use of data/digital technology.

Key synergies with other NHS strategies

Initially, the roll out programme for PLICS was a key enabler of *Five Year Forward View*, (NHS, 2014) enabling providers to more accurately understand their cost bases and therefore support the sustainable delivery of high-quality patient care. However, with the publication of the *NHS Long Term Plan* (NHS, 2019) it is now vital contributors address:

- the creation of new services models through more joined up care and improvements in overall population health (Chapter 1)
- the improvement of outcomes driven through understanding unwarranted variation (Chapter 3)
- the changes required to the workforce pressures through new staffing models (Chapter 4)
- the return to a sustainable financial balance for the NHS through getting the most out of tax payer investment in the NHS (Chapter 6).

Importantly, the move away from aggregation supports the *NHS Long Term Plan* in the following ways:

- PLICS allows consistent, linkable, cost data at patient-level and through that, a single view of the resources consumed in delivering secondary care, to help design more efficient and effective ways of meeting patient needs
- PLICS is the biggest data collection in the NHS and, once fully rolled out, will provide a powerful resource for individual trusts but more crucially across provider boundaries enabling integrated care organisations to understand the whole patient pathway within secondary care.

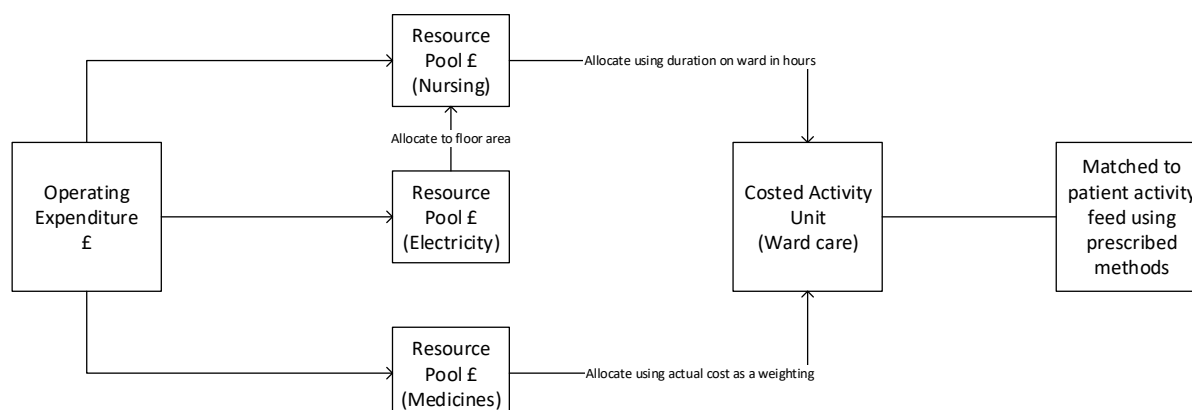
The programme is expected to see benefits earlier than 2021, as data collected in 2019 will support the operational productivity programme, including the Model Hospital, and its rollout to ambulance, mental health and community health services. More granular and transparent costs will support the future development of national tariff prices and currencies.

The theory of patient-level costing (2019)

The important difference between reference costs and patient-level costing is the linkage to a number of key master and supporting information feeds to get a unique cost per patient, dependant on their individual experience within the care setting. Each pound within the general ledger is linked to prescribed resources (ie: drugs, specialist nursing, consultant) using defined allocation methods¹ to link it to prescribed activities (ie: ward care, MRI, wheelchair issue). These costed activities are then matched to master activities (ie: unique inpatient episode) to create an individual patient level cost which can be analysed in a variety of different ways.

¹ Defined as "The process of distributing costs from a high-level pool of costs to a specific department, activity or patient, using a predetermined method." Prescribed methods include headcount, cost, usage and time.

The figure below outlines a simplified version of PLICS in practice:



On a simplified level, PLICS breakdown a providers operating expenditure into resource pools where the costs are similar in nature for example, nursing. This is then linked to the activity unit which drives the expenditure of this resource. In this example of ward care, it would be allocated across all the occupied bed hours on the ward. This hourly cost would then be linked to the patient on the ward for each day of their length of stay.

There is an expectation that by year 3 of the transition plan all activities in provider organisations will have patient level feeds available to enable a cost model fully costed using Costing Transformation Programme methodology. Information on patient level feeds, allocation methods and transition paths can be found on the NHS England and NHS Improvement website (NHS Improvement, 2019).

Term	Definition
Activity	A measurable amount of work performed using resources to deliver the services required by patients to achieve desired outcomes; e.g. a procedure in theatre, pathology test or therapy contact.
Resources	Components used to deliver activities, such as staff, equipment or consumable. The cost ledger is mapped to a prescriptive list of resources provided by NHS Improvement in the costing standards technical document.

The programme is managing a significant volume of data to produce granularity in the final product. In 2017/18, there were 6 million records for the collection of reference costs across the secondary care sector. In comparison, for the 80 acute trusts submitting voluntary patient-level cost data, there were approximately 3 billion records.

As a result, the programme is looking to use technological improvements to enable providers to access a much more granular level of data through an online portal. This is in addition to aggregated data being available on the NHS England and NHS Improvement website. This will empower the end users of the data to produce stronger benchmarking, enabling them to mould the datasets to meet individual unique criteria.

For 2019, the programme is running its first mandated patient-level collection with the acute sector for attendances in accident and emergency, outpatients and for episodes within admitted patient care.

It does however remain a mixed methodology for the acute trusts' collection, with several key areas outside of the scope of PLICS collection. The primary areas outside of the scope are high cost drugs, blood and devices, critical care and unbundled outpatient imaging. The programme envisages this to be collected from 2020 at patient-level as part of the overall transition plan to achieve a single national cost collection in 2021.

Patient-level costing in practice (2019)

NHS England and NHS Improvement have worked with providers to generate a series of case studies. These highlight ways that the new rich patient-level cost data can be used to identify unwarranted variation in patient care leading to improved patient care which is also more cost-effective.

These case studies are expected to be published on the NHS England and NHS Improvement website and will aim to give providers a framework to use when benchmarking against and working with each other to improve consistency of care across the country. It is expected that the use of these case studies as frameworks will deliver improved patient care and national cost efficiencies.

An example of where patient-level data has been used to deliver improved patient care and a reduction in costs is spinal injections. A trust in the South East (Provider A) were concerned that they were making significant losses when delivering spinal injections under admitted patient care in Trauma and Orthopaedics (T&O).

Nationally, a greater proportion of spinal injections are delivered in Pain Management (PM) and PLICS demonstrated that spinal injections administered in PM are more cost-effective than those administered in T&O.

Provider A delivered most of the service in T&O:

	T&O				PM			
	Total cost	Average cost	Activity	Proportion of total	Total cost	Average cost	Activity	Proportion of total
Provider A	£1,158,047	£624	1,856	71%	£417,274	£550	758	29%
All other trusts	£6,371,912	£888	7,177	21%	£19,140,645	£725	26411	79%

By revising the service location to be more aligned to the national delivery picture; Provider A found a realistic saving opportunity of c£95,000.

	Total cost	Average cost	TC Variance
Current position	£1,575,321	£603	
All in T&O	£1,630,999	£624	£55,678
All in PM	£1,438,991	£624	(£136,330)
Provider A using national deliver picture	£1,480,019	£566	(£95,302)

Further opportunities can also be identified by using the new activities and resources to scope the underlying costs of clinical variation. Providers can therefore consider the difference in costs depending on when the episode occurred. For example, the table below shows that the cost of delivering spinal injections in T&O in Provider A is lower per episode when carried out at the weekend. Combining this information with the activities and resources means the provider can understand which elements of the service are carried out during the week.

	Provider A – T&O		
	Cost	Average Cost	Activity
Midweek	£903,334	£652	1,386
Weekend	£261,461	£547	478

Another provider (Provider B) in the same region as Provider A carried out around half of their spinal injections as an outpatient procedure at 20 per cent of the cost of the same procedure in day case. As part of the case study process, NHS England and NHS Improvement have connected costing and clinical colleagues at the two providers to work together to understand whether Provider A could move their services away from admitted patient care, leading to additional potential savings opportunities.

	Provider B		
	Total cost	Average cost	Total activity
Day case	£395,828	£636	£622
Outpatient procedure	£79,575	£122	£653

Using patient-level cost data, Provider A (supported by the case study analysis prepared by NHS England and NHS Improvement) has re-organised its spinal injections service and is working with Provider B to understand if it can be further improved by moving the appropriate workload into outpatient procedures. The change driven by patient-level costing data has been communicated across the organisation, with the Deputy Medical Director stating “*The spinal service has engaged with the results of your work and are changing their service. Many thanks again for your work on this – it will make a big difference to overall patient care & quality*”.

Full details of this and the other case studies can be found on the NHS England and NHS Improvement website (<https://www.england.nhs.uk/publication/>).

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Understanding the cost of quality within an online sexual health service

James Moore, Paula Baraitser

Introduction

Online services are increasingly part of the health economy (NHS Digital, 2014). It is anticipated that they will increase convenience and choice and reduce cost in public health services (NHS, 2019). Sexual health services have been an important area of online service innovation and growth (Wilson et al., 2017; Escourt, 2017). Most areas of the UK now have an online offer for testing for sexually transmitted infections and there is an emerging evidence base to support the acceptability and effectiveness of this approach (Wilson et al., 2017).

A recent House of Commons Health and Social Care Committee enquiry into sexual health services identified geographical variation in access to high quality services and recommended the development of a national strategy for sexual health that sets out clear national quality standards for those commissioning sexual health services (House of Commons, 2019)

Economic evaluation of online sexual health services is limited. Where this does exist, it focuses on comparisons of the cost of online and face-to-face services assuming that these services operate separately (see for example, Smith et al., 2007; Blake, 2015) rather than as a system where users move between modalities of care (see for example, Turner, 2018). None of the economic evaluations of online services to date consider quality of care within online sexual health services. The recent publication of joint standards from the Faculty of Sexual and Reproductive Health Care and the British Association for Sexual Health and HIV offers new opportunities to do this (FSRH/BASHH, 2019). These standards provide a quality benchmark for online sexual health services and an opportunity to identify the core elements of high quality service provision that would require costing in any future economic evaluation and should be considered when commissioning services. We completed an analysis of those elements of the quality standards that have significant cost implications for online service development and provision. We note that many of these quality indicators are not routinely considered when developing standard costs for clinic-based services and this paper is intended as a resource for those planning to cost or commission such services.

Methods

Our analysis is based on an online test for genital chlamydia, gonorrhoea, HIV and syphilis (T4). This is the standard offer recommended by the British Association for Sexual Health and HIV (BASHH) for individuals with a 'sexual health need' (BASHH, 2019). We mapped the pathway for delivery of T4 combining the pathways from a number of different online services to generate a simple composite pathway and then applied the national standards specified by BASHH and the Faculty of Sexual and Reproductive Health Care (FSRH) to each element of this user journey (FSRH, 2019). This process enabled us to generate a list of cost areas that should be considered in developing standard costs for online sexual health services. We focused specifically on costs that we thought would not be present within standard NHS cost analyses. Throughout this analysis we assumed basic standards, for example service registration with appropriate regulator.

Results

Figures 1a and 1b show the T4 testing pathway and the quality standards mapped to this. On this basis, we identified key areas of the journey where quality is particularly important and which should be a focus for appropriate costing of online services. These are: user completes risk assessment and ordering; clinical management of concerns identified through initial assessment process (including safeguarding concerns); support for sample collection by users; provision of HIV reactive results.

Figure 1a

Simplified Cost Profile: SH:24

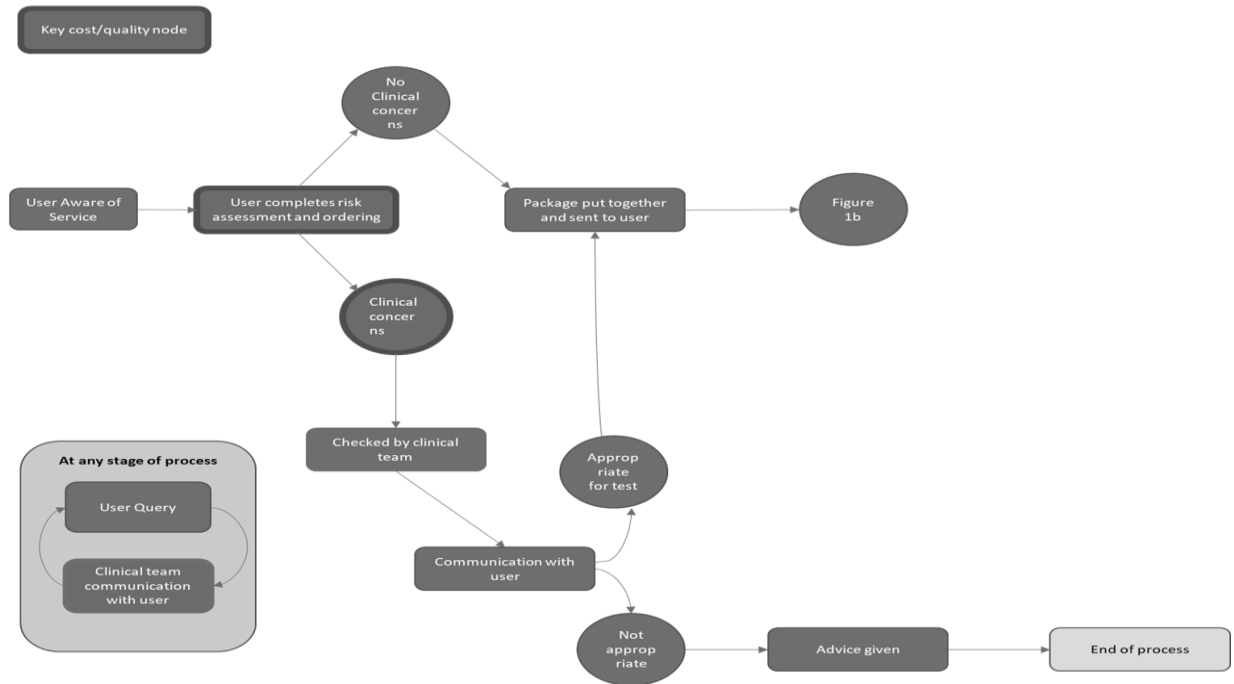
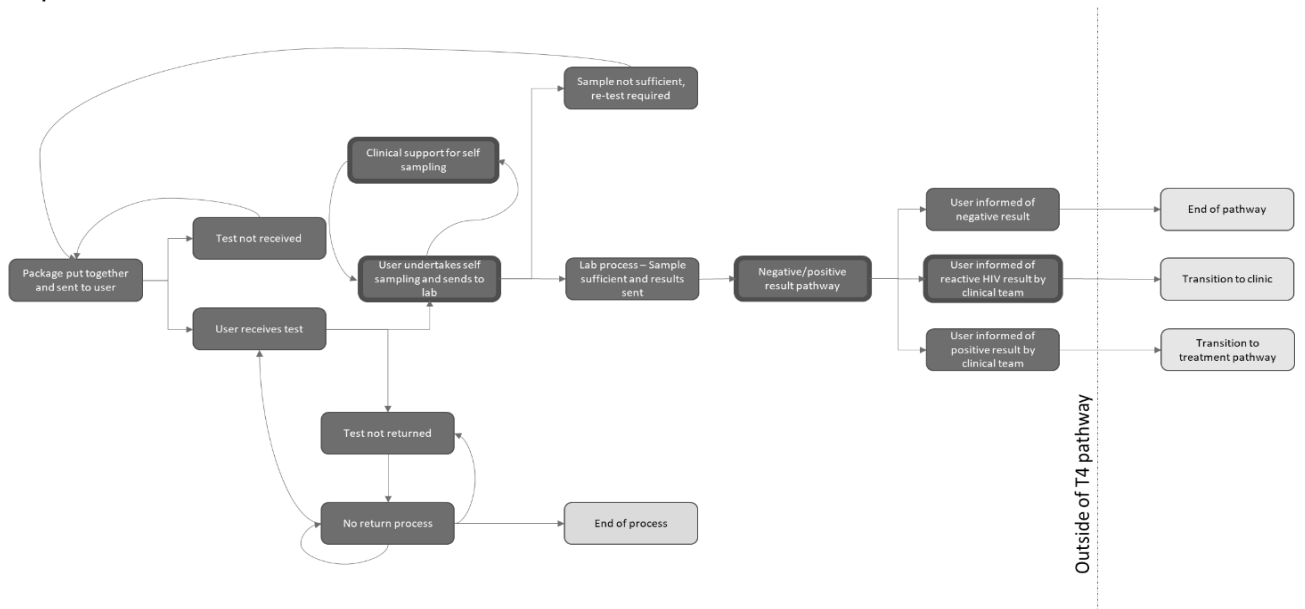


Figure 1b

Simplified Cost Profile: SH:24 1b



This is further illustrated by Table 2 below which links each stage of the journey to the specific standards relevant to that stage which might have cost implications, with a focus particularly on those costs that might not be present within standard NHS pathways.

Table 2: Quality standards relevant to each stage of the online testing journey linked to cost implications

Pathway stage	Quality standard	BASSH (2019) Standard	Cost implications	Type of cost
User aware of the service	Adherence to the UK Code of Non-broadcast Advertising and Direct & Promotional Marketing code (CAP code), with regard to relationships with pharmaceutical companies and advertising of their products.	2.5	Effective online communication about the service will require investment in high quality website development for clear communication of the range of services on offer, who should use these services and where to go for alternatives. It will also require investment in the development of clear pathways between the online and face to face service.	Overheads Variable. Development cost with maintenance.
	Online service providers should make it clear what treatment/care is available via the online service and what is not available with appropriate signposting to other services, particularly for rapid access to emergency contraception and post-exposure prophylaxis.	3.1.2	Ensuring that this communication is available in formats that promote diversity, maximize access for those who speak different languages and for people living with disabilities will require investment.	
	Online services should conform to the World Wide Web Consortium on access for people with disabilities.	3.1.1		
	The content and layout of the user interface should promote diversity and not discriminates against any protected characteristic. This includes recognition of diverse sexual orientation and gender identities.	4.1.3		
	Websites and applications should be easy to use and neither directly or indirectly discriminates against those with poor digital literacy; safeguards include the use of clear English, clear site structure and unambiguous site navigation.	4.1.4		
	Digital support must be available on the website for service users to obtain additional explanation or information.	3.4.1		
Patient completes risk assessment and ordering	Limit and manage risk associated with remote consultations.	1.2	Development of appropriate digital interfaces to obtain valid consent and assess capacity.	Overheads Variable. Development cost with maintenance. Clinical staff costs.
	Safeguarding assessment with follow up and transition to face to face care as appropriate	1.2	Clinical resource to manage assessment of safeguarding risk and appropriate referral and follow up.	

	<p>Obtain valid consent and assessing capacity</p> <p>Management of risk and performance</p> <p>Safety checking of digital tools/symptom checkers</p> <p>Digital security certification and testing</p> <p>Obtaining informed consent in a remote service.</p>	<p>2.1/2.2</p> <p>1.4</p> <p>1.4.3</p> <p>1.4.14</p> <p>2.1</p>	<p>Staff training to understand and manage risk associated with remote consultations.</p> <p>Maintenance of appropriate digital security certification and testing</p>	<p>Staff training to take on new roles e.g. remote clinical care that are not included in standard NHS training programmes.</p>
Testing kit and instructions packaged and sent	Products sent by post must be sent in a discreet, non-identifiable package so that no one but the recipient will know what the package contains.	3.5.4	Cost of sourcing appropriate packaging. Additional considerations that are not mentioned in the guidance are biodegradability of packaging or size of package for ease of delivery.	Variable and ongoing cost of appropriate packaging.
User self-samples and sends to laboratory	No specific standards relating to this step.		The standards do not comment on quality in this area but modelling of services shows that kit return rates have a small but important impact on the cost effectiveness of online services (Turner et al., 2018). Kit return rates are thought to be influenced by usability of the test kits and the quality of the instructions and support. This suggests that investment in these areas could be important.	Overheads Variable. Development cost with maintenance.
Results	Providers of online or remote SH/ SRH ¹ services may or may not be the same organisation which provides the face-to-face SH/ SRH service for any specific location. It is the online service provider's responsibility to ensure that the pathway between the face-to-face and online and remote services is well supported and does not put the service user at a disadvantage if they need to move between the two types of service.	4.1.1	Clinical staff to give reactive HIV results by telephone, to provide clinical advice and signposting for those who are symptomatic, to offer partner notification and to support transition to sexual health services as required.	Clinical staff costs. Staff training to take on new roles e.g. remote clinical care that are not included in standard NHS training programmes.

¹Sexual health/sexual reproductive health

Discussion

By mapping the user journey for an online T4 sexual health test to the quality standards specified by the professional bodies within sexual health, we have identified priorities for further work on costing online services. As far as we know this is the first attempt to map the possible cost of quality standards within online sexual health service provision.

The results highlight the key cost areas of the online service and could contribute to sensitivity analyses for future costing work in this type of service. In-person NHS services can be potentially costed using the *Unit Costs of Health and Social Care* (Curtis, 2018), and NHS reference costs (NHSI, 2018), however the emergence of online services creates new types of cost and costing profiles. Both running costs and capital expenditure are less well characterised for online services than face-to-face care. Much of the development of these services has taken place outside the NHS and much of the data on costs is commercially sensitive making it more challenging to understand their components and prices. Whilst online services share many of the same responsibilities and requirements of a physical service our analysis shows where the costs differ and the lack of published resources to estimate the costs in this sector.

The development of online services within the NHS requires a different skill mix and there is limited guidance from the NHS on the banding or costing of many of the unique roles required, with current salaries influenced by local market factors given the value placed on them in the UK and international private sectors.

Finally, online services offer new challenges for managing volumes of activity. Traditional services are limited by the number of appointments available whereas demand management in online services requires new strategies. The commonest approach currently adopted is capping the number of tests available each day. At present we do not know the implications of this strategy for equity of access, particularly for vulnerable groups. Further work is required to understand these implications.

Conclusion

There is a lack of evidence around the costs of a high quality online service. The published evidence to date suggests that it is important to consider the cost-effectiveness of online services in terms of their impact on the costs and outcomes of whole systems of sexual health care (Turner, 2018). Our work highlights key areas where sensitivity analysis of quality standards on costs of online services should be undertaken. As digital services are increasingly part of NHS care we need to specify the cost of new staff roles (e.g. designers and developers) and new staff training (e.g. the management of remote consultations) in order to understand the cost-effectiveness of these new service modalities.

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The costs of obesity prevention and treatment

Emma Frew, Alastair Canaway, Louise Jackson, Peymane Adab, Kate Jolly, Miranda Pallan

Introduction

It is well known that childhood and adult obesity impose significant costs to the health service and wider society (Serdula et al., 1993) and there is growing recognition that targeted treatment and prevention programmes should be from a wide-system perspective and therefore include delivery in non-health care settings such as schools, community venues and workplace settings. However, it is not clear how economic evaluations should be designed to evaluate these interventions, in particular how the non-health care costs should be captured. A recent review identified that there have been few economic evaluations of obesity interventions reported and a wide range of methods applied for collecting and reporting cost information (Zanganeh et al., 2019). Furthermore, only four out of 39 evaluations were conducted in a UK setting.

Methods

In this short paper we synthesize cost information from three recent evaluations of interventions designed to either treat or prevent obesity in non-health care settings. The purpose is to describe the methods used to capture the cost information associated with complex interventions using a 'bottom-up' methodology, and to highlight the proportional contribution of each element of cost across the three case studies.

Case study 1 is the WAVES study. This was a multi-centre cluster randomized controlled trial (RCT) conducted to estimate the effect of an obesity prevention intervention in which primary schools were either randomised to the intervention arm (n=24 schools; 622 children) or to continue with ongoing health-related activities (the control arm, n=26 schools; 735 children). Full details of the trial design, intervention development and the RCT results (Adab et al., 2015; Adab et al., 2018), and full cost-effectiveness analysis (Canaway et al., 2019) are reported elsewhere. Briefly the intervention comprised four components focused on changing dietary and physical activity behaviours: cooking workshops; signposting to local opportunities to be physically active; 'Villa Vitality' (an external package provided by a sporting institution to promote physical activity and healthy eating); and daily structured physical activity sessions delivered within the school day.

Case study 2 is the CHANGE study. A feasibility study was conducted to adapt an existing children's weight management programme to meet the needs of culturally diverse populations in which families were allocated to either the 'intervention' programme (375 families) or the comparator programme (161 families). Full details of the study design and results are available (Pallan et al., 2018). The intervention was an enhanced culturally adapted programme delivered to families in a community setting over six weeks. The comparator was the standard weight management programme delivered over the same time period.

Case study 3 is the HDHK study - Healthy Dads, Healthy Kids UK. This was a feasibility RCT in which fathers of primary school aged children identified as having a BMI $\geq 25\text{kg/m}^2$ were randomly allocated to either the intervention arm which comprised nine weekly healthy lifestyle group sessions involving the father and child or the control arm in which each family received a voucher for one visit to a local leisure centre. Within the study, three different modes of delivery for the intervention were explored: 1. Local Authority-delivered; 2. Private Coaching Organization-delivered; 3. Leisure Centre-delivered. Further details of the study are reported (Jolly et al., waiting to publish).

For all three studies, data on resource use were identified and measured by the trial team. All resource use capture tools were embedded within the trial data collection forms. Each study adopted a 'bottom-up' costing approach whereby the intervention components were 'itemised' and resource use collected alongside. For the WAVES study, this was a multi-component intervention comprising workshops delivered at school at which all materials and food items were recorded, and staff time logged using school self-completion logbooks. Similarly, time and materials relating to the daily physical activity sessions in school were recorded by the staff in logbooks. One component was provided by an external sporting institution and therefore purchased at a

fixed cost, and the time spent by research staff updating information sheets to signpost families to local physical activity opportunities was recorded using an electronic log.

The HDHK and the CHANGE studies were both feasibility trials and the economic evaluation therefore focused on the feasibility of cost data collection. For both interventions, the resource use captured included the costs of the intervention materials (handbooks and logbooks), room hire, intervention promotion, travel costs and staff time for delivery and training. All studies focused on measuring only the costs that differed between the 'usual care' and the intervention, therefore capturing only the incremental cost differences.

Unit costs for staff time were then applied to the resource use using external sources. For all studies, a societal perspective was adopted and costs were summed and averaged for each participant or family unit and the mean difference in costs between the two arms of the study estimated.

Results and discussion

The resources identified for each of the obesity interventions and their costs are outlined in the table overleaf.

The costs presented here are the average costs per participant for a range of obesity prevention and treatment interventions. They are constructed from findings from three research studies based in the West Midlands, England. The costs provide an indication of the resource use requirements to deliver weight prevention and management activities in different settings.

Looking at the per participant costs, these do not appear to be expensive interventions. The six week CHANGE programme cost around £40 per participant, and WAVES cost £165 per child. HDHK costs are between £125 and £300 per family. In times of very limited budgets it can be difficult to find the resources to implement new services, or to put in place services that cost more than the existing one. However, if such interventions are more effective (that is, participants can make sufficient and lasting changes to their weight and lifestyle) than the comparator, this could have an impact on costs to the health service and wider society both today and in the future (Serdula et al., 1993). To set these costs into perspective, for the same year (2017/18) we know that just one GP appointment costs £37.40, an elective in patient stay costs around £3,756 and a paediatric outpatient appointment costs £185.

Intervention fidelity is, of course, important: to obtain the same effect were the interventions to be rolled-out, they should be delivered adhering to the same methods as within the trial. However, our detailed 'bottom-up' estimates of the resources used to deliver the interventions has allowed us to identify some components, such as choice of venue, timing of sessions, or delivery organisation, that may help keep the costs within budget.

Mean resource use and costs associated with the obesity interventions (2017/18 prices)

Resource item	Unit cost (£)	Resource use	Intervention (£)	Comparator (£)
The CHANGE Intervention				
Initial training/set up costs				
Training of 2 main facilitators (2 sessions: 1 x 2.5 hours + 1 x 1.5 hours)	10.80 ^a	8 hours	86.40	
Training of 1 assistant (2 sessions: 1 x 2.5 hours + 1 x 1.5 hours)	10.80 ^b	4 hours	43.20	
Display boards	395.00 ^c	2	790.00	
Card game	18.93 ^c	1	18.93	
Floor mat	39.00 ^a	1		39.00
Photocard	6.00 ^a	1		6.00
Stomach model	60.00 ^a	1		60.00
Fat model	73.00 ^a	1		73.00
Subtotal set up/training costs			938.53	178.00
Delivery costs (identified as different between comparator and intervention arm)				
Folders (1 per participant)	4	169 participants (intervention arm)	676	Free
Inserts for the cover of the folder	0.45	169 participants (intervention arm)	76.05	
Folder dividers	1.23	169 participants (intervention arm)	207.87	
Food labelling sheets	0.27	169 participants (intervention arm)	45.63	
Certificates	0.72	169 participants (intervention arm)	121.68	
Single-sided worksheets (11 per participant)	0.10	169 participants (intervention arm)	185.90	
Double-sided worksheets (colour) (6 per participant)	0.20	169 participants (intervention arm)	202.80	
Double-sided worksheets (black and white) (100 per participant)	0.04	74 participants (100 per participant)		296.00
Healthy portion plates (1 per participant in control arm)	1.88	74 participants (control arm)		139.12
BMI charts	0.55	169 participants (intervention arm), 74 participants (control arm)	92.95	40.70
Staffing (additional staffing costs for intervention compared to comparator)				
Assistant	10.80 (hour)	Intervention (5 weeks for 2.5 hours) Comparator (3 weeks for 2 hours)	135	64.80
Venue hire	580 (average weekend rate)	Intervention (7 weekend sessions) Comparator (1 weekend session)	4060	580
Total cost (including training/set up costs)			6742.41	1298.62
Total average cost per session (including training/set up costs)			421.40	162.33
Total average cost per participant (including training/set up costs)			39.90	17.54
HDHK intervention (3 modes of delivery)				
Local Authority delivered:				
Set up/training costs				
Room hire for training	40 (per day)	2 days	80	
Training the health trainers	1000 (per day)	2 days training (for 9 trainers)	2000	
Training the sports coach	250 (per day)	1 day training (for 1 sports coach)	250	
Subtotal set up/training costs			2330	
Equipment (per family pack)				
t-shirts	3.30	(assume 4 per family)		

Resource item	Unit cost	Resource use	Intervention (£)	Comparator (£)
pedometers	16.50	1		None
stickers	0.50	1 pack		"
handbook for dad	8.40	1		"
handbook for child	2.50	1		"
handbook for mum	4.25	1		"
logbook	4.60	1		"
play cared	1.85	1		"
spinner	0.50	1		"
Subtotal (per family pack)	52.30	1		
Subtotal for the whole intervention (15 x family packs)		15 family packs	785	
Room hire	0	Provided free of charge	0	"
Preparation time for 2 x health trainers (1 hour per weekly session for 9 weeks)	18 (per hour) ^d	1 hour per weekly session for 9 weeks	324	"
Delivery time for 2 x health trainers (1.5 hours per weekly session for 9 weeks)	18 (hour)	1.5 hour per weekly session for 9 weeks	486	"
Delivery time for 1 x sports coach	50 (hour)	1 hour per week for 9 weeks	450	"
Delivery time for grade 6 researcher	15 (hour) ^e		203	"
Total cost (excluding training)			2248	
Total cost (including training)			4578	
Total average cost per session (including training)			508	
Total average cost per family (including training/set up costs)			305	"
Coaching organization delivered:				
Whole package including training and delivery	3444 ^f		3444	"
Room hire (per week)	40		360	"
Total cost (including training)			3804	
Total average cost per session (including training)			422	
Total average cost per family (including training/set up costs)			254	
Leisure centre delivered				
Whole package including training and delivery	1530 ^f		1530	"
Room hire (per week)	40		360	"
Total cost (including training)			1890	
Total average cost per session (including training)			210	
Total average cost per family (including training/set up costs)			126	
WAVES intervention			Intervention mean cost per school class	
Signposting	Please see Canaway et al, 2019 for full details	Published cost items are in 2013/14 prices.	140	"
Villa vitality package		Here they are inflated to 2017/18 prices	3027	"
Cooking classes and workshops		Using PSS annual percentage increases for	289	"
Purchasing/packing/printing materials		Local Authority services.	128	"
Cooking materials			43	"
Delivery of materials			123	"
Physical activity sessions at school (staff time)			1132	"
Total average cost per class			4884	
Total average cost per child (assuming 30 children in a class)			163	

^aCosts provided by the weight management service staff (BCHCT), ^b Band 4, NHS Agenda for Change Pay 2016/17 ^c Costs provided by research team ^d Source: <https://www.youthemployment.org.uk/careers-hub-job-role/health-trainer/> (accessed 6 December 2019) ^e Source: University of Birmingham salary payscales: <https://www.birmingham.ac.uk/staff/jobs/pay.aspx> ^f Amount charged by external organization.

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I. SERVICES

1. Services for older people

1.1 Private sector nursing homes for older people (age 65+)

1.2 Private sector residential care for older people (age 65+)

1.3 Local authority own-provision residential care for older people (age 65+)

1.4 Local authority own-provision day care for older people (age 65+)

1.5 Dementia memory service

1.6 Multi-professional clinical medication reviews in care homes for older people

1.1 Private sector nursing homes for older people (age 65+)

Using Adult Social Care Finance Return (ASC-FR)¹ returns for 2018/2019, the median cost per person for supporting older people in all nursing homes was £656 per week [using unique identifiers: 8713501, 8714101, 8714701, 8715301, 8715901 (numerators in thousands of pounds), 8713502, 8714102, 8714702, 8715302, 8715902 (denominators)]. The mean cost was £678 per week. The standard NHS nursing care contribution is £158.16 and the higher rate is £217.59.² When we add the standard NHS nursing care contribution to PSS expenditure, the total expected median cost is £814 and the mean cost is £836.

Costs and unit estimation	2018/2019 value	Notes
A. Fees	£830 per week ³	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. ^{4,5,6,7,8} The midpoint between the minimum and maximum fee was taken from Laing & Buisson Care Homes Complete Dataset 2018/2019. ⁹ Care home fees have been split into their component parts by Laing & Buisson (2019). ¹⁰ For nursing care for frail elderly people, direct costs (staff: care and ancillary) form 66 per cent of total costs; repairs, maintenance and other non-staff current costs at home level forms 15 per cent, corporate overheads forms 4 per cent and accommodation costs forms 15 per cent of the total.
External services		
B. Nursing	£8 per week	Information has been drawn from the article in the 2018 volume by Sach et al.(2018) which compares the mean cost of contacts per resident using data collected from GP records compared to care home records over a seven-month period. Using the midpoint between the two data sources, total costs incurred per resident week were £25 (£22 using GP records and £26 using care home data). Costs have been uprated using the NHS cost inflation index.
C. GP services	£11 per week	
D. Other external services	£6 per week	
E. Personal living expenses	£24.90 per week	
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	91 per cent	The occupancy level in England for private and voluntary care homes for older people in 2016/2017 was 91 per cent. ¹² The occupancy rate for care homes (for-profit sector) with nursing was 89.2 per cent (provisional). ⁷ A report published by the Registered Care Providers Association (2016) reported that the occupancy rate for specialist care homes was 88 per cent in 2016. ¹³
London multiplier	1.14 x A	Fees in London nursing homes were 14 per cent higher than the national average. ⁹
Unit costs available 2018/2019		
£830 establishment cost per permanent resident week (A); £880 establishment cost plus personal living expenses and external services per permanent resident week (A to E); £119 establishment cost per permanent resident day (A); £126 establishment cost plus personal living expenses and external services per permanent resident day (A to E).		

¹ Calculated using NHS Digital (2019) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2018/19, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19> [accessed 23 October, 2019], in collaboration with the Department of Health and Social Care.

² Department of Health and Social Care (2018) *NHS-funded nursing care rate for 2018 to 2019*, Department of Health and Social Care, London. <https://www.gov.uk/government/news/nhs-funded-nursing-care-rate-announced-for-2018-to-2019> [accessed 23 October 2019].

³ Laing & Buisson have confirmed that fees have not reduced since last year and apparent reductions are due to formulae changes in Care Cost Benchmarks.

⁴ 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].

⁵ Institute of Public Care (2014) *The stability of the care market and market oversight in England*, Institute of Public Care, London. <http://www.cqc.org.uk/sites/default/files/201402-market-stability-report.pdf> [28 November 2016].

⁶ Drummond, M. & McGuire, A. (2001, p.71) *Economic evaluation in health care*, Oxford University Press.

⁷ Laing & Buisson (2015) *Care of older people: UK market report 2014/2015*, Laing & Buisson, London.

⁸ Laing & Buisson (2012) *'Fair Fees' for care placements left behind amidst council cuts*, Laing & Buisson, London. http://www.laingbuisson.co.uk/Portals/1/PressReleases/FairPrice_12_PR.pdf [accessed 29 November 2016].

⁹ Laing & Buisson (2019) *Laing & Buisson Care Homes Complete Dataset 2018/19*, Laing & Buisson, London.

¹⁰ Laing & Buisson (2019) *Care Cost Benchmarks*, Laing & Buisson, London.

¹¹ Department of Health & Social Care (2019) *Social Care – Charging for care and support*, Department of Health & Social Care, London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/772969/Social_care_charging_for_care_and_support_-_LAC_2019.pdf [accessed 20 May 2019].

¹² Laing, W. (2017) *Care homes for Older People market analysis and projections*, <http://www.laingbuisson.com/wp-content/uploads/2017/05/William-COP.pdf> [accessed 17 October 2017].

¹³ Registered Care Providers Association Ltd (2016) *Care Home Benchmarking Report 2016/17*, http://www.rcpa.org.uk/wp-content/uploads/2016/12/NAT00339_Healthcare_Report_Midres.pdf [accessed 10 October 2017].

1.2 Private sector residential care for older people (age 65+)

Using Adult Social Care Finance Return (ASC-FR)¹ returns for 2018/2019, the median cost per person for supporting older people in a residential care home provided by non-local authority organisations was £622 per week, with a mean cost of £620 per week [using unique identifiers: 8713801, 8714401, 8715001, 8715601, 8716201 (numerators in thousands of pounds), 8713802, 8714402, 8715002, 8715602, 8716202 (denominators)]. See *Care homes market study* for an explanation of why the average fee reported using the Laing & Buisson Care Homes Complete Dataset⁸ is higher than that reported using the ASC-FR returns.²

Costs and unit estimation	2018/2019 value	Notes
A. Fees	£691 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} The midpoint between the minimum and maximum fee was taken from Laing & Buisson Care Homes Complete Dataset 2018/2019. ⁸ Care home fees have been split into their component parts by Laing & Buisson (2019). ⁹ For residential care for frail elderly people, direct costs (staff: care and ancillary) form 56 per cent of total costs; repairs, maintenance and other non-staff current costs at home level form 21 per cent, corporate overheads forms 4 per cent and accommodation costs forms 19 per cent of the total.
External service B. Nursing C. GP services D. Other external services	£8 per week £11 per week £6 per week	Information has been drawn from the article in the 2018 volume by Sach et al. (2018) which compares the mean cost of contacts per resident using data collected from GP records compared to care home records over a seven-month period. Using the mid-point between the two data sources, total costs incurred per resident week were £25 (£22 using GP records and £27 using care home data). Costs have been updated using the NHS cost inflation index.
E. Personal living expenses	£24.90 per week	The Department for Work and Pensions (DWP) personal allowance for people in residential care or a nursing home is £24.90. ¹⁰ 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	1.18 x A	Fees in London residential homes were 18 per cent higher than the national average. ⁶
Occupancy	91 per cent	The occupancy level in England for private and voluntary sector care homes for older people in 2016/2017 was 91 per cent. ¹¹ The occupancy rate for care homes (for-profit sector) without nursing was 89.7 per cent (provisional). ¹¹
Unit costs available 2018/2019		
£691 establishment cost per permanent resident week (A); £741 establishment cost plus personal living expenses and external services per permanent resident week (A to E); £99 establishment cost per permanent resident day (A); £106 establishment cost plus personal living expenses and external services per permanent resident day (A to E).		

¹ Calculated using NHS Digital (2019) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2018/19, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19> [accessed 23 October, 2019], in collaboration with the Department of Health and Social Care.

² CMA Competition & Markets Authority (2017) *Care homes market study*, Final report, <https://assets.publishing.service.gov.uk/media/5a1fdf30e5274a750b82533a/care-homes-market-study-final-report.pdf> [accessed 19 November 2018].

³ 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].

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

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

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

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

⁸ Laing & Buisson (2018) *Laing & Buisson Care Homes Complete Dataset 2017/18*, Laing & Buisson, London.

⁹ Laing & Buisson (2019) *Care Cost Benchmarks*, Laing & Buisson, London.

¹⁰ Department of Health & Social Care (2019) *Social Care – Charging for care and support*, Department of Health & Social Care, London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/772969/Social_care_charging_for_care_and_support_-_LAC_2019.pdf [accessed 20 May 2019].

¹¹ Laing, W. (2017) *Care homes for Older People market analysis and projections*, <http://www.laingbuisson.com/wp-content/uploads/2017/05/William-COP.pdf> [accessed 17 October 2017].

1.3 Local authority own-provision residential care for older people (age 65+)

This table uses data from the Adult Social Care Finance Return (ASC-FR)¹ return for 2018/2019 for local authority expenditure.

Costs and unit estimation	2018/2019 value	Notes
Capital costs		
A. Buildings and oncosts	£95 per week	Based on the new-build and land requirements for local authority residential care establishments. These allow for 57.3 square metres per person. ² 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	£28 per week	Based on a report published by the Ministry of Housing, Communities & Local Government. ³ 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, therefore no additional cost has been added for items such as equipment and durables.
D. Total local authority expenditure (minus capital)	£1,115 per week	The median estimate is taken from ASC-FR 2018/2019. ¹ Capital charges relating to buildings and oncosts have been deducted. The mean cost is lower at £939 per week [using unique identifiers: 8713701, 8714301, 8714901, 8715501, 8716101 (numerators in thousands of pounds), 8713702, 8714302, 8714902, 8715502, 8716102 (denominators)].
E. Overheads		Social services management and support services (SSMSS) costs are included in ASC-FR total expenditure figures, therefore no additional overheads have been added.
External services		
F. Community nursing	£8 per week	Information has been drawn from the article in the 2018 volume by Sach & colleagues which compares the mean cost of contacts per resident using data collected from GP records compared to care home records over a seven-month period. Using the mid-point between the two data sources, total costs incurred per resident week were £24 (£21 using GP records and £26 using care home data). Costs have been updated using the NHS cost inflation index.
G. GP services	£11 per week	
H. Other external services	£6 per week	
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. ⁵
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		See previous volume for information on multipliers
Unit costs available 2018/2019		
£1,238 establishment cost per permanent resident week (includes A to E); £1,288 establishment cost plus personal living expenses and external services per permanent resident week (includes A to I).		
£177 establishment cost per permanent resident day (includes A to E); £184 establishment cost plus personal living expenses and external services per permanent resident day (includes A to I).		

¹ Calculated using NHS Digital (2019) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2018/19, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19> [accessed 23 October, 2019], in collaboration with the Department of Health and Social Care.

² Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

³ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁴ Department of Health & Social Care (2019) *Social Care – Charging for care and support*, Department of Health & Social Care, London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/772969/Social_care_charging_for_care_and_support_-_LAC_2019.pdf [accessed 20 May 2019].

⁵ Laing & Buisson (2015) *Care of older people: UK market report 2015*, twenty-seventh edition, Laing & Buisson, London.

1.4 Local authority own-provision day care for older people (age 65+)

As day care expenditure is now combined with other expenditure in the ASC-FR data collection,¹ this table uses data from the Personal Social Services Expenditure return (PSS EX1) for 2013/14,² which has been updated using the PSS pay and prices inflator. The median and mean cost was £145 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,³ 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	2018/2019 value	Notes
Capital costs		
A. Buildings and oncosts	£6.30 per client attendance	Based on the new-build and land requirements for local authority day 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	£2.20 per client attendance	Based on a report published by the Ministry of Housing, Communities & Local Government. ⁵ 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, therefore no additional cost has been added for items such as equipment and durables.
D. Total local authority expenditure (minus capital)	£51 per client attendance	The median and mean cost per week is taken from PSS EX1 2013/14 and has been updated using the PSS pay & prices index. ² Based on PSSRU research, ³ 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 £51. Capital charges relating to buildings have been deducted.
E. Overheads		Social services management and support services (SSMSS) costs are included in PSS EX1 total expenditure figures, therefore no additional overheads have been added.
Use of facility by client		Assumes clients attend 2.5 times per week. ³
Occupancy		
London multiplier		See previous volume for information on multipliers
Unit costs available 2018/2019		
£60 per client attendance (includes A to D); £13 per client hour; £45 per client session lasting 3.5 hours.		

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

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

³ Based on research carried out by PSSRU in 2014.

⁴ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁵ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

1.5 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.¹ 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*² 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 £1,266. Two further dementia memory services provided by SLAM (but not providing assessments) had average annual costs per client of £1,065 (Lambeth and Southwark) and £805 (Lewisham). The costs of another London dementia memory service can be found in <http://www.londonhp.nhs.uk/wp-content/uploads/2011/03/Dementia-Services-Guide.pdf>. See 8.2 for the cost of diagnosis and early support in patients with cognitive decline.

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£462,760 per year	Based on mean salaries for Agenda for Change (AfC) bands. ³ Weighted to reflect the input of 1 FTE associate specialist, 0.40 FTE consultant, 2 FTE occupational therapists (bands 6 & 7), 2.8 FTE psychologists (bands 5, 7 & 8) and nurses (band 6 & two nurses on band 7).
B. Salary oncosts	£118,655 per year	Employer's national insurance is included plus 14.38 per cent of salary for employer's contribution to superannuation.
C. Overheads Management and administration	£117,499 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. ³ Includes 3 FTE administrative and clerical assistants (bands 3, 4 & 5) and management provided by 0.2 FTE psychologist (band 8).
Non-staff	£192,741 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	£4,450 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 2018/2019		
Total annual cost £896,106; total cost per hour £445; cost per client £1,266.		

¹ Department of Health (2011) *Commissioning services for people with dementia*, Department of Health, London.

http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_127381 [accessed 9 October 2014].

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

³ NHS Digital (2019) *NHS staff earnings estimates, 12-month period from May 2018 – April 2019* (not publicly available), NHS Digital, Leeds.

⁴ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁵ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

1.6 Multi-professional clinical medication reviews in care homes for older people

Information for this schema was drawn from a study conducted in two counties in Eastern England (Cambridgeshire and Norfolk)¹ in collaboration with the primary care Medicines Management Teams (MMTs). It aimed to illustrate the methods of micro-costing within the pharmacy context for patients in care homes in order to raise awareness and use of this approach in pharmacy research.

Medication review meetings are attended by the relevant GP(s), care home staff (manager and/or deputy manager, and/or senior carer/nurse), clinical pharmacist and pharmacy technician from the medicines management team (MMT). The pharmacy technician did not attend every meeting however. The meeting consisted of a review of each individual resident and some discussion of general issues arising out of the individual's review. Each resident was reviewed at one meeting at each time point (T1 and at T2 6 months later).

Five broad steps to the medication review process were identified:

- Step 1: undertaken by a pharmacy technician and/or the clinical pharmacist to set up the medication review meeting by liaising with the care home and GP practice.
- Step 2: the pharmacy technician undertakes data extraction at the GP surgery prior to the medication review. This includes extraction of medical history, medications data and latest test results and completion of paperwork (individual resident medication review – MR1 – forms).
- Step 3: the MR1 forms are passed to the clinical pharmacist ahead of the medication review meeting at the care home.
- Step 4: hold the multi-professional medication review meeting at which each resident's medication history and medication is discussed.
- Step 5: the pharmacy technician followed up the meeting to make sure all action points and medication changes had been implemented.

The costs for these steps are tabulated below and travel costs have been added. The average cost per resident of the multi-professional medication review intervention was £114. All costs have been updated using the appropriate inflators.

Table 1 Cost per resident for a multi-professional clinical medication review in care homes for older people

	Meeting set up	Data extraction T1 & T2	Preparation T1 & T2	Meeting	Follow up 1 & 2
Mean cost per resident	£1.80	£22.50	£10.30	£45.90	£12.40
Travel costs for review meeting 1		£3.10		£12.40	£3.20
Travel costs for review meeting 2		£2.10			
Total Costs	£1.80	£27.70	£10.30	£58.30	£15.60

¹ Sach, T., Desborough, J., Houghton, J. & Holland, R. (2015) Applying micro-costing methods to estimate the costs of pharmacy interventions: an illustration using multi-professional clinical medication reviews in care homes for older people, *International Journal of Pharmacy Practice*, 23, pp. 237-247.

2. Services for people with mental health problems

2.1 NHS reference costs for mental health services

2.2 Care homes for adults requiring long-term mental health support (age 18-64)

2.3 Local authority own-provision social services day care for adults requiring mental health support (age 18-64)

2.4 Private and voluntary sector day care for adults requiring mental health support (age 18-64)

2.5 Behavioural activation delivered by a non-specialist

2.6 Deprivation of liberty safeguards in England: implementation costs

2.7 Interventions for mental health promotion and mental illness prevention

2.8 Lifetime costs of perinatal depression

2.9 Lifetime costs of perinatal anxiety

2.1 NHS reference costs for mental health services

'Reference costs are the average unit cost to the NHS of providing defined services to NHS patients in England in a given financial year. They show how NHS providers spend money to provide health care to patients.¹ We have drawn on *NHS Improvement, Reference Costs 2017/2018* to report on the NHS reference costs for selected mental health services.¹ All costs have been updated to 2018/2019 prices using the NHS cost inflation index. Please note the source costs no longer include figures for lower and upper quartiles.

In this schema, only individual services with more than ten data submissions have been included, but weighted costs have been provided for service groups which do include services with fewer than ten submissions. The costs of selected mental health care services for children can be found in table 6.1.

	Mean £
MENTAL HEALTH SERVICES	
Mental health care clusters (per bed day)	£430
Mental health care clusters (per bed day), including carbon emissions 51 kgCO ₂ e ²	£432
Mental health care clusters (initial assessment)	£314
Mental health care clusters (initial assessment), including carbon emissions 37 kgCO ₂ e ³	£316
Mental health specialist teams (per care contact)	
A&E mental health liaison services	£203
Criminal justice liaison services	£239
Prison health adult and elderly	£140
Forensic community, adult and elderly	£254
IAPT, adult and elderly	£96
Secure mental health services	
Low level	£478
Medium level	£520
Specialist mental health services (per bed day)	
Eating disorder (adults) – admitted	£473
Specialist perinatal – admitted	£746

¹ NHS Improvement (2018) *National Schedule of Reference Costs 2017-18*, NHS Improvement, <https://improvement.nhs.uk/resources/reference-costs/> [accessed 1 November 2019].

² The cost of carbon emissions from patient and staff travel, electricity and gas for the building, along with embedded emissions in the goods and services used to provide the appointment. Based on the Sustainable Development Unit carbon footprint of the health, social care and public health system: <https://www.sduhealth.org.uk/policy-strategy/reporting/natural-resource-footprint-2018.aspx>

2.2 Care homes for adults requiring long-term mental health support (age 18-64, summary provided for 65+)

This table uses the Adult Social Care Finance Return (ASC-FR)¹ returns for 2018/2019 for expenditure data. The median establishment cost per resident week in long-term residential care for adults aged 18-64 is £826.

Costs and unit estimation	2018/2019 value	Notes
Capital costs		
A. Buildings and oncosts	£108 per resident week	Based on the new-build and land requirements for homes for people with mental health problems. ² 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. Total local authority expenditure (minus capital)	£718 per resident week	The median revenue weekly cost estimate (£718) for adults age 18-64 requiring long-term mental health support [using unique identifier: 8713001 (numerator in thousands of pounds), 8713002 (denominator)]. ¹ Capital costs have been deducted. The mean cost per client per week in the ASC-FR is £778 ¹ after deducting capital costs.
C. 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. ³ 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		See previous volume for information on multipliers
Unit costs available 2018/2019		
Age 18-64 (using unique identifier 8713001; numerator in thousands of pounds, 8713002; denominator)		
£826 per resident week establishment costs (includes A to B); £851 per resident week (includes A to D). £118 per resident day establishment costs (includes A to B); £122 per resident day (includes A to D).		
Age 65+ (using unique identifier 8716001; numerator in thousands of pounds, 8716002; denominator)		
£588 (£598) median (mean) establishment costs per resident week £84 (£85) median (mean) establishment costs per resident day		

¹ Calculated using NHS Digital (2019) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2018/19, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19> [accessed 23 October, 2019], in collaboration with the Department of Health and Social Care.

² Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

³ Department for Work and Pensions (2016) *Proposed benefit and pension rates*, Department for Work and Pensions, London. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/572844/proposed-benefit-and-pension-rates-2017-to-2018.pdf [accessed 13 September 2017].

2.3 Local authority own-provision social services day care for adults requiring mental health support (age 18-64)

As day care expenditure is now combined with other expenditure in the ASC-FR data collection,¹ this table uses the Personal Social Services Expenditure return (PSS EX1)² for 2013/2014 for local authority expenditure, 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 £111 and mean cost was £115 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,³ 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.⁴

Costs and unit estimation	2018/2019 value	Notes
Capital costs		
A. Buildings and oncosts	£6.30 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.
B. Land	£2.20 per client attendance	Based on Ministry of Housing, Communities & Local Government land estimates. ⁵ These allow for 33.4 square metres per person. ⁶
C. Other capital		Capital costs not relating to buildings and oncosts are included in the local authority expenditure figures, so no additional cost has been added for other items such as equipment and durables.
D. Total local authority expenditure (minus capital)	£29 per client attendance	The median cost per client week has been taken from PSS EX1 2013/2014 ¹ 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 £29. Capital charges relating to buildings have been deducted.
E. 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. ³
London multiplier		See previous volume for information on multipliers
Unit costs available 2018/2019		
£38 per client attendance (includes A to D); £9.30 per client hour; £32 per client session lasting 3.5 hours.		

¹ Calculated using NHS Digital (2018) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2017/18, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2017-18> [accessed 30 October, 2018], in collaboration with the Department of Health.

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

³ Based on research carried out by PSSRU in 2014.

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

⁵ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁶ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

2.4 Private and voluntary sector day care for adults requiring mental health support (age 18-64)

This table uses the Personal Social Services Expenditure return (PSS EX1)¹ for 2013/2014 for expenditure costs, which have been uprated using the PSS pay & prices inflator. The median cost was £108 per client week and the mean cost was £94 (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,² 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.³

Costs and unit estimation	2018/2019 value	Notes
Capital costs		
A. Buildings and oncosts	£6.30 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.
B. Land	£2.20 per client attendance	Based on Ministry of Housing, Communities & Local Government land estimates ⁴ and allowing for 33.4 square metres per person. ⁵
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)	£29 per client attendance	The median cost per client week has been taken from PSS EX1 2013/2014 ¹ 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), ² the mean cost per day care attendance per day is lower at £24. Capital charges relating to buildings have been deducted.
E. 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. ²
Occupancy		
London multiplier		See previous volume for information on multipliers
Unit costs available 2018/2019		
£37 per client attendance (includes A to D); £9 per client hour; £32 per client session lasting 3.5 hours.		

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

² Based on research carried out by PSSRU in 2014.

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

⁴ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁵ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

2.5 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 five days training in BA and one 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 £11 (£13 with qualifications) and for 12 sessions £131 (£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 £33 per hour or £61 per hour of face-to-face contact.

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£79,988 per year	Based on the mean full-time equivalent basic salary for two mental health nurses on AfC band 7 of the 2018/2019 NHS staff earnings estimates. ³
B. Salary oncosts	£20,216 per year	Employer's national insurance is included plus 14.38 per cent of salary for contribution to superannuation.
C. Qualifications	£17,489 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). ⁴ This cost is for 2 mental health nurses.
D. Training for behavioural activation	£686 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) (£235 per therapist). Supervision costs were based on 1-hour fortnightly contact for 40 weeks (£3,056 per therapist); 12 session behavioural protocol (£228 per therapist). These costs have been annuitised over the working life of the nurse.
E. Overheads		
Management, administration and estates staff	£24,550 per year	Taken from the 2013/2014 financial accounts for 10 community trusts. Management and other non-care staff costs were 24.5 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£38,278 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	£8,942 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. ^{5,6} 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	42 weeks per year 37.5 hours per week	Unit costs are based on 1,573 hours per year: 210 working days minus sickness absence and training/study days as reported for all NHS staff groups. ⁷
Duration of contact		One-hour sessions included direct treatment time of 40-50 minutes and administration.
Unit costs available 2018/2019 (costs including qualifications given in brackets)		
Cost per session per person attending a group £16 (£18); Cost per 12 group sessions per person £192 (£211)		

¹ 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.

² Richards, D., Ekers, D., McMillan, D., Taylor, R., Byford, S., Warren, F., Barrett, B., Farrand, P., Gilbody, S., Kuyken, S., 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, p871-880.

³ NHS Digital (2018) *NHS staff earnings estimates, 12-month period from May 2017 – April 2018* (not publicly available), NHS Digital, Leeds.

⁴ 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.

⁵ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁶ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁷ Contracted hours are taken from NHS Careers (2017) *Pay and benefits*, National Health Service, London, <https://www.healthcareers.nhs.uk/about/careers-nhs/nhs-pay-and-benefits> [accessed 9 October 2017]. *Working days and sickness absence rates as reported in NHS Digital, NHS sickness absence rates, annual summary tables, 2009-10 to 2016-17* [accessed 13 October 2017].

2.6 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.¹ 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 £1,476. The standard deviation around the estimated cost of a single DoLS assessment was £441, and the 95 per cent confidence interval was £568 to £2,298. All costs have been updated to 2018/2019 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	£526	£239	£613	£304	£261	£389
Assessments by best-interest assessor	£739	£444	£311	£1,081	£602	£635
Secretarial costs	£344	£193	£136	£621	£326	£324
Independent mental capacity advocates assessments	£119	£91	£65	£62	£77	£83
Court protection costs	£45	£45	£45	£45	£45	£45
Total costs	£1,773	£1,013	£1,170	£2,113	£1,312	£1,476

¹ Shah, A., Pennington, M., Heginbotham, C. & Donaldson, C. (2011) Deprivation of liberty safeguards in England: implementation costs, *British Journal of Psychiatry*, 199, 232-238.

2.7 Interventions for mental health promotion and mental illness prevention

Information has been drawn from McDaid et al. (2017)¹ to provide the costs of a range of interventions which can help reduce the risk and/or incidence of mental health problems. The information builds on the interventions costed in the 2011 report *Mental Health Promotion and Mental Illness Prevention: the Economic Case* (still found in this schema).² All costs drawn from the later report have been updated from 2015 values to reflect current costs.

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 £1,214 per family, while that of individual interventions is £2,650. 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 £1,501 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 £168 per child per year.

The KiVa programme

Context: Bullying (including cyberbullying) is very common among young people with around a third of all 11 year olds reporting that they had been bullied at least once in the last two months. There are impacts of bullying on mental health and emotional wellbeing including the risk of self-harm and suicide. Children and young people who were frequently bullied were more likely to use mental health services, both in childhood and adolescence, and in midlife. Adults who have been bullied in childhood can suffer from depression, a lack of social relationships, economic hardship and poor perceived quality of life.

Intervention: This is a school-based programme which is designed to support young people within and outside the school environment to counter the impacts of all bullying, including cyberbullying and other forms of online abuse. It focuses on enhancing the empathy, self-efficacy and anti-bullying attitudes of classroom peers. Positive changes in the behaviour of pupils who are neither bullies nor victims can reduce the rewards that bullies perceive that they receive and thus reduce the incentives for bullying.

¹ McDaid, D., La Park, A., Knapp, M. & colleagues (2017) *Commissioning cost-effective services for promotion of mental health and wellbeing and prevention of mental ill-health*, Public Health England.

² Knapp, M., McDaid, D. & Parsonage, M. (2011) *Mental health promotion and mental illness prevention: the economic case*, Department of Health, London.

Cost: for a cohort of 200 children, investment overall in KiVa is associated with net increased costs of £5,181 or £26 per child over a four year period.

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 £3,680 per patient, compared with £948 for standard care.

Early intervention for psychosis

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

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

Cost: The annual direct cost per patient of this type of service, plus other community psychiatric services and inpatient care, has been estimated at £13,029. The first year of the early intervention team's input is estimated to cost £2,721 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 intervention in primary care combines universal screening by GPs of all patients, followed by a five-minute advice session for those who screen positive.

Cost: The total cost of the intervention averaged over all those screened was £22 at current prices.

Providing debt advice to protect mental health

Context: There is a substantial evidence base on the association between debt and poor health, including poor mental health and increased risk of suicide

Intervention: Targeted at people who do not initially have mental health problems but are experiencing unmanageable debt. It is focused on debt advice as a potential preventive action and therefore does not look at the impact of debt advice for people who already have mental health problems. The service involved volunteer delivered debt advice services located in a GP surgery.

Cost: Over five years, per adult population of 100,000, the total intervention cost is estimated to be £1,353,552 (£70,832 for GP awareness training and £1,172,226 for the face-to-face debt advice service).

Promoting mental health and wellbeing in the workplace

Context: Effective universal workplace health promotion programmes can not only improve mental and physical health outcomes, but also have productivity benefits to business. These actions are in addition to protections that maybe embedded within health and safety legislation that impact on mental health.

Intervention: A multi-component universal mental health promotion programme delivered in a 'white collar' workplace with 500 employees. It consists of a health risk appraisal questionnaire, unlimited access to a personalised web portal to encourage health lifestyle behaviours including interactive behavioural changes via online and fortnightly e-mail

communications to provide practical tips for self-care over a 12 month period. In addition there are paper-based information packs, including a newsletter, stress management, sleep, nutritional advice, and physical activity and four off-line seminars touching on the most common wellness issues.

Costs: The incremental cost of this wellbeing programme was £46,673, or £91 per annum per employee.

Workplace interventions to prevent stress, depression and anxiety problems

Context: Taking action against work-related stress and/or burnout has been regarded as one of the most important public health issues for an economically active population (Public Health England, 2016a).

Intervention: The provision of a workplace cognitive behavioural therapy service offered to all employees who are identified by occupation health services as being stressed.

Cost: Administered to 1,000 employees, the total cost is estimated as £3,886 (£97 set up costs and £3,789 running costs).

Suicide and self-harm

Context: There are substantial personal and economic costs associated with both completed and non-fatal suicidal events, although the number of studies estimating these costs remains limited (McDaid, 2016b).

Intervention: Guidance in England now recommends a multi-component approach to suicide prevention (NICE, 2013). Guidelines also recommend training of service gatekeepers, such as GPs, the police and teachers to recognise potential risk of depression and suicide, while psychosocial assessment is recommended for most individuals who present at hospital for deliberate self-harm (NICE, 2013).

Cost: A strategy administered to a population of 100,000 adults, from a health system perspective is estimated to cost £39,858.

Protecting the mental health of people with long-term physical health problems

Context: Many people with long-term physical health conditions are at increased risk of developing mental health problems which can impact on the management of physical health leading to poorer health outcomes and reduced quality of life.

Intervention: A specially trained individual such as a nurse working in primary care settings who can help improve co-ordination between different health care professionals; these individuals or others will also be specially trained to provide psychological interventions such as problem-solving therapy or cognitive behavioural therapy.

Cost: Administered to a population of 100,000, the total cost was £23,388

Collaborative care for depression in individuals with Type II diabetes

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

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

Cost: It is estimated that the total cost of six months of collaborative care is £814, compared with £412 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 £105 per session. Costs are 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.

Addressing loneliness to protect the mental health of older people

Context: Depression is a common problem in older people and one risk factor which has been associated with depression is involuntary social isolation and loneliness. Recent NICE guidelines on actions to promote the mental wellbeing of older people recommend actions to support, publicise and, if there is not enough provision, consider providing a range of group, one-to one and volunteering activities that meet the needs and interests of older people (NICE, 2015).

Intervention: A signposting service put in place in GP surgeries, shopping centres and libraries, for people aged 65 and older who are not in paid work. Individuals would then have an opportunity to have an assessment of needs to help identify opportunities for participation in a wide range of local social activities to reduce the risk of social isolation and loneliness.

Cost: For a population of 100,000 was £185,407 (£58,271 for the signposting service and £127,136 for group activities).

2.8 Lifetime costs of perinatal depression

The World Health Organisation (WHO) recognises perinatal mental health as a major public health issue; at least one in ten women has a serious mental health problem during pregnancy or in the year after birth (WHO, 2014¹). The pre-and post-natal periods have a significant impact on future physical, mental and cognitive development of offspring: children of mothers with perinatal mental illness are exposed to higher risks of low birth-weight, reduced child growth, intellectual behavioural and socio-emotional problems. Research carried out at PSSRU at LSE estimated the total lifetime costs of perinatal anxiety and depression (see Bauer et al., 2016)².

This study has used a decision-modelling approach, based on data from previous longitudinal studies to determine incremental costs associated with adverse effects, discounted to present value at time of birth. These costs are summarised in Schema 2.8 and 2.9 and have been updated from 2012/2013 values to current prices. Estimates for the impact on mothers were based on mean probabilities of developing perinatal depression, its persistence in subsequent years, annual costs of health and social care and health disutility for people with depression in the general population. Work days lost were calculated, distinguishing again between remitted and non-depression. Data on costs, health disutility and work days lost, all referred to the general adult population with depression. Estimates for impact on children were based on mean probabilities that children exposed to perinatal depression developed adverse outcomes (emotional, behavioural and physical health problems), and evidence of long-term economic consequences linked to such outcomes. Economic consequences referred to additional use of health and social care, education and criminal justice services and wider societal costs such as productivity losses and health-related quality of life losses out-of-pocket expenditure.

Public sector costs	Perinatal depression		Notes
	Mother	Child	
Health and Social Care	£1,824	£3,060	The child's health and social care costs related in similar proportions to pre-term birth, emotional problems and conduct problems.
Education	£0	£4,353	85 per cent of education costs are a result of conduct problems, with the remainder due to emotional problems.
Criminal	£0	£2,295	All child criminal justice costs were incurred because of conduct problems.
Subtotal public sector costs	£1,824	£9,708	All mothers' public sector cost relate to health and social care expenditure. Seventy per cent of the child's public sector costs relate to conduct problems.
Wider societal perspective costs			
Productivity losses	£3,521	£6,583	42 per cent of child-related productivity losses are related to emotional problems.
Health-related quality of life losses	£19,625	£10,174	84 per cent of the mother's costs to the wider perspective are due to reduced health-related quality of life. These costs form 73 per cent of total costs.
Lost life	£322	£25,764	Based on the mean probability of postnatal depression and risk to sudden death for infants of mothers who suffered from post-natal depression.
Out-of-pocket	£0	£16	
Victim of crime	£0	£8,047	12 per cent of total child costs are related to becoming a victim of crime.
Total wider societal perspective costs	£23,468	£50,584	Costs to the wider perspective for mother and child were £74,052.
Grand total	£25,292	£60,293	Mother and child costs of perinatal depression totalled £85,585, 42 per cent of child problems relate to loss of life, 35 per cent to conduct problems, 19 per cent to emotional problems and 6 per cent to pre-term birth and special educational needs.

¹ World Health Organisation (2014) *Social determinants of mental health*, World Health Organisation and Calouste Gulbenkian Foundation, Geneva.

² Bauer, A., Knapp, M., & Parsonage, M. (2016) Lifetime costs of perinatal anxiety and depression, *Journal of Affective Disorders*, 192, 83-90. http://eprints.lse.ac.uk/64685/2/Bauer_Lifetime%20costs_2015.pdf [accessed 17 October 2017].

2.9 Lifetime costs of perinatal anxiety

The World Health Organisation recognises perinatal mental health as a major public health issue; at least one in ten women has a serious mental health problem during pregnancy or in the year after birth (WHO, 2014¹). The pre-and post-natal periods have a significant impact on future physical, mental and cognitive development of offspring: children of mothers with perinatal mental illness are exposed to higher risks of low birth-weight, reduced child growth, intellectual behavioural and socio-emotional problems. Research carried out at PSSRU at LSE estimated the total lifetime costs of perinatal anxiety and depression (see Bauer & colleagues, 2016)².

This study has used a decision-modelling approach, based on data from previous studies to determine incremental costs associated with adverse effects, discounted to present value at time of birth. These costs are summarised in Schema 2.8 and 2.9 and have been uprated from 2012/2013 values to current prices. Estimates were based on mean probabilities of developing perinatal anxiety (without co-existing depression), its persistence in subsequent years, annual costs of health and social care and health disutility for people with anxiety disorder in the general population. Work days lost were calculated distinguishing again between remitted and non-remitted anxiety. Data on costs, health disutility and work days lost all referred to the general adult population with anxiety. Potential life years lost due to anxiety-caused suicide were not valued. Estimates for impact on children were based on mean probabilities that children exposed to perinatal anxiety developed adverse outcomes (emotional, behavioural and physical health problems), and evidence of long-term economic consequences linked to such outcomes. Economic consequences referred to additional use of health and social care, education and criminal justice services and wider societal costs such as productivity losses and health related quality of life losses out-of-pocket expenditure.

Public sector costs	Perinatal anxiety		Notes
	Mother	Child	
Health and Social Care	£4,669	£4,836	20 per cent/32 per cent of the mother/child's costs were associated with health and social care expenditure.
Education	£0	£356	Over half of child education costs were associated with conduct problems, with a smaller amount associated with chronic abdominal pain.
Criminal	£0	£603	
Public sector costs	£4,669	£5,795	All mother's public sector costs relate to health and social care expenditure.
Wider societal perspective			
Productivity losses	£6,394	£2,021	Productivity losses account for 28 per cent of total mother costs and 13 per cent of child-related costs.
Health-related quality of life losses	£11,861	£2,744	Health-related quality of life losses were the largest share of total expenditure for the mother.
Out-of-pocket expenditure	£0	£443	
Unpaid care	£0	£2,200	Chronic abdominal pain was associated with unpaid care costs.
Victim of crime	£0	£2,448	Conduct problems were associated with victim of crime costs.
Wider societal perspective costs	£18,256	£9,856	Costs to the wider societal perspective for mother and child were £27,545 and accounted for 73 per cent of total costs.
Grand total	£22,924	£15,651	Mother and child costs totalled £37,876.

¹ World Health Organisation (2014) Social determinants of mental health, World Health Organisation and Calouste Gulbenkian Foundation, Geneva.

² Bauer, A., Knapp, M., & Parsonage, M. (2016) Lifetime costs of perinatal anxiety and depression, *Journal of Affective Disorders*, 192. pp. 83-90. ISSN 0165-0327, http://eprints.lse.ac.uk/64685/2/Bauer_Lifetime%20costs_2015.pdf [accessed 17 October 2017].

3. Services for adults who misuse drugs or alcohol

3.1 NHS reference costs – misuse of drugs or alcohol

3.2 Alcohol health worker/Alcohol liaison nurse/Substance misuse nurse

3.1 NHS reference costs – misuse of drugs or alcohol

Reference costs are the average unit cost to the NHS of providing defined services to NHS patients in England in a given financial year. They show how NHS providers spend money to provide health care to patients.¹ We have drawn on *NHS Improvement, Reference Costs 2017/2018* to report on the NHS reference costs for selected drug or alcohol services.¹ All costs have been updated to 2018/2019 prices using the NHS cost inflation index. Please note the source costs no longer include figures for lower and upper quartiles.

In this schema, only individual services with more than ten data submissions have been included, but weighted costs have been provided for service groups which do include services with fewer than ten submissions.

	£ Mean
Drug and alcohol services (adults)	
Alcohol services – admitted (per bed day)	£424
Alcohol services – admitted (per bed day), including carbon emissions 50 kgCO ₂ e ²	£426
Alcohol services – community (per care contact)	£121
Alcohol services – community (per care contact), including carbon emissions 14 kgCO ₂ e	£122
Drug services – admitted (per bed day)	£472
Drug services – admitted (per bed day), including carbon emissions 55 kgCO ₂ e	£474
Drug services – community (per care contact)	£133
Drug services – community (per care contact), including carbon emissions 16 kgCO ₂ e	£134
Drug services – outpatients	£83
Drug and alcohol services (children and adolescents)	
Alcohol services – community contacts	£300
Alcohol services – outpatient attendances	£49
Drug services, community	£246
Drug services, outpatients	£341

¹ NHS Improvement (2018) *National Schedule of Reference Costs 2017-18*, NHS Improvement, <https://improvement.nhs.uk/resources/reference-costs/> [accessed 1 November 2019].

² Costs of carbon emissions provided by Imogen Tennison, Sustainable Development Unit, NHS England and NHS Improvement, Cambridge. See www.sduhealth.org.uk more information.

3.2 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	2018/2019 value	Notes
A. Wages/salary	£33,411 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 6 of the 2018/2019 staff earning estimates. ² See <i>NHS terms and conditions of service handbook</i> for information on payment for unsocial hours and shift work. ³ See Section V for further information on salaries.
B. Salary oncosts	£8,253 per year	Employer's national insurance contribution is included, plus 14.38 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£8,744 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). ⁴ Current cost information has been gathered from various sources (see Schema 18). 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 2014/2015</i> . ⁵
Management, administration and estates staff	£10,083 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	£17,957 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	£3,482 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. ^{6,7} Treatment space has not been included.
Working time	41.9 weeks per year 37.5 hours per week	Unit costs are based on 1,573 hours per year: 225 working days minus sickness absence and training/study days as reported for all NHS staff groups. ⁸
Ratio of direct to indirect time on: Face-to-face contact	1:0.47	Drawn from a study by Marsden & colleagues (2019) where it was reported that every hour of face-to-face time required 28 minutes of non face-to-face time. ⁹
Length of contact		
Unit costs available 2018/2019 (costs including qualifications given in brackets)		
£47 (£52) per hour. £69 (£76) per hour with qualifications.		

¹ 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.

² NHS Digital (2018) *NHS staff earnings estimates, 12-month period from May 2017 – April 2018* (not publicly available), NHS Digital, Leeds.

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

⁴ 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.

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

⁶ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁷ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁸ Contracted hours are taken from NHS Digital, NHS sickness absence rates, January 2019 to March 2019 and Annual Summary 2010-11 to 2018-19, NHS Digital, London. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/january-2019-to-march-2019-and-annual-summary-2010-11-to-2018-19> [accessed 1 October 2019].

⁹ Marsden, J., Stillwell, G., James, K., Shearer, J., Byford, S., Hellier, J., Kelleher, M., Kelly, J., Murphy, C. & Mitcheson, L. (2019) Efficacy and cost-effectiveness of an adjunctive personalised psychosocial intervention in treatment-resistant maintenance opioid agonist therapy: a pragmatic, open-label, randomised controlled trial, *Lancet Psychiatry* 2019; 6:391-402 (supplementary appendix).

4. Services for adults requiring learning disability support

- 4.1 Local authority own-provision day care for adults requiring learning disability support (age 18-64)
- 4.2 Advocacy for parents requiring learning disability support
- 4.3 Residential care homes for adults requiring learning disability support
- 4.4 Care homes for adults with autism and complex needs
- 4.5 Positive behavioural support for adults with intellectual disabilities and behaviour that challenges

4.1 Local authority own-provision day care for adults requiring learning disability support (age 18-64)

As day care expenditure is now combined with other expenditure in the ASC-FR data collection,¹ this table uses the Personal Social Services Expenditure return (PSS EX1)² for 2013/2014 for expenditure costs, which have been uprated using the PSS pay & prices inflator. The median cost was £345 per client week and the mean cost was £359 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,³ 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	2018/2019 value	Notes
Capital costs		
A. Buildings and oncosts	£6.30 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. ⁴
B. Land	£2.20 per client attendance	Based on Ministry of Housing, Communities & Local Government land estimates. ⁵ 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)	£64 per client attendance	The median cost per client week has been taken from PSS EX1 2013/2014 ¹ 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), ² the mean cost per day care attendance is £65. 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. 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. ³
Occupancy		No current information is available.
London multiplier		See previous volume for information on multipliers
Unit costs available 2018/2019		
£72 per client attendance (includes A to D); £18.10 per client hour; £63.40 per client session lasting 3.5 hours.		

¹ Calculated using NHS Digital (2018) Calculated using NHS Digital (2018) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2018/19, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2017-198> [accessed 23 October, 2019], in collaboration with the Department of Health and Social Care.

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

³ Based on research carried out by PSSRU in 2014.

⁴ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁵ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

4.2 Advocacy for parents requiring learning disability support

Advocacy can help service users 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)¹ 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 £4,972. 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).¹

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

Costs and unit estimation	2018/2019 value	Notes (for further clarification see Commentary)
A. Wages/salary	£39,093 per year	Project A: two part-time advocates (salary range £20,000-£25,000); Project B: 80 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	£9,715 per year	Employer's national insurance is included plus 17 per cent of salary for employer's contribution to superannuation.
C. Overheads Management/supervision	£7,117 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	£3,417 per year	Premises costs (office, stationery, utilities etc.) are estimated at 7 per cent of salary costs. ²
Indirect overheads	£7,809 per year	Indirect overheads assumed to be 16 per cent of direct care salary costs. ² 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	£3,191 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.
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. ³ 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. ¹
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 2018/2019		
Average cost per working hour £31, average cost per client-related hour £52. (Estimates exclude travel costs).		
Average total cost £70,342; Total cost for project A: £41,440; Total cost for project B: £99,244.		
Average cost per advocacy intervention (based on 95 hours); £4,972 (Project A £2,929 and Project B £7,015).		

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

² 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.

³ Skills for Care (2018) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 11 October 2018].

4.3 Residential care homes for adults requiring learning disability support (age 18-64)

The following schema draw on research carried out by Laing & Buisson.¹ All costs have been updated from 2012/13 using the PSS inflators. They provide illustrative cost models in learning disabilities social care provision, first for residential care homes and then for supported living schemes. See also Laing & Buisson (2016).² Using Adult Social Care Finance Returns (ASC-FR)³ for 2018/2019, the median cost per person for adults (18 to 64) requiring learning disability support in long-term residential care was £1,520 per week and the mean cost was £1,523 per week [using unique identifiers: 8712401 (numerator in thousands of pounds), 8712402 (denominator)].

4.3.1 Residential care homes

Average costs	Low – 30 hours per week	Medium – 60 hours per week	High – 100 hours per week
Direct staff costs	£391	£901	£1,469
Management supervision	£97	£97	£97
Sleep-in costs	£18	£18	£18
Total staff costs	£506	£1,016	£1,584
Service user expenses			
Support overheads	£33	£33	£33
Living expenditure			
Other accommodation costs			
Central overheads	£101	£101	£101
Total operational costs (before rent)	£134	£134	£134
Rent (not known as paid by housing benefit)			
Mark-up (average for sample 6%).	£32	£57	£85
Grand total	£671	£1,207	£1,803

¹ Laing and Buisson (2013) *Cost Analysis Report, Surrey LD costing survey*, Laing & Buisson, London.

² Laing and Buisson (2016) Review of actual cost levels for provision of learning disability supported living services in Lancashire, http://www.lldc.org/wp-content/uploads/2016/09/LaingBuisson_LLDC_Final_Report_070916.pdf [accessed 28 October 2019].

³ Calculated using NHS Digital (2019) Calculated using NHS Digital (2018) Calculated using NHS Digital (2019) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2018/19, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19> [accessed 23 October, 2019], in collaboration with the Department of Health and Social Care.

4.3.2 Supported Living

Supported living schemes offer care and support for people in communal living settings

(<https://www.peoplefirstinfo.org.uk/health-and-well-being/learning-disability/accommodation-for-people-with-learning-disabilities/>). Support includes:

- Assessment of ongoing care needs
- Hands-on care and practical assistance
- Skills training
- Escort to community settings
- Advice and support

The following costs have been drawn from a report which summarises findings and conclusions arising from the learning disabilities service provision costing survey conducted by Laing and Buisson (2013)¹, on behalf of Surrey County Council during October and November 2012. All costs have been uprated to current price levels. See another report by Laing & Buisson (2016)² which identifies the costs of learning disability supported living services provided by councils' own in-house teams in the North West region.

Supported Living (based on average costs for different levels of need)

Average costs	Low – 30 hours per week	Medium – 60 hours per week	High – 100 hours per week
Direct staff costs	£407	£881	£1,355
Management supervision	£134	£134	£134
Sleep-in costs	£39	£39	£39
Total staff costs	£580	£1,054	£1,528
Service user expenses	£62	£74	£85
Support overheads	£45	£45	£45
Living expenditure	£79	£79	£79
Other accommodation costs	£79	£79	£79
Central overheads	£163	£163	£163
Total operational costs (before rent/ROP)	£1,010	£1,496	£1,981

¹ Laing and Buisson (2013) Laing and Buisson (2013) *Cost Analysis Report, Surrey LD costing survey*, Laing & Buisson, London.

² Laing and Buisson (2016) Review of actual cost levels for provision of Learning Disability Supported Living Services in Lancashire, http://lldc.org/wp-content/uploads/2016/09/LaingBuisson_LLDC_Final_Report_070916.pdf.

4.3.3 Specialised supported housing

A sub-category of supported housing is 'Specialised supported housing' (SSH) which is provided or managed by registered providers which are all regulated by the HCA. This relates to supported housing that is exempted entirely from social rent requirements and is defined as those properties developed in partnership with local authorities or the health service (See Housing LIN¹ for a more detailed definition).

Costs were collected from 29 registered providers. Research carried out by Housing LIN¹ found that a person with a learning disability living in Specialised Supported Housing requires state funding of on average £1,569 per person per week for care and housing costs (housing cost and £1,337 care package cost per week).

	Average weekly rent	Average weekly service charge	Care package	Total cost
Shared SSH	£185.60	£52.65	£1,337	£1,575
Self-contained SSH	£194.43	£48.86	£1,337	£1,580
All SSH	£232		£1,337	£1,569

¹ Housing LIN (2018) Funding supported housing for all, Specialised Supported Housing for people with a learning disability, https://www.mencap.org.uk/sites/default/files/2018-04/2018.052%20Housing%20report_FINAL_WEB.pdf [accessed 28 October, 2019].

4.4 Care homes for adults with autism and complex needs

4.4.1 Supported living homes

This schema was prepared in 2017, in collaboration with the Autism Alliance <http://autism-alliance.org.uk/about-us/the-alliance>, a major UK network of specialist autism charities supporting thousands of people with autism and complex needs. 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. Costs have been updated to 2018/2019 values using the PSS Pay and Prices Inflatoms.

Costs and unit estimation	This example is the average costs for 13 adults with autism and complex needs living in their own rented accommodation. The average care hours are 86.75 per person per week. Some people share communal facilities in addition to their self-contained flats. Actual hours of support vary from 175 per week to 16 per week.	
Income	Per person fee/cost per week (including oncosts)	Total for all residents
Income		
Fees	£1,599	£1,081,228
Costs		
Senior support staff	1,002	£677,432
Waking nights	£34	£22,746
Sleep in staff	£26	£17,593
Manager	£123	£82,957
Sub-total	£1,185	£800,728
Recruitment	£10.30	£6,944
Training	£10	£6,594
Other staff overheads	£33.40	£23,207
Total staff support costs	£54.40	£36,745
Total costs (excluding management costs)	£1,241	£1,514,905
Management costs – area and central	£311	£210,224

4.4.2 Residential care homes

This schema was prepared in 2015, in collaboration with three members of the Autism Alliance <http://autism-alliance.org.uk/about-us/the-alliance>, a major UK network of specialist autism charities supporting thousands of people with autism and complex needs. The annual cost per client year has been calculated by taking an average of the per client figures from the three participating agencies. Costs have been updated using the PSS inflators and the Retail Price Index.

When interpreting the costs, it should be taken into account that these clients have very specific needs, resulting in the necessity for a high level of staff support (usually one-to-one) and more specialist staff training and therefore higher salaries. There is also a need for specialist professionals, such as behavioural specialists and psychologists, and speech and language therapists who provide support in response to urgent need and fulfil a function that a LA specialist would be unable to meet. Given that the clients often display challenging behaviour, there is more staff sickness together with additional costs associated with furniture and equipment and 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 additional costs associated with specialist diets, clothing and bedding. There must also be consideration for the type of activities and specific interests that the person will regularly demand, and the associated costs.

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£49,529 per client year	Based on actual salaries of care staff, including support workers, service co-ordinators, team leaders, waking-night support and sleep-in workers. Therapists are included in this cost (includes positive behaviour and communication therapists).
B. Salary oncosts	£7,056 per client year	Employer's national insurance contribution plus employer's contribution to superannuation.
C. Direct overheads	£10,620 per client year	Support staff and management including administrators, cooks and managers. Staff costs were 19 per cent of direct care salary costs.
Management and supervision		
Non-staff	£11,930 per client year	Non-staff overheads form in total 21 per cent of direct care salary costs. They include training (2%), supplies and services (5%), maintenance (4%), utilities (3%), staff travel (0.1%), rent (5%) and other (2%).
D. Indirect overheads	£14,126 per client year	Indirect overheads include general management and support services such as finance and human resource departments. On average, these costs comprise 33 per cent of direct care salary costs.
E. Personal living expenses	£4,130 per client year	This includes an amount for groceries, household provisions, clothing and medical expenses, comprising 8 per cent of direct care salary costs.
F. Day Care	£26,309 per client year	This includes the costs for 37.5 hours per week per person of separately-based specialist day care, and assumes a ratio of one member of staff for every two clients attending.
Working time	24 hours per day, 365 days per year.	
Number of clients	65	
Unit costs available 2018/2019		
Average annual cost per client (excluding day care); £97,392; average weekly cost per client £1,866.		
Average annual cost per client, (including day care); £123,700; average weekly cost per client £2,371.		

4.5 Positive behavioural support for adults with intellectual disabilities and behaviour that challenges

Positive behavioural support (PBS) is a flexible service that aims to maintain people with intellectual disabilities whose behaviour challenges the community, and to increase the ability of carers and professionals to cope with such behaviours (<http://www.skillsforcare.org.uk/Topics/Learning-disability/Positive-behavioural-support/Positive-behaviour-support.aspx>).

The service supports adults (18 years old and over) in four areas of practice: early intervention for high-risk groups (e.g. training workshops for carers and professionals working with people with intellectual disabilities and behaviour that challenges); crisis prevention and management (e.g. early identification of behaviours that may lead to placement breakdowns); technical support for those with the most complex (e.g. intensive behavioural intervention); and placement development (e.g. returning people in out-of area placements to their 'home' borough).

A study carried out by Lemmi et al. (2015)¹ found that the service was effective in improving the outcomes (behaviours that challenge, activity engagement, community participation) of individuals at a total cost of services of £2,594 per week (see table 1 overleaf which uses average costs for a sample of three people). The economic analysis adopted a public service perspective, including health and social care services and criminal justice services. The PBS intervention formed nearly 10 per cent of this cost (£258). The total cost of the PBS intervention lasting 15 months is estimated to cost £17,020 per adult. The total cost of services received for adults in receipt of additional support was £138,973 per year. These costs have been updated from 2012/2013 using the appropriate inflators.

These costs were calculated using a representative high-intensity case, and the PBS intervention includes staff costs (behaviour analyst, assistant behaviour analyst, support worker), overheads (IT, telephone, photocopy, training, human resources cost, accommodation costs, meetings, analysis and report formulation), travel costs, and clinical supervision. The authors note that by maintaining people with less severe challenges in the community (£9 to £175 per week) and those with more severe behavioural needs in less service-intensive residential accommodations (£1,293 to £3,940 per week), the service may potentially reduce public services cost in the long term.¹

See Hassiotis et al. (2014)² for a study addressing the clinical and cost effectiveness of staff training in PBS.

¹ Lemmi, V., Knapp, M., Saville, M., McWade, P., McLennan, K. & Toogood, S. (2015) Positive behavioural support for adults with intellectual disabilities and behaviour that challenges: an initial exploration of the economic case, *International Journal of Positive Behavioural Support*, 5,1, 16-25.

² Hassiotis, A., Strydom, A., Crawford, M., Hall, I., Omar, R., Vickerstaff, V., Hunter, R., Crabtree, J., Cooper, V., Biswas, A., Howie, W. & King, M. (2014) Clinical and cost effectiveness of staff training in Positive Behaviour Support (PBS) for treating challenging behaviour in adults with intellectual disability: a cluster randomised controlled trial, *BMC Psychiatry*, 14: 219.

Table 1 Service use and cost for adults over the first 6 months of PBSS (N=3)

	No. using	No. contacts mean (SD)	Contact: hours, mean (SD)	Weekly cost (£2017/2018), mean (SD)
Health and social care				
Supported housing (days)	1	182		£352 (£610)
Other than residential home (days)	1	35.5		£106 (£183)
Total residential care				£458 (£542)
Community-based care				
Psychiatrist	2	2 (0)	0.9 (0.2)	£14.50 (£13)
Nurse	3	5 (2.6)	0.8 (0.1)	£8.00 (£4.20)
Social worker	3	48.3 (17.2)	0.4 (0)	£144 (£62)
Care worker	1	182	24	£1,551 (£2,686)
Other services (paid through direct payments)	2	78		£148 (£128)
Total community-based care				£1,865 (£2,530)
Day care centre	1	78	6	£66 (£114)
Total health and social care				£2,388 (£2,997)
Positive behavioural support for adults with intellectual disabilities and behaviour that challenges				£260
Total health and social care (+PBSS)				£2,648 (£2,756)

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

5.1 Local authority own-provision care homes for adults requiring physical support (age 18-64, summary provided for 65+)

This table uses data from the ASC-FR data return (ASC-FR) for 2018/2019.¹

Costs and unit estimation	2018/2019 value	Notes
Capital costs A. Buildings and oncosts	£161 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. ² 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 costs	£26 per resident week	Based on Ministry of Housing, Communities & Local Government land estimates. ³ 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. Total local authority expenditure (minus capital) D. Overheads	£757 per resident week	The median revenue weekly cost estimate (£757) for adults requiring physical support in own-provision residential care. Capital costs relating to buildings and land have been deducted. The mean cost per client per week is reported as being £849 [using unique identifiers: 8710701 (numerator in thousands of pounds), 8710702 (denominator)]. 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. 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		See previous volume for information on multipliers
Unit costs available 2018/2019		
Age 18-64 (using unique identifier 8710701; numerator in thousands of pounds, 8710702; denominator) £944 per resident week establishment costs (includes A to C); £969 per resident week (includes A to E). £135 per resident day establishment costs (includes A to C); £138 per resident day (includes A to E).		
Age 65+ (using unique identifier 8713701; numerator in thousands of pounds, 8713702; denominator) £996 (£1,023) median (mean) establishment cost per resident week. £142 (£146) median (mean) establishment cost per resident day.		

¹ Calculated using NHS Digital (2019) Calculated using NHS Digital (2019) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2018/19, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19> [accessed 23 October, 2019], in collaboration with the Department of Health and Social Care.

² Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

³ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁴ Department of Health & Social Care (2019) *Social Care – Charging for care and support*, Department of Health & Social Care, London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/772969/Social_care_charging_for_care_and_support_-_LAC_2019.pdf [accessed 20 May 2019].

5.2 Voluntary and private sector residential care homes for adults requiring physical support (age 18-64, summary provided for 65+)

This table uses data from the ASC-FR data return (ASC-FR) for 2018/2019.¹

Costs and unit estimation	2018/2019 value	Notes
Capital costs		
A. Buildings and oncosts	£161 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. ² 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 costs	£26 per resident week	Based on Ministry of Housing, Communities & Local Government land estimates. ³ 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. Total expenditure (minus capital)	£755 per resident week	The median weekly expenditure (£755) for adults requiring physical support in residential care provided by others [using unique identifiers: 8710801 (numerator in thousands of pounds), 8710802 (denominator)]. Capital charges relating to buildings and land have been deducted. The mean cost per client per week is reported as being £812.
D. 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		See previous volume for information on multipliers
Unit costs available 2018/2019		
Age 18-64 (using unique identifier 8710801; numerator in thousands of pounds, 8710802; denominator)		
£942 per resident week establishment costs (includes A to C); £967 per resident week (includes A to E). £135 per resident day establishment costs (includes A to C); £138 per resident day (includes A to E).		
Age 65+ (using unique identifier 8713701; numerator in thousands of pounds, 8713702; denominator)		
£594 (£597) median (mean) establishment cost per resident week. £85 (£85) median (mean) establishment cost per resident day.		

¹ Calculated using NHS Digital (2019) *Adult Social Care Finance Return (ASC-FR)*, NHS Digital 2018/19, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19> [accessed 23 October, 2019], in collaboration with the Department of Health and Social Care.

² Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

³ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁴ Department of Health & Social Care (2019) *Social Care – Charging for care and support*, Department of Health & Social Care, London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/772969/Social_care_charging_for_care_and_support_-_LAC_2019.pdf [accessed 20 May 2019].

5.3 Day care for adults requiring physical support (age 18-64)

As day care is now combined with other expenditure in the ASC-FR data collection, this table uses the Personal Social Services Expenditure return (PSS EX1)¹ for 2013/2014 for expenditure costs which have been updated using the PSS pay & prices inflator.

The median cost was £238 per client week and the mean cost was £237 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,² 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	2018/2019 value	Notes
Capital costs		
A. Buildings and oncosts	£6.30 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. ³
B. Land	£2.20 per client attendance	Based on Ministry of Housing, Communities & Local Government land estimates. ⁴ 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	£88 per client attendance	The median cost per client week has been taken from PSS EX1 2013/2014 ¹ and updated using the PSS pay & prices index. Assuming people with learning disabilities attend on average 2.7 times per week (4.8 hours in duration), ² the median and mean cost per day care attendance is £88. 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. 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. ²
Occupancy		No current information is available.
London multiplier		See previous volume for information on multipliers
Unit costs available 2018/2019		
£97 per client attendance (includes A to D); £20 per client hour; £70 client per session lasting 4.8 hours.		

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

² Based on research carried out by PSSRU in 2014.

³ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁴ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

6. Services for children and their families

- 6.1 NHS reference costs for children's health services
- 6.2 Department for Education's Social Care Innovation Programme
- 6.3 Care home for children—local authority
- 6.4 Voluntary and private sector care homes for children
- 6.5 Foster care for children
- 6.6 Adoption
- 6.7 Parent training interventions for parents of disabled children with sleep problems
- 6.8 Early Years Teacher Classroom Management programme
- 6.9 Advocacy
- 6.10 Counselling

6.1 NHS reference costs for children's health services

'Reference costs are the average unit cost to the NHS of providing defined services to NHS patients in England in a given financial year. They show how NHS providers spend money to provide health care to patients.'¹ We have drawn on *NHS Improvement, Reference Costs 2017/2018* to report on the NHS reference costs for selected services for children and their families.¹ All costs have been updated to 2018/2019 prices using the NHS cost inflation index. Please note the source costs no longer include figures for lower and upper quartiles.

	National average
COMMUNITY SERVICES, average cost per group session (one-to-one)	
Therapy services	
Physiotherapy	£81 (£100)
Occupational therapy	£145 (£147)
Speech therapy services	£83 (£99)
Community health services – nursing, average cost per care contact/group session	
School-based children's health core (other) services – group single professional	£49 (£51)
School-based children's health core (other) services – one to one	£59 (£56)
ELECTIVE INPATIENT (PAEDIATRICS), average cost per stay	
Elective inpatient (paediatrics), average cost per stay, (inc. carbon impact 490 kgCO ₂ e) ²	£2,978 £3,000
OUTPATIENT ATTENDANCES, average cost per attendance	
Paediatrics	£198
Paediatric consultant-led outpatient attendance	£205
Paediatric non-consultant-led outpatient attendance	£155
SPECIALIST PALLIATIVE CARE, average cost per bed day	
Hospital specialist palliative care support	£175
CRITICAL CARE	
Paediatric Critical Care, transportation	£1,421
Paediatric Critical Care, transportation	£3,390
CHILD AND ADOLESCENT MENTAL HEALTH SERVICES, average cost per patient contact	
Day care facilities – regular attendance	£277
Admitted patients	£733
Admitted patients – psychiatric intensive care	£1,358
Community contact	£234
Community contact, crisis resolution	£192
Outpatient attendance	£307

¹ NHS Improvement (2018) *National Schedule of Reference Costs 2017-18*, NHS Improvement, <https://improvement.nhs.uk/resources/reference-costs/> [accessed 1 November 2019].

² The cost of carbon emissions from patient and staff travel, electricity and gas for the building, along with embedded emissions in the goods and services used to provide the appointment. Based on the Sustainable Development Unit carbon footprint of the health, social care and public health system: <https://www.sduhealth.org.uk/policy-strategy/reporting/natural-resource-footprint-2018.aspx>. See Preface for more information.

6.2. Department for Education’s Social Care Innovation Programme

The following services have been funded as part of the Department for Education (DfE)’s Social Care Innovation Programme (<https://www.gov.uk/government/publications/childrens-services-innovation-programme>). We report the unit costs from the evaluation reports, and users are advised to confirm the approach fits their requirements (see also the DfE Innovation evaluation approach: <http://innovationcsc.co.uk/evaluation-approach/>). Unless specified below, we assume costs were reported at 2015/2016 values, the first year of receiving the DfE grant. New information will be added each year as further evaluations are published.

What is the programme?	Who is involved?	Costs
<p>‘Pause’ A voluntary programme for women at risk of having children removed from their care.¹ An intense programme of emotional, psychological, practical and behavioural support which aims to reduce the number of children being removed into care and improve the health and wellbeing of the women.</p>	<p>Pause works with partner agencies (such as health and domestic violence services) to design individual programmes for caseloads of 6-8 women.</p>	<p>Costs were captured for a cohort of 125 women. The cost of delivering Pause over 18 months - £2,525,230 (£20,202 per woman), equivalent to £1,683,487 (£13,468 per woman) per annum, based on Round 1 evaluation figures. Includes staff running costs, office costs, and individual budgets. Set-up costs, strategic management costs, and in-kind costs were excluded from the estimations.</p>
<p>‘No Wrong Door’ An integrated service for young people.² Provides an integrated service for young people, aged 12 to 25, who either are in care, edging to or on the edge of care, or have recently moved to supported or independent accommodation while supported by No Wrong Door (NWD).</p>	<p>NWD operates from 2 hubs in Scarborough and Harrogate. Each hub has a team that consists of a manager, 2 deputy managers, NWD hub workers, a communications support worker, a life coach and a police liaison officer.</p>	<p>Bespoke packages of care were developed. Although an intensive package with daily face-to-face contact over 28 days is estimated to cost NWD around £5,000 per week, others received only low levels of outreach support (for example, 3 hours per month) costing much less.</p>
<p>Belhaven Service³ provides mental health treatment in a local care home setting to reduce the risk of referral to mental health inpatient services and breakdown of educational and care arrangements for young people. It aims to integrate health, care and education delivery for the most vulnerable children.</p>	<p>A 5-bed residential home, in which 4 beds were funded as part of the DfE Innovation Programme (http://innovationcsc.co.uk/projects/belhaven-service/).</p>	<p>Full occupancy £676 per day. Actual occupancy during evaluation £849 per day. The planned length of stay was 90 days; at full occupancy this would cost £60,840.</p>

¹ McCracken, K., Priest, S., FitzSimons, A., Bracewell, K., Torchia, K. & Parry, W. with Stanley, N. (2017) Evaluation of Pause, Department for Education, <https://www.gov.uk/government/publications/social-care-pause-programme>.

² Lushey, C., Hyde-Dryden, G., Holmes, L. & Blackmore, J. (2017) Evaluation of the No Wrong Door Innovation Programme, Research Report, Department for Education, <https://www.gov.uk/government/publications/no-wrong-door-innovation-programme-evaluation>.

³ Boxford, S., Harvey, J., Irani, M. & Spencer, H. (2017) Evaluation of the Belhaven Service, Department for Education, http://innovationcsc.co.uk/wp-content/uploads/2017/11/1.2.67-Priory_Belhaven_IP_evaluation_report_July_17.pdf.

What is the programme?	Who is involved?	Costs
<p>The Mockingbird Family Model (MFM)¹ is an approach to supporting foster carers and the children and young people placed with them. It aims to ensure young people in foster care experience improved stability, stronger birth family and sibling relationships and more successful early reunifications with their birth family.</p>	<p>MFM brings together clusters of between 6 and 10 ‘satellite foster homes’ to form a ‘constellation’. The constellation is supported by hub carers, identified as key to MFM’s success, who provide range of supports to those within the constellation</p>	<p>The ongoing cost of running a constellation during the pilot phase was estimated to be around £30,491 per year (data from 5/8 MFM host services; 2015 prices) including payments to hub carers, additional payments for activities and mileage. This excludes payments for respite care or the costs for staffing, such as the constellation liaison worker.</p>
<p>The overall objective of the Innovation Programme in Hampshire and the Isle of Wight was to create the right conditions and capacity for professional to work as effectively as possible (p7).² Specific Social Care Innovations include:</p> <ul style="list-style-type: none"> a) An new offer for children on the edge of care b) Piloting an approaching to volunteering with vulnerable children and families c) A pilot intervention to address child sexual exploitation. 	<p>The edge of care offer includes a key worker, a structured weekly activities programme and a volunteer mentor.</p> <p>Volunteering The Hampshire model is a newly recruited team of 4 volunteer coordinators. The Isle of Wight model involves Home Start providing family support volunteers. The child sexual exploitation team includes a team manager, 3 social workers and two administrators. The team also includes 2 health safeguarding nurses, the specialist Barnardo’s worker and police inputs, however, the costs of these members are excluded from the unit costs shown here.</p>	<p>A typical edge of care intervention costs £3,273. This includes £1,812 for the key worker, £1,065 for the Activities Programme, and £396 for support from the volunteer mentors.</p> <p>Volunteering Hampshire, £396.40 per substantive intervention, including the co-ordinator, marketing and admin, volunteer expenses, and overheads at 20%</p> <p>Isle of Wight, £305 per substantive intervention for the Volunteer Co-ordinator.</p> <p>Addressing child exploitation - £262,980 per team including staffing and approximate overheads at 20%.</p>
<p>Sefton Community Adolescent Service (CAS)³ aimed to:</p> <ul style="list-style-type: none"> a) reduce numbers of young people entering the care system at age 13+; b) improve placement stability for looked after young people; c) reduce the number of children missing from home or care; d) achieve engagement in Education, Training and Employment; e) reduce involvement with the criminal justice system, and with guns and gangs; f) reduce the number of young people at risk of Child Sexual Exploitation (p7). 	<p>The model centred on 2 multi-disciplinary hub teams working with young people and their families. These teams were supported by a 4-bed residential children’s home, commissioned to offer planned respite provision.</p>	<p>The residential respite unit has capacity for 4 young people to stay, totalling 1,440 overnight stays a year. During the evaluation period, the total number of young people did not exceed 139 (756 overnight stays). This under-occupancy meant the unit costs were higher than expected at £889 per night compared to £467 if operating at full capacity over the year. However, the unit was also used flexibly with some young people accessing it for just a few hours during the day (p36).</p>

¹ McDermid, S., Baker, C. & Lawson, D. with Holmes, L. (2016) The evaluation of the Mockingbird Family Model, Department for Education, http://innovationcsc.co.uk/wp-content/uploads/2017/11/1.2.73-DFE-RR528-Mockingbird_family_model_evaluation.pdf.

² Burch, K., Green, C., Merrell, S., Taylor, V. & Wise, S. (2017) Social Care innovations in Hampshire and the Isle of Wight, Evaluation Report, Department for Education, http://innovationcsc.co.uk/wp-content/uploads/2017/11/1.2.49-Hampshire_and_IOW_Evaluation_Report_March_2017.pdf.

³ Day, L., Scott, L. & Smith, K. (2017) Evaluation of the Sefton Community Adolescent Service (CAS), Department for Education. http://innovationcsc.co.uk/wp-content/uploads/2017/11/1.2.68-Evaluation_of_the_Sefton_Community_Adolescent_Service-1.pdf.

6.3 Care homes 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 £6,380 per resident week. The Chartered Institute of Public Finance & Accountancy (CIPFA) reported that the average spend per authority on own-provision residential care for children in 2018 was £1,238,700 compared with £956,300 in 2017. In 2018, 67 per cent of total spend was attributed to on-site social workers (including agency staff, floating staff, staff on sick leave) and includes pay, overtime, national insurance and any pension contributions

See: <https://socialcareinspection.blog.gov.uk/2018/08/22/the-changing-picture-in-the-childrens-homes-sector/> for a report on the children's homes sector.

Costs and unit estimation	2018/2019 value	Notes
Capital costs (A & B)		
A. Buildings	£148 per resident week	Based on the new-build requirements for local authority children's homes. These allow for 59.95 m ² 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	£31 per resident week	Based on Ministry of Housing, Communities & Local Government land estimates. ²
C. Total local authority expenditure (minus capital)	£4,557 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 2017/18. ³ The cost for a child for a week in an own-provision residential care home was £4,557. This was calculated by dividing total current expenditure for local authority (LA) provision children's care homes (£292,975,611) 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) (444,329). ⁴ This gives a cost of £659 per day or £4,616 per week, and £4,736 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 £4,557. Local authorities reporting costs of less than £400 per week (5 local authorities) or more than £14,000 per week (25 local authorities) have been excluded.
D. Overheads		No current information available. See previous editions of this volume for sources of information.
E. Other costs	£14.30 per resident week for school support	Using Section 251 data, ³ and dividing total expenditure for 'education of looked-after children' (£44,572,670) by total children looked-after aged 5 and over (61,330), ⁵ a cost per child per year for education was calculated (£727). When uprated, this gives a cost of £14.30 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	1.02 x C	Relative London costs are drawn from the same source as the base data for each cost element. ³
Unit costs available 2018/2019		
£4,736 establishment costs per resident week (includes A to C); £677 establishment costs per resident day (includes A to C); £4,750 per resident week (includes A to E); £679 per resident day (includes A to E).		

¹ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

² Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

³ Department for Education (2019) *Section 251 documents*, Department for Education, London. <https://www.gov.uk/government/collections/section-251-materials> [accessed 29 October 2019].

⁴ Department for Education (2019) *Children looked-after in England including adoption and care leavers, year ending 31 March 2017*, Department for Education, London.

⁵ Department for Education (2019) *Children looked after in England including adoption: 2017 to 2018*, <https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2017-to-2018> [accessed 5 November 2019].

⁶ 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 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 £3,582 per resident week.

Costs and unit estimation	2018/2019 value	Notes
Capital costs (A & B)		
A. Buildings	£148 per resident week	Based on the new-build requirements for local authority children's homes. These allow for 59.95 m ² 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	£31 per resident week	Based on Ministry of Housing, Communities & Local Government land estimates. ²
C. Total expenditure (minus capital)	£3,403 per resident week	Mean costs for children looked-after in externally provided children's homes (e.g. non-local authority (LA) own-provision) are based on the underlying data of the DfE Section 251 outturn data for 2017/2018. ³ The cost for a child for a week in a non-statutory residential care home for children was £3,403. This was calculated by dividing total expenditure for other provision children's care homes (private and voluntary/third sector) (£899,077,800) 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) (1,808,920). ⁴ This gives a cost of £497 per day (£3,479 per week, and £3,583 when uprated using the PSS pay and prices inflator). Capital charges for buildings and land have been excluded to give a cost per resident week of £3,403. Local authorities reporting costs of less than £400 per week (6 local authorities) or more than £14,000 per week have been excluded (no local authority data showed costs in this category).
D. Overheads		No current information available. See previous editions of this volume for sources of information.
E. Other costs External services	£14.30 per resident week for school support	Using Section 251 data, ³ and dividing total expenditure for 'education of looked-after children' (£44,572,670) by total children looked-after aged 5 and over (61,330), ⁴ a cost per child per year for education was calculated (£727). When uprated, this gives a cost of £14.30 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. ⁵
London multiplier	1.00 x C	Relative London costs are drawn from the same source as the base data for each cost element. ³
Unit costs available 2018/2019		
£3,582 establishment costs per resident week (includes A to C); £512 establishment costs per resident day (includes A to C) £3,596 per resident week (includes A to E); £514 per resident day (includes A to E).		

¹ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

² Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

³ Department for Education (2019) *Section 251 documents*, Department for Education, London. <https://www.gov.uk/government/collections/section-251-materials> [accessed 29 October 2019].

⁴ Department for Education (2019) *Children looked after in England including adoption: 2017 to 2018*, <https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2017-to-2018> [accessed 5 November 2019].

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

6.5 Foster care for children

This table provides the cost of foster care for children.

Costs and unit estimation	2018/2019 value	Notes
A. Boarding out allowances, administration and the costs of social worker and other support staff who support foster carers	£607 per child per week	Using Section 251 data, ¹ 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 £1,645,285,832 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) (19,540,928), ² the cost per day for all foster care for 2017/18 was £84 (£87 per day and £609 per week when uprated to 2018/19 prices using the Personal Social Services (PSS) pay & prices inflator). Local authorities reporting an average cost of more than £1,500 per week (1 local authority) has been excluded. Using Section 251 data ¹ and dividing total expenditure for LA provision foster care (including children placed with family and friends, own-provision and other public provision) of £830,709,206 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) (12,799,470), ² the cost per day for 2017/18 was £65 (£67 per day or £466 per week when uprated to 2018/19 prices using the PSS pay & prices inflator). Local authorities reporting an average cost of more than £1,500 per week (7 local authorities) have been excluded.
B. Social care support		No current information available on social work costs (teams and centres) directly related to fostered children. See previous editions for the cost of social services support estimated from the Children in Need (CiN) census 2005. ³
C. Overheads		No current information available.
D. Other services, including education	£14.30 per resident week for school support	Using Section 251 data, ¹ and dividing total expenditure for 'education of looked-after children' (£44,572,670) by total children looked-after aged 5 and over (61,330), ⁴ a cost per child per year for education was calculated (£727). When uprated, this gives a cost of £14.30 per resident week. This cost excludes school spending and relates to additional LA services to promote the education of looked-after children, for example virtual heads.
Service use by client	52.18 weeks per year	
London multiplier	1.24 x A	Relative London costs are drawn from the same source as the base data. ¹
Unit costs available 2018/2019		
£621 per child per week (excluding social care support directly related to fostered children but including additional education services).		

¹ Department for Education (2019) *Section 251 documents*, Department for Education, London. <https://www.gov.uk/government/collections/section-251-materials> [accessed 29 October 2019].

² Department for Education (2019) *Children looked after in England including adoption: 2017 to 2018*, <https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2017-to-2018> [accessed 5 November 2019].

³ 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.

⁴ Department for Education (2017) *Children looked after in England including adoption: 2017 to 2018*, <https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2017-to-2018> [accessed 5 November 2019].

6.6 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 schema 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 for Education's financial data collection. It also includes findings from a survey conducted in 2016 to inform the Centre for Child and Family Research's (CCFR's) initial work to extend the Cost Calculator for Children's Services (CCFCS) to include adoption services in England. All costs have been updated using appropriate inflators.

Local authority expenditure – Section 251

Based on the Section 251 budget summary for 2018/2019, the total expenditure on adoption services is £308,902,924.² 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.²

Based on returns from 30 local authorities which form part of the Chartered Institute of Public Finance & Accountancy (CIPFA) benchmarking clubs (<http://www.cipfa.org/services/benchmarking>), the average spend per authority on adoption services in 2017 was £2,659,300 compared with £2,424,700 in 2016. **No data beyond 2017 is being collected by CIPFA.** In 2017, 23 per cent of total spend was attributed to social workers (including agency staff, floating staff, staff off sick) and includes pay, overtime, national insurance and any pension contributions. Seven per cent was allocated to costs relating to all other adoption service staff, 22 per cent to other direct costs (including adoption support), 3 per cent to service overheads (property costs relating to service provision, cost of Head of Service and management, business support, the adoption management team and procurement, and nearly 7 per cent to corporate overheads. Thirty nine per cent of expenditure was attributed to the adoption allowance.

At year end 31 March 2018, 5,360 children had a placement order; 55,240 had a care order and there was a voluntary agreement (S20) in place for 14,500.³ There were 3,820 looked-after children adopted during the year ending 31 March 2018.³ 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.⁴

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'). The 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 (2019) are shown in table 1 below (<http://www.cvaa.org.uk/the-voluntary-adoption-sector/inter-agency-fees/>). Further information can be found in Dance et al (2017).⁵

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

² Department for Education (2019) *Section 251 documents*, Department for Education, London. <https://www.gov.uk/government/collections/section-251-materials> [accessed 29 October 2019].

³ Department for Education (2019) *Children looked after in England including adoption: 2017 to 2018*, <https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2017-to-2018> [accessed 5 November 2019].

⁴ http://trixresources.proceduresonline.com/nat_key/keywords/placement_order.html

⁵ Dance, C., Neil, E. & Rogers, R. (2017) *Inter-agency adoption and the government's subsidy of the inter-agency fee*, Department for Education, London. [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/638885/Inter-agency Adoption and Subsidy of the Inter-Agency Fee.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/638885/Inter-agency%20Adoption%20and%20Subsidy%20of%20the%20Inter-Agency%20Fee.pdf) [accessed 4 December 2017].

Table 1: Inter-agency fees

Local authorities	Costs for 2019/2020 (see above for information on changes from June 2019)
Fees for one child	£31,620
Fees for two children	£51,000
Fees for three or more children	£69,360
Fees for four children	£79,560
Fees for five children	To be negotiated on an ongoing basis
Ongoing supervision per child	£877 per month

An additional weighting of 10% applies for agencies based in the Greater London area.

Family-finding

We have drawn on 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 employed, involving the linking of social care time-use and activity data with information about salaries, overheads, and other types of expenditure.

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

The average unit costs of five adoption sub-processes are shown in Table 2, for 'standard' cases and 'difficult-to-place'¹ cases supported by local authority, voluntary and all adoption agencies. All costs have been uprated using the PSS Inflaters.

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 work involved linking the process unit costs detailed in Table 2 with these other types of expenditure to estimate the total costs of adoption. In late 2016, CCFR also administered 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.

¹ Cases were classified as 'difficult to place' if the child had a least one of the following characteristics: they were part of a sibling group; from a black and minority ethnic background; living with a disability; were affected by a health condition, and/or were over four years old.

Table 2: Average costs (£) of adoption processes at 2018/2019 values

Adoption sub-processes	Local authority adoption agencies		Voluntary adoption agencies		All adoption agencies	
	'Standard' case	'Difficult-to-place' case	'Standard' case	'Difficult-to-place' case	'Standard' case	'Difficult-to-place' case
Adoption planning	£2,155	£2,206	£1,658	£1,590	£2,151	£2,099
Preparation, assessment of adopters	£4,281	£3,575	£3,967	£4,731	£4,179	£4,472
Adoption panel	£1,893	£1,405	£912	£1,728	£1,667	£1,645
Linking & matching	£3,838	£3,816	£1,524	£5,681	£2,744	£5,097
Placement of the child	£1,885	£2,004	£739	£2,508	£1,833	£2,314
Assessment for adoption support	£2,736	£3,326	£1,810	£3,396	£2,212	£3,861

Helping birth families

See previous editions for sources of information.

Supporting direct contact after adoption

See previous editions for sources of information.

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).^{1,2} 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. This includes training to meet the child's needs, respite care and assistance in cases of disruption. See previous editions for sources of information relating to post-adoption support.

¹ Department of Education (2013) Statutory guidance on adoption, For local authorities, voluntary adoption agencies and adoption support agencies, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/270100/adoption_statutory_guidance_2013.pdf [accessed 30 November 2016].

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

6.7 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)¹ 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 Ascend Programme 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 £7,527 Programme cost £174 Total £7,701
The Cygnnet programme is a group-delivered parent-training programme for parents of children with Autistic Spectrum Conditions, age 7 to 18.	Cygnnet co-ordinator Autistic Support Group co-ordinator, child psychologist (8B), consultant clinical psychologist (8D), clinical psychologist (7), social worker, teacher, administrator (level 3), senior CAMHS practitioner (7), 3 STARS workers and a student nurse.	Delivered in CAMHS and voluntary sector community facilities in 6-weekly 2.5 hour sessions. There is a reunion session at three months. In total 51.5 hours were delivered by staff across 6 programmes.	Staff cost £4,027 Programme cost £193 Total £4,221
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 £3,658 Programme cost £256 Total cost £3,914
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 £3,265 Programme cost £288 Total cost £3,553
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 attend 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 £1,839 Programme cost £125 Total cost £1,964

¹ 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.

6.8 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 six full-day workshops, with enough time between each workshop for teachers to practice the new skills. *The Teacher Classroom Management Programme* is useful for teachers, teacher aides, school psychologists and school counsellors <http://incredibleyears.com/programs/teacher/classroom-mgt-curriculum/>. See also Ford et al. (2012) for details on the cost-effectiveness of the programme.¹

The following table provides the costs for two group leaders to deliver six full-day day workshops to ten 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 (2014 costs). Although not obligatory, group leaders are encouraged to apply for certification/accreditation (£270, 2014 costs). 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 2013/2014 costs and updated using the appropriate inflators.

Costs and unit estimation	2018/2019 value	Notes
Start-up costs		
Group leader training	£1,638 per year	Based on the cost of £273 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	£1,614 per year	This includes Incredible Years materials such as manuals, assorted books, tool box, wheel of fortune, puppets etc. Costs for video cameras should be included if sessions are to be filmed.
Group leaders		
Course planning	£15,019 per year	Based on the cost of £627 per day (includes salaries and overheads) for two group leaders for six days.
Teachers attending programme		
Supply cover	£10,923 per year	Supply cover provided for the 10 teachers attending the course at £182 per day for 6 days.
Incredible Years professional		
Supervision	£1,775 per year	Supervision provided by an Incredible Years professional for the 6 sessions. Based on a cost of £296 per session
Venue		Cost for venue is not known.
Course materials	£398 per year	Books and handouts at £40 per teacher for 10 teachers
Miscellaneous costs	£54 per annum £405 per annum	Incentives and materials Lunch and refreshments are based on a cost of £68 per session.
Certification/accreditation	£292 per annum	This promotes fidelity to the programme
Unit Costs for 2018/2019		
Start-up costs £3,212 (excluding airfare and accommodation for Incredible Years trainer).		
Cost per programme for 10 teachers excluding start-up costs £28,886.		
Cost per teacher excluding start-up costs £2,885.		

¹ 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.

6.9 Advocacy for children with additional/multiple needs

The Children's Act 2004 makes it clear that where young people have difficulty in expressing their wishes and feelings about any decisions made about them, or wish to make a complaint, consideration must be given to securing the support of an advocate. This can result in a variety of benefits for both the child and the local authority; enhanced self-esteem and a better understanding of processes leading to more informed choices and improved care packages as well as improved transition from child to adult services.

This service is targeted at young people who are aged between ten and twenty-one and who have additional/multiple needs, are in need of immediate care and protection, looked after, or a care-leaver. It is considered to be a 'typical' service model. The costs below have been compiled in collaboration with a national children's charity. All costs have been updated from 2016/2017 to 2018/2019 levels using the PSS inflators.

Costs and unit estimation	2018/2019 value	Notes (for further clarification see Commentary)
A. Wages/salary	£91,864 per year	The service comprises two senior advocates (one whom specialises in disability) working 30 hours per week, an advocate working 21 hours per week and a trainee advocate working 30 hours a week. There is also a sessional advocate who works 12 additional hours per week.
B. Salary oncosts	£19,496 per year	Employer's national insurance is included plus 13.75 per cent of salary for employer's contribution to superannuation.
C. Overheads*		
Management/administration	£36,275 per year	This includes a services manager (21 hours per week) and an administrative assistant (18 hours per week).
Direct overheads	£3,807 per year	This includes rent, utilities, venue hire
Indirect overheads	£18,125 per year	Indirect overheads form 16 per cent of salary plus oncosts. This includes the finance, central management and human resources function.
D. Qualifications	No costs available	
E. Training	£3,695 per year	A standard allowance of £500 per head is provided for training. The majority of training is run in-house via e-learning portals that the national children's charity have either developed in-house or have made available through partnerships with external suppliers.
F. Capital overheads	£20,883 per year	This includes an amount of £2,984 per head for equipment and buildings owned by the national children's charity.
G. Travel	£5,279 per year	This is as per budget for a 'typical' advocacy service.
Working time	41 weeks per year 37.5 hours per week	Unit costs are based on 5043 working hours.
Ratio of direct to indirect time on client-related work	1:0.94	2600 hours of client related time is assumed each year.
Caseload	20	20 young people per 1 FTE advocate.
Time per case	10 hours	On average, advocates spend 10 hours per case: 85 per cent of cases require 10 hours or less face-to-face time.
Unit costs available 2018/2019		
Average cost per working hour £40, average cost per client-related hour £77. Average cost per advocacy intervention £767.		

* as estimated by the provider organisation

6.10 Counselling for children with mental or emotional difficulties

Counselling falls under the umbrella term 'talking therapies' and allows people to discuss their problems and any difficult feelings they encounter in a safe, confidential environment (<https://www.counselling-directory.org.uk/what-is-counselling.html>). Counselling for young people may be provided at the young person's home, in schools, GP surgeries or other external settings when these are agreed and risk assessed. Although counselling is usually delivered by PW11 and PW111 Counsellors and Psychotherapists, some are delivered by trained volunteers or by more specialised staff when particularly vulnerable groups such as refugees or victims of sexual exploitation/abuse are involved (usually on a sessional basis).

The information for this schema was provided by a national children's charity and the costs estimated represent a 'typical' service for young people who are identified as having a vulnerability relevant to strategic priorities and assessed as having a mental or emotional health difficulty that could benefit from a counselling intervention. There is significant variability between service models dependent on client and commissioner needs. All costs have been updated from 2016/2017 to 2018/2019 levels using the PSS inflators.

Costs and unit estimation	2018/2019 value	Notes (for further clarification see Commentary)
A. Wages/salary	£62,818 per year	Salary provided by the national children's charity for a counselling service. Includes a service co-ordinator (PW111) with some client-facing time, a project worker, and sessional or volunteer staff to deliver required volumes as flexibly as possible.
B. Salary oncosts	£14,263 per year	Employer's national insurance is included plus 13.75 per cent of salary for employer's contribution to superannuation.
C. Overheads*		
Management/administration	£21,120 per year	This includes a services manager (PW111) (33% client-facing time) and an administrative assistant (12.5 hours per week).
Direct overheads	£2,538 per year	This includes rent, utilities and venue hire specific to the service. Indirect overheads form 16 per cent of salary plus oncosts.
Indirect overheads	£14,803 per year	This includes the finance, central management and human resources function.
D. Qualifications	No costs available	
E. Training	£2,112 per year	A standard allowance of £500 per head is provided for training. The majority of training is run in-house via e-learning portals that the national children's charity have either developed in-house or have available through partnerships with external suppliers.
F. Capital overheads	£11,936 per year	A flat amount per head of £2,617 has been applied per staff member for equipment and buildings owned by the national children's society.
G. Travel	£5,543 per year	This is as per budget for a 'typical' counselling service but will vary between services due to differing locations.
Working time	41 weeks per year 37.5 hours per week	Unit costs are based on 2,850 working hours for the counselling service.
Ratio of direct to indirect time on client-related work	1:0.98	Based on 1440 hours of client-related time assumed each year. The BACP good-practice recommendation for counselling is 60:40, with 60 per cent of the counsellor's time being direct face-to-face counselling and 40 per cent spent on associated activities, including supervision, recording and professional developing/training.
Caseload	20	20 young people per 1 FTE counsellor.
Time per case	Median 12 hours	The majority of counselling projects provide short- to medium-term interventions, ranging from 8 to 12 counselling sessions. Most of the counselling is face-to-face, but can also take place in a group context, over the phone or online. Unit costs are based on a median of 12 hours per case (range of 6-16 hours) based on data from a range of counselling services.
Unit costs available 2018/2019		
Average cost per working hour £47, average cost per client-related hour £94, average cost per counselling intervention £1,126.		

* as estimated by the provider organisation

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 Self-management programmes

7.6 Hospice Rapid Response Service

7.7 Specialist neuro-rehabilitation services

7.8 NHS reference costs for sexual health

7.9 Screening interventions for sexually-transmitted infections

7.10 Abortion reference costs

7.11 Cost of private abortion treatment

7.1 NHS reference costs for hospital services

'Reference costs are the average unit cost to the NHS of providing defined services to NHS patients in England in a given financial year. They show how NHS providers spend money to provide health care to patients.'¹ We have drawn on *NHS Improvement, Reference Costs 2016/2017* to report on the NHS reference costs for selected mental health services.¹ All costs have been updated to 2017/2018 prices using the NHS cost inflation index. Please note the source costs no longer include figures for lower and upper quartiles.

	National average
Elective/non-elective Health Care Resource Group (HRG) data, average cost per episode	
Elective inpatient stays	£3,754
Elective inpatient stays (inc. carbon impact 618 kgCO ₂ e) ²	£3,782
Non-elective inpatient stays (long stays)	£3,053
Non-elective inpatient stays (long stays) (inc. carbon 5032 kgCO ₂ e) ²	£3,076
Non-elective inpatient stays (short stays)	£631
Day cases HRG data (finished consultant episodes)	
Weighted average of all stays	£752
Weighted average of all stays (inc. carbon 124 kgCO ₂ e) ²	£757
Outpatient attendances³	
Weighted average of all outpatient attendances	£135
Weighted average of all outpatient attendances (inc. carbon 22 kgCO ₂ e) ²	£136
PALLIATIVE CARE	
Inpatient, specialist palliative care (adults only), average cost per bed day	£398
Inpatient, specialist palliative care (same day) adults only	£162
Hospital specialist palliative care support (adults only)	£121
Outpatient, medical specialist palliative care attendance (adults and children)	£202
Outpatient non-medical specialist palliative care attendance	£70
AMBULANCE SERVICES (Weighted average of attendances)	
Calls	£7
Hear and treat and refer	£38
See and treat and refer (including carbon 43 kgCO ₂ e) ²	£196 (£)
See and treat and convey (including carbon 56 kgCO ₂ e) ²	£258 (£)
Weighted average of all	£125
COMMUNITY SERVICES, average cost per group session (one-to-one)	
Physiotherapy	£46 (£54)
Occupational therapy	£70 (£78)
Speech therapy services	£119 (£97)
Dietician	£86

¹ NHS Improvement (2018) *National Schedule of Reference Costs 2017-18*, NHS Improvement, Leeds. <https://improvement.nhs.uk/resources/reference-costs/> [accessed 1 November 2019].

² The cost of carbon emissions from patient and staff travel, electricity and gas for the building, along with embedded emissions in the goods and services used to provide the appointment. Based on the Sustainable Development Unit carbon footprint of the health, social care and public health system: <https://www.sduhealth.org.uk/policy-strategy/reporting/natural-resource-footprint-2018.aspx>. See Preface for more information.

³ 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.¹ The study information was supplemented with national data not available from the sites. Three main types are identified: those propelled by an attendant or self-propelled; a lighter type of chair especially designed for active users; and powered wheelchairs. (Active users are difficult to define, but generally refer to individuals who are permanently restricted to a wheelchair but are otherwise well.) The cost of modifications is included in the estimated capital value, but this is a very approximate mid-range figure so specific information should be used wherever possible. All costs have been updated using the retail price index.

Although we have been unable to identify any recent studies on wheelchairs, current price information² suggests that powered wheelchairs range from £1000-£5000 and self- or attendant-propelled wheelchairs range from £100-£1,300.

Type of chair	Total value 2018/2019	Annual cost 2018/2019	Notes
Capital costs			
Self- or attendant-propelled	£315	£70	Capital value has been annuitised over five years at a discount rate of 3.5 per cent to allow for the expected life of a new chair. In practice, 50 per cent of wheelchairs supplied have been reconditioned, not having been worn out by the time their first users ceased to need them.
Active user	£785	£174	
Powered	£1,569	£348	
Revenue costs			Revenue costs exclude therapists' time but include the staff costs of maintenance, and all costs for pressure relief. The cost of reconditioning has not been included in the cost of maintenance.
Maintenance			
- non-powered		£32	
- powered		£126	
Agency overheads			No estimate of management overhead costs is available. They are likely to be minimal.
Unit costs available 2018/2019			
£101 per self or attendant propelled chair per year; £206 per active user per chair per year; £473 per powered chair per year.			

¹ Personal communication with Richard Murray, National Health Service Management Executive, 1995.

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

7.3 Equipment and adaptations

Community equipment refers to any items of equipment prescribed by occupational therapists, physiotherapists and other health staff, designed to help vulnerable or older people and those with disabilities or long-term health conditions to manage everyday tasks independently at home. For this schema, we have drawn from a study commissioned by PSSRU and undertaken by Astral/Foundations (<http://www.foundations.uk.com/about-home-improvement-agencies/>). The aim of the study was to identify the process and resources used to supply equipment and adaptations, as well as quantifying the time inputs of the staff involved and the cost of the equipment or materials used. The research differentiated between the time taken to supply and install minor adaptations (generally those under £1,000) and major adaptations (those costing over £1,000) and also provided time inputs of the staff involved in administering the process and assessing clients.¹ See <https://www.pssru.ac.uk/blog/category/adaptation/> for further information.

In Tables 1-2, we have provided the total average mean and median costs of major and minor adaptations including ranges, and in Tables 3-4 the costs of staff preparation and assessment time are provided. 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 *Unit Costs of Health & Social Care 2013*).

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.² The costs have been uprated from 2013/2014 costs using the PSS Pay and Prices inflator.

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	£2,919	£14,012	£5,431 (£4,654)	£653 (£560)
Stair lift (straight)	21	£1,227	£3,303	£2,188 (£2,248)	£263 (£270)
Stair lift (more complex)	7	£2,686	£7,722	£5,330 (£5,372)	£641 (£646)
Convert room for downstairs WC /washroom	7	£3,270	£25,690	£11,509 (£11,527)	£1,383 (£1,386)
Build downstairs extension for WC/washroom	5	£14,012	£35,032	£26,347 (£29,193)	£3,166 (£3,509)
Build downstairs extension for bedroom	5	£14,012	£52,548	£31,195 (£30,063)	£3,750 (£3,614)
Build downstairs extension for bedroom and en suite facilities	6	£26,857	£52,548	£39,280 (£37,445)	£4,721 (£4,501)
Total	82				

¹ Curtis, L. & Beecham, J. (2018) A survey of local authorities and Home Improvement Agencies: Identifying the hidden costs of providing a home adaptations service, *British Journal of Occupational Therapy*, <http://journals.sagepub.com/doi/full/10.1177/0308022618771534> [accessed 6 November 2018].

² See <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government> [accessed 6 November 2018].

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	£19	£116	£48 (£32)	£5.70 (£3.90)
Fit handrail – internal	10	£11	£76	£32 (£23)	£4.00 (£2.70)
Fit handrail to bath	8	£10	£33	£20 (£23)	£2.50 (£2.70)
Fit over bath shower	6	£366	£2111	£123 (£1363)	£15 (£164)
Create step to front/back door	8	£24	£1759	£546 (£102)	£67 (£12.40)
Create ramp to front/back door	5	£139	£795	£359 (£136)	£44 (£16)
Lay new path, per metre cost	3	£115	£141	£126 (£136)	£16 (£16.40)
Widen doorway for wheelchair access	6	£342	£776	£609 (£750)	£75 (£90.10)
Install lighting to outside steps/path	5	£29	£704	£291 (£159)	£35 (£19.10)
Move bed to downstairs room	3	£35	£52	£45 (£51)	£5.70 (£6.10)
Raise electrical sockets/lower light switches	6	£47	£1726	£91 (£85)	£11.40 (£10.20)

Table 3 Mean costs for staff involved in the process of providing minor adaptations

	Average cost			Total mean staff cost
	Initial enquiry	OT	HIA administrator	
Fit handrail – external	£4	£55	£14	£73
Fit handrail – internal	£4	£47	£17	£68
Fit handrail to bath	£4	£27	£14	£45
Fit (handrail) over bath shower	£4	£55	£24	£83
Create step to front/back door	£4	£86	£17	£107
Create ramp to front/back door	£4	£234	£17	£256
Lay new path, per metre cost	£4	£125	£28	£157
Widen doorway for wheelchair access	£4	£297	£24	£325
Install lighting to outside steps/path	£4	£207	£7	£218
Move bed to downstairs room	£4	£51	£24	£79
Raise electrical sockets/lower light switches	£4	£101	£21	£126

Table 4 Mean costs for staff involved in providing major adaptations

	Average cost						Total cost
	Initial enquiry	OT	LA grants officer	HIA technical officer	HIA caseworker	Administrators (HIA and LA)	
Level access shower	£4	£137	£258	£439	£173	£123	£1,134
Stairlift (straight)	£4	£47	£104	£126	£286	£82	£649
Stairlift (more complex)	£4	£101	£422	£320	£58	£98	£1,003
Convert room for downstairs WC/washroom	£4	£324	£442	£703	£167	£236	£1,877
Build downstairs extension for WC washroom	£4	£531	£663	£1,651	£87	£204	£3,140
Build downstairs extension for bedroom and en-suite facilities	£4	£695	£757	£1,331	£225	£335	£3,346

Notes to tables: OT: Occupational Therapist, LA: Local Authority, HIA: Home improvement agency

7.4 Public health interventions

These costs are drawn from *A review of the cost-effectiveness of individual level behaviour change interventions* commissioned by the Health and Well-Being Alliance (North West Public Health Observatory, 2011).¹ Here we present the costs of interventions for which the economic evidence originated in the UK. Further information can be found on Public Health Interventions in the Cost Effectiveness Database (PHICED) <http://www.yhpho.org.uk/PHICED/>. All costs have been taken directly from the reports and updated to 2018/2019 prices using the appropriate inflators. Further information on the specific research studies can be found in the reports named above, and King's Fund have produced a set of infographics that describe key facts about the public health system and the return on investment for some public health interventions <https://www.kingsfund.org.uk/audio-video/public-health-spending-roj>. See NICE guidance : <https://www.nice.org.uk/advice/lgb10/chapter/judging-the-cost-effectiveness-of-public-health-activities#smoking-cessation-interventions-bury---a-case-study-in-cost-effectiveness> for advice on the cost effectiveness of public health activities. See also a series of blogs 'public health matters' issued by Public Health England (<https://publichealthmatters.blog.gov.uk/2016/02/29/investing-in-prevention-is-it-cost-effective/>), which cover subjects such as why investing in prevention matters and whether it saves money

Reducing long-term absence in the workplace

The NICE public health guidance on *Management of long-term sickness and incapacity for work*² 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		£190	£719		£909
Workplace intervention	£612				£612
Physical activity education and workplace visit		£190	£719	£54	£963

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 £43 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 £89 and £198 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 £2.20 per person. Estimates of cost are higher when the unit receiving the intervention is defined as those potentially exposed to the campaign (£28-£53).

¹ North West Public Health Observatory (2011) *A review of the cost-effectiveness of individual level behaviour change interventions*, Health and Wellbeing Alliance, Manchester. <https://lx.iriss.org.uk/content/review-cost-effectiveness-individual-level-behaviour-change-interventions> [accessed 6 November 2018].

² <https://www.nice.org.uk/guidance/ph19>

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 evidence from the UK on the cost of NRT (£50-£172 per person), bupropion (£93-£99 per person), and combinations of NRT and bupropion (£188-£195 per person).

A ten-minute opportunistic brief advice session for smoking costs £37 with a GP and £8 with a practice nurse (see Tables 10.2 and 10.3c of this publication).

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 £38.

7.5 Self-management programmes

Empowering patients is one of the key priorities listed for the *Five Year Forward View* and the King's Fund have provided a summary of a number of well-established self-management programmes that aim to empower people to improve their health (<https://www.kingsfund.org.uk/projects/gp-commissioning/ten-priorities-for-commissioners/self-management>).

Here we draw from studies that have provided the costs of the programmes. We will continue to add to this section as new costs become available.

Self-management support using digital health system for chronic obstructive pulmonary disease (COPD)

Andrew Farmer and colleagues (2017)¹ conducted a randomised controlled trial of a digital health system supporting clinical care through monitoring and self-management support in community-based patients with moderate to very severe chronic obstructive pulmonary disease. The aim of the study was to determine the efficacy of a fully automated internet-linked, tablet computer-based system of monitoring and self-management support (EDGE, sElf-management anD support proGrammE) in improving quality of life and clinical outcomes. Patients were informed that the EDGE platform was not a replacement for their usual clinical care, and the conclusion drawn was that there appears to be an overall benefit in generic health status. The effect sizes for improved depression score, reductions in hospital admissions, and general practice visits, warrant further evaluation.

The costs provided below are for self-management support only; patients will undergo their usual appointments which could be a hospital admission estimated as £2,517, a GP appointment as (£37) and a half-hour practice nurse appointment (£18). To provide an annual cost, we have used the costs provided by Farmer & colleagues (2017)¹ and assumed that the equipment would be replaced every 5 years.

Table 1 Costs of self-management support using a digital health system for chronic obstructive pulmonary disease.

	Fixed costs	Annual costs
Equipment costs		
Tablet computer (Android tablet computer (Samsung Galaxy Tab)	£338	£75
Bluetooth-enabled pulse oximeter probe	£423	£94
Clinician reviewing summary of the oxygen saturation, heart rate, and symptom diary module, twice weekly.		£478
Total costs		£646

¹ Farmer, A., Williams, V., Verlardo, C., Ahmar Shah, S. Mee Yu, L., Rutter, H., Jones, L., Williams, N., Heneghan, C., Price, J., Hardinge, M. & Tarassenko, L. (2017) Self-management support using a digital health system compared with usual care for chronic obstructive pulmonary disease: randomized controlled trial, *Journal of Medical Internet Research*, https://www.jmir.org/article/viewFile/jmir_v19i5e144/2.

7.6 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.¹ 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 also *National Survey of Patient Activity Data* for more information on specialist palliative care services.²

Costs and unit Estimation	2018/2019 value	Notes
A. Wages/salary	£285,406 per year	Based on mean Agenda for Change (AfC) salaries for 18 band 3 health care assistants (HCAs) ³ who spend 85 per cent of their time on duties related to the RRS.
B. Salary oncosts	£62,641 per year	Employer's national insurance is included plus 14.38 per cent of salary for employer's contribution to superannuation.
C. Qualifications		HCAs required NVQ 2/3 or equivalent and community end-of-life care experience.
D. Training		The HCAs were provided with an initial orientation training programme covering introduction to the hospice and clinical work on wards and in the community. They also attended a 5-day hospice palliative care course costing approximately £755. Staff have continued to access in-house development training, statutory and mandatory annual training.
E. Overheads		
Service co-ordinator and day to day co-ordinator	£40,386 per year	Based on information provided by the hospice, supervision was provided by an Agenda for Change band 8 nurse (40% of WTE) plus a day-to-day coordinator (80% of WTE Agenda for Change band 3). Salary and oncosts are included in this calculation.
Management, administration and estates staff	£17,402 per year	Based on information provided by the hospice, estates and indirect care staff are assumed to be approximately 5 per cent of direct care salary costs.
Non-staff	£150,008 per year	Taken from <i>NHS foundation trusts accounts: consolidated (FTC) files 2014/15</i> . ⁴ Hospice overheads are broadly similar to those applied to NHS staff. Non-staff costs were 43.1 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport and telephone, education and training, supplies and services (clinical and general), as well as utilities such as water, gas and electricity.
F. Capital overheads	£1,553 per year	Based on the new-build and land requirements of NHS facilities. ^{5,6} It is assumed that each HCA uses one-sixth of an office. Six HCAs are on duty at any one time. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
H. Travel	£121,512 per year	£12.30 per visit. Based on the average number of visits per patient in 2012 (16.6).
Caseload	610 per year	Number of patients
Hours and length of service		The service is available 24 hours each day, seven days per week.
Ratio of indirect time to direct time		No estimates available for percentage of service time spent with patients. Travel time is high given the area covered by the service (approx 20% of total time).
Number of rapid response visits	16.6 per patient	Based on the average number of visits per patient in 2012 (610). Episodes vary according to need. The average number of referrals was 670, although this includes multiple referrals for some people.
Unit costs available 2018/2019		
Total annual costs £709,761; cost per hour of service £81; average cost per patient (referral) £1,164 (£1,059).		

¹ 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.

² 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.

³ NHS Digital (2018) *NHS staff earnings estimates, 12-month period from May 2017 – April 2018* (not publicly available), NHS Digital, Leeds.

⁴ Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415>. [accessed 17 October 2016]

⁵ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁶ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

7.7 Specialist neuro-rehabilitation services

Specialist rehabilitation services¹ 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. They are consultant-led and supported by a multi-professional team who have undergone recognised specialist training in rehabilitation.^{2,3}

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 Major Trauma Networks.⁴ 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).⁵ Two costs are provided for each service: the mean cost per occupied bed day, calculated by taking the total annual costs and dividing by the number of patient bed days; and the mean cost per weighted occupied bed day, which takes into account the number of days patients spend at five identified sub-levels of complexity. See <http://www.kcl.ac.uk/lsm/research/divisions/cicelysaunders/research/studies/ukroc/Commissioning-Tools.aspx> for more information on how the weighted costs have been calculated.

Table 1 2018/2019 mean costs per occupied bed day and weighted occupied bed day for each service level from participating UKROC Services

Service level	Mean cost (ranges) per occupied bed day (excluding ^b)	Mean cost (ranges) per weighted occupied bed day (excluding ^b)
Level 1 - Tertiary 'specialised' rehabilitation services: high cost / low volume services for patients with highly complex rehabilitation needs that are beyond the scope of their local and district specialist services. These are normally provided in co-ordinated service networks planned over a regional population of 1,000,000-5,000,000 through specialised commissioning arrangements.		
Level 1a - for patients with high physical dependency	£602 (£523 - £691)	£451 (£388 - £496)
Level 1b - mixed dependency	£537 (£484 - £580)	£401 (£344 - £439)
Level 1c - mainly physically stable patients with cognitive/behavioural disabilities. ^a	£717 (£653 - £804)	£540 (£488 - £601)
Level 2 – Local (district) specialist services: typically planned over a district-level population of 350,000-500,000 providing advice and support for local general rehabilitation teams. As tertiary specialised rehabilitation services are thinly spread, in some areas of the UK where access is poor, local specialist rehabilitation services have extended to support a supra-district catchment of 750,000-1,000,000, and take a higher proportion (at least 50%) of patients with very complex needs.		
Level 2a - supra-district specialist rehabilitation services	£487 (£357 - £578)	£389 (£255 - £492)
Level 2b - local specialist rehabilitation services	£459 (£348- £564)	£383 (£327 - £468)
Hyper-acute - 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.		
Hyper-acute	£739 (£702 - £774)	£461 (£435 - £487)

a. Based on only two services

b. MFF (Market Forces Factor)

¹ 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.

² British Society of Rehabilitation Medicine (2015) *Specialised Neurorehabilitation Service Standards*, BSRM London.

³ <http://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-d/d02/>

⁴ British Society of Rehabilitation Medicine (2013) *Core standards and major trauma*, London: <http://www.bsrn.co.uk/Publications.html#BSRMstandards> [accessed 10 November 2015]

⁵ Clinical Reference Group Specialist Services Specification (2012) *Specialist rehabilitation for patients with highly complex needs*, London <http://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-d/d02/> [accessed 10 November 2015]

7.8 NHS reference costs for sexual health

'Reference costs are the average unit cost to the NHS of providing defined services to NHS patients in England in a given financial year. They show how NHS providers spend money to provide health care to patients.'¹ We have drawn on *NHS Improvement, Reference Costs 2017/2018* to report on the NHS reference costs for selected sexual health services.¹ All costs have been updated to 2018/2019 prices using the NHS cost inflation index. Please note the source costs no longer include figures for lower and upper quartiles.

In previous years, the reference costs have been provided by the Department of Health (now Department of Health and Social Care) using the following guidance: <https://www.gov.uk/government/collections/nhs-reference-costs>. This year NHS Improvement have published new guidance: <https://improvement.nhs.uk/resources/approved-costing-guidance/>.

2018/2019 costs	National average
Genito-Urinary Medicine (GUM) infections	
Elective/non elective Health Care Resource Group (HRG) data, average cost per episode	
Elective inpatient stays	£2,804
Non-elective inpatient stays	£2,220
Non-elective inpatient stays (short stays)	£480
Day cases	£300
Consultant-led (Multi-professional)	
Non-admitted, face-to-face, first	£169
Non-consultant-led	
Non-admitted, face-to-face, first	£146
Non-admitted, face-to-face, follow-up	£120
Community health services	
HIV/AIDS specialist nursing (adult)	
Face-to-face	£110
Non face-to-face	£63
Outpatient attendances	
Family planning clinic, consultant led	£92
Family planning clinic, non-consultant led	£84

¹ NHS Improvement (2018) *National Schedule of Reference Costs 2017-18*, NHS Improvement, <https://improvement.nhs.uk/resources/reference-costs/> [accessed 1 November 2019].

7.9 Screening interventions for sexually transmitted infection (STI)

In 2013, Louise Jackson and colleagues (2014)¹ carried out a study to compare the costs and outcomes of two sexually transmitted infection (STI) screening interventions (SPORTSMART pilot trial). The participants were men aged 18 years and over within six amateur football clubs in London. Eligible football clubs were grouped by similar characteristics into three pairs, and each of the pairs was randomised to a study arm (captain-led, sexual health advisor-led and poster-only), after which resource use data were collected prospectively and unit costs were applied. In total, 153 men received the screening offer; 50 per cent of the men in the captain-led arm accepted the offer, 67 per cent in the sexual health advisor-led arm and 61 per cent in the poster-only arm.

The costs of each intervention are shown in Table 1. Forgone leisure time or any informal costs were excluded from the study. All costs have been uprated from 2012/2013 costs using the appropriate inflators.

Table 1: Health service costs per intervention and player

Resources used	Cost item	Unit cost £	N	Total cost £
Intervention costs				
Recruitment of club	Per club	£610	2	£1,221
Poster pack	Per pack	£59	2	£119
Test kit	Per player	£6.20	46	£287
Promotion	Per club	Captain-led ¹ £148 Health advisor-led ² £266 Poster-only ³ £148	2	¹ £287 ² £531 ³ £295
Specimen collection box ⁴	Per club	£61		£122
Transport of specimen collection box	Per club	£149		£299
Processing costs				
Additional storage facilities ⁴		£13		£26
Sample processing	Per player tested	£12	Captain-led 28 Health advisor-led 31 Poster-only 31	£332 £368 £368
Patient admin and notification of results	Per player tested	£5.60	Captain-led 28 Health advisor-led 31 Poster-only 31	£156 £172 £172
Total cost per intervention				Captain-led £2,857 Health advisor-led 3,145 Poster-only £2,909
Average cost per player screened			Captain-led 28 Health advisor-led 31 Poster-only 31	Captain-led £102 Health advisor-led £101 Poster-only £94

1) Captain-led and poster STI screening promotion; includes the costs for a member of staff (healthcare assistant) from the clinic to undertake the sample processing, notification, preparing of materials and safe return of samples to the clinic. The forgone time taken by the team captain to prepare for and deliver the intervention was excluded.

2) Sexual health advisor-led and poster STI screening promotion; included a sexual health advisor to lead the screening promotion. It was assumed that the health advisor would also take the materials to the club, prepare the promotion and ensure the safe return of completed specimen samples to the clinic in accordance with trial processes and clinical governance requirements. Travel costs are included.

3) Poster-only STI screening promotion (control/comparator). It was assumed that a member of staff (healthcare assistant) from the clinic undertaking the testing and notification would need to be on-site before and after the promotion.

4) Includes costs for the first year of the design elements of the posters, test kit, pens and specimen collection boxes and for the first year of the storage facilities, annuitised at three per cent over three years

¹ Jackson, L., Roberts, T., Fuller, T., Sebastian, S., Sutcliffe, L., Saunders, J., Copas, A., Mercer, C., Cassell, J. & Estcourt, C. (2014) Exploring the costs and outcomes of sexually transmitted infection (STI) screening interventions targeting men in football club settings: preliminary cost-consequence analysis of the SPORTSMART pilot randomised controlled trial. *Sexually Transmitted Infections*, 91 (2). Pp. 100-105. <http://sro.sussex.ac.uk/53486/1/100.full.pdf> [accessed 27 November 2018].

7.10 Abortion reference costs

'Reference costs are the average unit cost to the NHS of providing defined services to NHS patients in England in a given financial year. They show how NHS providers spend money to provide health care to patients.'¹ We have drawn on *NHS Improvement, Reference Costs 2017/2018* to report on the NHS reference costs for selected abortion services.¹ All costs have been updated to 2018/2019 prices using the NHS cost inflation index.

In previous years, the reference costs have been provided by the Department of Health (now Department of Health and Social Care) using the following guidance: <https://www.gov.uk/government/collections/nhs-reference-costs>. This year NHS Improvement have published new guidance: <https://improvement.nhs.uk/resources/approved-costing-guidance/>.

Abortion Services – Day Case	2019 £
Dilation and Evacuation, less than 14 weeks gestation	1,023
Dilation and Evacuation, 14 to 20 weeks gestation	872
Medical Termination of Pregnancy, less than 14 weeks gestation	419
Medical Termination of Pregnancy, 14 to 20 weeks gestation	609
Vacuum Aspiration with Cannula, less than 14 weeks gestation	899
Vacuum Aspiration with Cannula, 14 to 20 weeks gestation	971
Medical or Surgical Termination of Pregnancy, over 20 weeks gestation	1,002

Abortion services – non elective long stay	2019 £
Dilation and Evacuation, less than 14 weeks gestation	2,667
Dilation and Evacuation, 14 to 20 weeks gestation	4,060
Medical Termination of Pregnancy, less than 14 weeks gestation	1,884
Medical Termination of Pregnancy, 14 to 20 weeks gestation	1,499
Vacuum Aspiration with Cannula, less than 14 weeks gestation	2,628
Vacuum Aspiration with Cannula, 14 to 20 weeks gestation	3,672
Medical or Surgical Termination of Pregnancy, over 20 weeks gestation	4,029

¹ NHS Improvement (2018) *National Schedule of Reference Costs 2017-18*, NHS Improvement, <https://improvement.nhs.uk/resources/reference-costs/> [accessed 1 November 2019].

7.11 Cost of private abortion treatment

The costs are taken from The British Pregnancy Advisory Service¹ information on prices for treatment for those who chose to be treated privately. The BPAS notes that 97% of women they see have their treatment paid for by the NHS (or another government department). Prices are from 10th April 2019. For costs of some NHS treatments see Schema 7.10.

Prices	Initial consultation	Treatment price	Total payable
Abortion services	£	£	£
Under 10 weeks – Abortion pill only	110	370	480
Surgical up to 14 weeks	110	570	680
Surgical 19-24 weeks & medical 11-24 weeks	110	790	900
Vasectomy services	110	1400	1510
Local anaesthetic vasectomy	110	360	470

Contraception Services	£
Emergency hormonal contraception	
Levonelle	10
ellaOne	15
Depo Provera supply and inject	30
IUCD supply and fit	60
IUCD fit only	40
NuvaRing contraceptive vaginal ring (3 months supply)	50
Jaydess supply & fit	110
LARC supply & fit	150
LARC removal	100
Patch (EVRA) supply	25

Other services	£
Chlamydia screening at consultation	30
Post operative counselling BPAS client	FREE
Post operative counselling (if not treated by BPAS)	75
Pregnancy testing	FREE

¹ <https://www.bpas.org/abortion-care/considering-abortion/prices/>

8. Care packages

- 8.1 Services for children returning home from care
- 8.2 Patient costs following discharge from acute medical units
- 8.3 End of life care
- 8.4 Smoking cessation services
- 8.5 Social prescribing
- 8.6 Low intensity interventions for the management of obsessive-compulsive disorder
- 8.7 The cost of diagnosis and early support in patients with cognitive decline

8.1 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.¹

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 8.2.1 to 8.2.4 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.² They make use of existing unit costs that have been estimated in previous research studies carried out by the CCFR.^{2,3,4} 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 2017/2018 financial year. Where costs have been taken from research completed in previous years, they have also been inflated to 2018/2019 prices. The unit costs of support foster care were estimated for the Fostering Network, and have been included in these case studies with their permission.⁵

¹ Department for Education (2013) *Data pack: improving permanence for looked-after children*, <http://www.education.gov.uk/a00227754/looked-after-children-data-pack/> [accessed 1 October 2013].

² Ward, H., Holmes, L. & Soper, J. (2008) *Costs and consequences of placing children in care*, Jessica Kingsley, London.

³ Holmes, L., McDermid, S., Padley, M. & Soper, J. (2012) *Exploration of the costs and outcomes of the Common Assessment Framework*, Department of Health, London.

⁴ Holmes, L. & McDermid, S. (2012) *Understanding costs and outcomes in child welfare services*, Jessica Kingsley, London.

⁵ The Fostering Network & Holmes, L. (2013) *Unit costs of support care*, The Fostering Network, London.

8.1.1 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 placing 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	£1,472	£2,944
LAC 2 – care plan	Once a fortnight	£278	£556
LAC 3 – ongoing placement support	Six months in total	£3,376	£20,253
LAC 4 – return home	Once	£479	£479
LAC 6 – review	Twice	£714	£1,428
Total social care case management costs per year			£25,660

8.1.2 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.

Social care processes (case management)			
Process	Frequency	Unit cost	Sub-total
CiN 3 – ongoing support	12 months	£230	£2,763
CiN 6 – planning and review	3 times	£265	£795
Cost of social care case management activity			£3,558
Additional service costs (out of London)			
Drug and alcohol treatment services	Once a fortnight	£140	£3,628
Total social care case management and service costs per year			£7,186

8.1.3 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.¹ 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	£277	£553
LAC 3 – ongoing placement support	10 months	£13,785	£137,850
LAC 4 – return home	Once	£479	£479
LAC 6 – review	Twice	£714	£1,428
Support foster care – ongoing	2 months	£800	£1,599
Support foster care – referral	Once	£456	£456
Total social care case management costs per year			£142,364

8.1.4 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 table below shows the costs of Child in Need (CiN) support provided during the first three months of 2012.

Social care processes (case management)			
Process	Frequency	Unit cost	Sub-total
CiN 3 – ongoing support	3 months	£1,246	£3,739
CiN 4 – close case	Once	£114	£114
Total social care case management costs per year			£3,853

¹ Department for Education (2012) *Children in care*, <http://www.education.gov.uk/childrenandyoungpeople/safeguardingchildren/a0068940/children-in-care/> [accessed 10 September 2013].

8.2 Patient costs following discharge from acute medical units

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. The Acute Medicine Outcome Study (AMOS) carried out by Franklin et al. (2014) found that readmission rates for older people in the year following discharge from AMUs are high.¹ 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 2018/2019 prices using the NHS cost 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 available. The mean cost for the 456 patients (excluding primary care) was £2,005, and £1,980 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

	No. of service users (mean number of events per service user) ^(a)	Mean (SD) cost (£) for 456 patients	Mean (SD) cost (£) per patient including primary care (n = 250)
Hospital care	360 (4)	£1,761 (£3,511)	£1,680 (£3,254)
Inpatient care ^(b)	119 (2)	£1,209 (£3,290)	£1,104 (£3,035)
Day case care	71 (1)	£148 (£429)	£158 (£477)
Outpatient care	358 (3)	£395 (£420)	£402 (£377)
Critical care ^(c)	8 (1)	£8 (£103)	£15 (£139)
Ambulance service	20 (2)	£20 (£121)	£16 (£86)
Intermediate care	11 (Not applicable)	£12 (£172)	£3 (£43)
Mental health care	28 (4)	£42 (£201)	£49 (£198)
Social care	76 (4)	£172 (£798)	£233 (£977)
Total costs (exc. primary care)	377 (5)	£2,007 (£3,737)	£1,982 (£3,573)
Primary care ^(d)	243 (6)	-	£252 (£265)
Consultations	113 (3)	-	£33 (£48)
Home visits	42 (7)	-	£28 (£111)
Procedures	25 (3)	-	£4 (£22)
Other events ^(e)	202 (22)	-	£58 (£61)
Medication	232 (21)	-	£119 (£150)
Wound dressings	64 (4)	-	£12 (£36)
Total costs including primary care ^(f)	248 (7)	-	£2,232 (£3,623)

SD: standard deviation

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

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

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

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

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

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

The figures presented in Table 2 are mean costs by service and mean total cost across services for patients described as high-cost patients. A high-cost patient represents the top 25 per cent of most costly patients, based on their overall health and social care cost (including primary care) where data were available.

¹ 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.

The mean cost for these high cost patients across all services excluding primary care was £6,419, and £6,818 when including primary care. These mean costs for high-cost patients are approximately three times higher than the mean cost estimates for all patients discharged from AMU shown in Table 1 (mean total cost excluding primary care: £6,419 versus £1,980; mean total cost including primary care: £6,818 versus £2,232).

Table 2 High-cost patients discharged from AMU (top 25% of most costly patients)

	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)	£5,417 (£4,772)
Inpatient care ^(b)	52 (3)	£4,208 (£4,867)
Day case care	24 (1)	£501 (£812)
Outpatient care	61 (4)	£647 (£390)
Critical care ^(c)	3 (1)	£60 (£273)
Ambulance service	5 (2)	£34 (£130)
Intermediate care	2 (not applicable)	£14 (£87)
Mental health care	12 (4)	£138 (£335)
Social care	27 (4)	£817 (£1,807)
Total costs (excl. primary care)	63 (9)	£6,419 (£4,860)
Primary care ^(d)	27 (11)	£398 (£405)
Consultations	26 (3)	£31 (£49)
Home visits	16 (12)	£68 (£203)
Procedures	4 (1)	£1 (£5)
Other events ^(e)	53 (28)	£87 (£82)
Medication	57 (32)	£192 (£215)
Wound dressings	22 (5)	£20 (£50)
Total costs including primary care ^(f)	63 (14)	£6,818 (£4,821)

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 non 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.

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

8.3 End of life care

Research carried out by the Nuffield Trust¹ 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 (£2,120 per decedent). Elective inpatient costs more than tripled in the same period (from £81 to £291 per decedent). Costs have been updated from 2010/2011 to 2018/2019 prices using the Personal Social Services (PSS) and NHS pay and prices inflators.

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	£546	£7,456	65%	65,624	£8,322
Inpatient emergency	£388	£5,299	46%	54,577	£7,111
Inpatient non-emergency	£103	£1,413	12%	58,165	£1,779
Outpatient	£45	£608	5%	50,155	£888
A&E	£10	£136	2%	48,000	£208
Social care	£301	£4,103	35%	20,330	£14,782
Residential and nursing care	£241	£3,290	28%	10,896	£21,085
Home care	£47	£636	5%	10,970	£4,247
Other	£13	£177	2%	4,084	£3,176
Total	£847	£11,559	100%	73,243	NA

NB The total cost per decedent for any of the services is total cost of the service/the number of people who died. The total cost per user is total cost 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 shows these costs by diagnostic group. 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, and social care costs decreased with an increasing number of long-term conditions.

¹ Georghiou, T., Davies, S., Davies, A. & Bardsley, M. (2012) *Understanding patterns of health and social care at the end of life*, Nuffield Trust, London.

Table 2 Cost of hospital and social care services by diagnostic group per decedent in the final year of life

Diagnostic group	Average costs, final year, £ per person			
	Number	Hospital care	Social care	Hospital and social care
All people	73,243	£7,456	£4,104	£11,560
No diagnoses	22,118	£3,671	£5,043	£8,714
Any diagnosis	51,125	£9,092	£3,697	£12,790
Hypertension	21,241	£10,176	£3,392	£13,568
Cancer	19,934	£10,659	£1,584	£12,243
Injury	17,540	£10,981	£4,929	£15,909
Atrial fibrillation	13,567	£10,281	£4,018	£14,299
Ischaemic heart disease	13,213	£10,429	£3,423	£13,852
Respiratory infection	11,136	£11,412	£2,725	£14,137
Falls	10,560	£10,089	£6,239	£16,328
Congestive heart failure	10,474	£10,479	£3,888	£14,367
Chronic obstructive pulmonary disease	9,392	£10,237	£3,064	£13,301
Anaemia	9,210	£12,020	£3,694	£15,715
Diabetes	8,697	£10,463	£3,815	£14,278
Cerebrovascular disease	8,290	£10,302	£5,078	£15,380
Peripheral vascular disease	6,780	£11,871	£3,384	£15,255
Dementia	6,735	£8,593	£10,877 1	£19,470
Renal failure	6,570	£11,980	£3,905	£15,886
Angina	6,549	£11,203	£3,461	£14,664
Mental disorders, not dementia	4,814	£11,236	£4,396	£15,632
Iatrogenic conditions	4,190	£16,193	£3,083	£19,276
Asthma	3,480	£10,875	£3,022	£13,897
Alcoholism	2,437	£9,918	£1,411	£11,329
Non-rheumatic valve disorder	2,059	£12,211	£2,665	£14,875

8.4 Smoking cessation services

Quit 51 offer a smoking cessation service in accordance with National Institute for Health and Care Excellence (NICE) guidelines (<https://www.nice.org.uk/guidance/ng92>). The remit of the service is to provide a maximum of 12 sessions of support with an accredited adviser and provision of tailored pharmacotherapy to smokers attempting to quit. A session is typically 15 minutes duration although the introduction to a session will generally take longer in order to cover triaging and discussions around individual background and requirements. Assuming a patient continues with the service for the full duration, they should receive a minimum of 90 minutes contact time with an adviser covering a period up to 12 weeks after quitting.

Information for this schema has been drawn from Walker et al. (2018)¹ who analysed data from Quit-51 smoking cessation service across five English regions between March 2013 and March 2016 (n=9116). A cost for each individual using the service was estimated based on the pharmacotherapy prescribed and time spent with an adviser. With respect to pharmacotherapy, the costs, including prescription and value added tax (VAT) for each treatment were as follows : NRT (combination) - £21.10 per week; Varenicline - £81.10 per month and Bupropion £73.30 per month. Service use data was multiplied by an hourly charge of £27.80 that included the cost of the adviser, room, equipment, travel and advertising. Central overhead costs for the service were not included and neither were costs to the individual for travel and parking.

The following table provides the average cost per person quitting (with approximate 95% CI) calculated at the 12 week time point, with supporting information. The average cost per quitter was £426 with a significant degree of variation seen across certain subgroups of the client population. Costs have been uprated from 2015/2016 to current values using the NHS cost inflation index. See <https://www.herc.ox.ac.uk/publications/830311> for a summary of the background and method used to derive the costs reported here.

Table 1 Average cost per quit (with approximate 95% CI) calculated at the 12 week time point, with supporting information.

Variable	Levels	12 weeks	Total cost	Cost per head	Number quitting	Quit rate (%)	Mean cost per quit (£)
Age	12-19	509	£51,929	£102	116	23	£448
	20-29	1189	£134,760	£113	296	25	£455
	30-49	3911	£541,438	£138	1262	32	£429
	50-69	2955	£443,863	£150	1068	36	£416
	70+	538	£79,321	£147	192	36	£413
Gender	Male	4249	£593,353	£140	1425	33	£416
	Female	4867	£658,589	£135	1510	31	£436
Treatment	Nicotine replacement therapy	7373	£898,575	£122	2117	29	£424
	Varenicline/champix	1708	£348,817	£204	799	47	£437
	Bupropion/Zyban	35	£4,550	£130	19	54	£239
FTND ²	0-3	1534	£250,030	£162	622	41	£400
	4-5	1884	£316,398	£168	727	39	£435
	6-7	1676	£285,564	£170	641	38	£445
	8-10	766	£127,031	£166	236	31	£538
IMD ³	1-3	886	£143,781	£162	319	36	£451
	4-6	1838	£281,243	£153	635	35	£443
	7-8	2157	£317,415	£147	698	32	£455
	9-10	3321	£477,039	£144	1180	36	£404

¹ Walker, N., Yang, Y., Kiparoglou, V., Pokhrel, S., Robinson, H. & van Woerden, H. (2018) An examination of user costs in relation to smokers using a cessation service based in the UK, *BMC Health Services Research* (2018) 18:182

² FTND = Fagerstrom test for nicotine dependence.

³ Index of Multiple Deprivation

8.5 Social prescribing

Social prescribing enables GPs, nurses and other primary care professionals to refer people to a range of local, non-clinical services. Social prescribing schemes can involve a variety of activities which are typically provided by voluntary and community sector organisations. Examples include volunteering, arts activities, group learning, gardening, befriending, cookery, healthy eating advice and a range of sports: <https://www.kingsfund.org.uk/publications/social-prescribing>.

There is a growing body of evidence assessing the impact of social prescribing to healthcare demand and cost.¹ Much of the focus has been on the benefit of social prescribing where policy makers and commissioners have drawn from areas of good practice like Rotherham. In 2014, the Healthy London Partnership published evidence demonstrating the effectiveness of Social Prescribing in reducing patients use of hospital resources by a fifth in the 12 months following referral to a scheme: http://i5health.com/SPReports/COP_Report_SP_EPP_SouthWestLondonSTP_ver2.0.pdf.

The Rotherham Social Prescribing pilot was commissioned by NHS Rotherham as part of a GP-led Integrated Case Management Pilot and delivered by Voluntary Action Rotherham (VAR). It received around £1m as part of a programme to provide 'additional investment in the community'. Funded for two years from April 2012 to March 2014, it aimed to increase the capacity of GP practices to meet the non-clinical needs of their patients with long-term conditions. The five most common types of referral to funded services were for information and advice, community activity, physical activities, befriending and enabling. Twenty-four voluntary and community organisations (VCOs) received grants to deliver a menu of 31 separate social prescribing services. 1,607 patients were referred to the service.²

Table 1 provides the direct costs to the Clinical Commissioning Group of commissioning the Pilot, but excludes other costs such as for the time taken to develop the service model and consultations with GPs and voluntary sector organisations, costs to the Foundation Trust which supported the development of a complex client management system and also volunteer time.

Excluding the grants provided to the VCOs for delivering the social prescribing services, the average cost per person per year for those referred to the scheme was £171. Including grants to providers and additional support grants, the average cost per person referred per year was £384. The average cost per person referred on to funded voluntary care services was £552. All costs have been updated to 2018/2019 levels using PSS Inflaters.

A number of positive economic benefits to commissioners linked to the Social Prescribing Pilot were estimated: total NHS cost reductions by the end of the pilot of £552,000; a return on investment of 50 pence for each pound (£1) invested and potential NHS cost reductions of £415,000 in the first year post-referral when the service was running at full capacity.

If the benefits identified were fully sustained over a longer period, the authors estimated that the costs of delivering the service for a year would be recouped after between 18 and 24 months and the five year cost reductions for commissioners for each full year of service delivery could be as high as £1.9 million: a return on investment of £3.38 for each pound (£1) invested. The authors also estimated that even if the benefits were sustained but dropped off at a rate of 33 per cent each year, they could lead to total cost reductions of £807,000; a return on investment of £1.41 for each pound (£1) invested.

See also an evaluation of a Social Prescribing Service set in Doncaster³ for cost information on a different service.

Table 1 Overview of Social Prescribing Pilot (Inputs).

	Year 1	Year 2	Total	Cost per person referred per year
Grants to providers and additional support grants	£352,757	£330,459	£683,216	£212
Salaries and overheads	£243,647	£307,697	£551,344	£171
Total	£596,404	£638,156	£1,234,560	£384

¹ Polley, M., Bertotti, M. Kimberlee, R., Pilkinton, K., & Refsum, C. (2017) *A review of the evidence assessing impact of social prescribing on healthcare demand and cost implications*, University of Westminster.

² Dayson, C. & Bashir, N. (2014) *The social and economic impact of the Rotherham Social Prescribing Pilot: Main Evaluation Report*, Centre for Regional Economic Research, Sheffield Hallam University, Sheffield. <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/social-economic-impact-rotherham.pdf>.

³ Dayson, C., & Bennett, E. (2016) *Evaluation of Doncaster Social Prescribing Service: understanding outcomes and impact*, <http://www.syha.co.uk/wp-content/uploads/2017/01/Evaluation-of-Doncaster-Social-Prescribing-Service-Final-Report-.pdf>.

8.6 Low intensity interventions for the management of obsessive-compulsive disorder

Information for this schema has been drawn from a study carried out by Lovell et al. (2017)¹ to explore the cost-effectiveness of three low intensity interventions for the management of obsessive-compulsive disorder (OCD):

- a) cognitive-behavioural therapy delivered using OCFighter (received by 157 people in the study), a commercially produced cCBT program for people with OCD to design, carry out and monitor their treatment progress. Participants randomised to OCFighter were given an access ID and password to log in to the system and advised to use the program at least six times over a 12 week period. OCFighter was available to patients for 12 months following activation. Participants received six brief (10 minute) scheduled telephone calls from a PWP (total direct clinical input 60 minutes). The support offered consisted of a brief risk assessment, ensuring patients had been able to access OCFighter, reviewing progress and solving any difficulties that were impeding progress.
- b) guided self-help (received by 158 people in the study) which consisted of a self-help book focused on information about OCD, maintenance and provided guidance on how to implement the NICE-recommended treatment for OCD (i.e. CBT using exposure response therapy). Participants received six brief (10-minute) scheduled telephone calls from a psychological wellbeing practitioner (PWP), with one initial session of up to 60 minutes (either face to face or by telephone, dependent on patient preference) followed by up to 10-30 minute sessions over a 12-week period (total direct clinical input 6 hours).
- c) waiting list for high-intensity CBT (received by 158 people).

Table 1 provides a breakdown of mean costs associated with the supported cCBT and guided self-help intervention. Table 2 provides total societal costs: health and social care costs which include the cost of the intervention and employment losses, out-of-pocket expenses and out-of-pocket savings. The costs have been updated from 2013/2014 to current values.

The mean cost of the guided self-help intervention was over twice that of supported cCBT (£404 v £164). From baseline to 12 months, total health-and social-care costs were almost identical between the three groups (supported cCBT=£1,758, guided self-help= £1,770 and waiting list=£1,834. In terms of total costs which includes employment losses, out-of-pocket expenses and out-of-pocket savings, over the 12-month period, guided self-help was the least expensive group (£2,382) compared with £2,404 for the cCBT group and £2,601 for the waiting list option.

¹ Lovell, K. Bower, P., Gellatly, J., Byford, S., Bee, P., McMillan, D., Arundel, C., Gilbody, S., Gega, L., Hardy, G., Reynolds, S., Barkham, M., Mottram, P., Lidbetter, N., Pedley, R., Molle, J., Peckham, E., Knopp-Hoffer, J., Price, O., Connell, J., Heslin, M., Foley, C., Plummer, G. and Roberts, C. (2017) Clinical effectiveness, cost-effectiveness and acceptability of low-intensity interventions in the management of obsessive-compulsive disorder: the Obsessive-Compulsive Treatment Efficacy randomised controlled Trial (OCTET). *Health Technology Assessment* (Winchester, England) 21(37).pp.1-132.

Table 1 Cost of supported cCBT and guided self-help

Cost component	Intervention mean cost	
	Supported cCBT	Guided self-help
Number of sessions attended	2.3	4.11
Total session minutes	30.2	142.9
Cost of materials (£)	£67	£5.80
Cost of training (£)	£20	£36
Cost of PWP contacts (£)	£76	£362
Total cost (£)	£164	£404

Table 2 Total societal costs between baseline and 3 months and between baseline and 12 months

Costs	Intervention					
	Supported cCBT		Guided self-help		Waiting list	
	Valid n	Mean cost £	Valid n	Mean cost £	Valid n	Mean cost £
Baseline to 3 months						
Health and social care costs	157	£564	158	£761	158	£468
Employment losses, out-of-pocket expenses and out-of-pocket savings.	157	£252		£227	158	£205
Total costs	157	£817	158	£989	158	£672
Baseline to 12 months						
Health and social care costs	157	£1,758	158	£1,770	158	£1,834
Employment losses, out-of-pocket expenses and out-of-pocket savings.	157	£646	158	£612	158	£767
Total costs	157	£2,404	158	£2,382	158	£2,601

8.7 The cost of diagnosis and early support in patients with cognitive decline

Average costs to health and social care of mild, moderate and severe dementia are estimated to be £24,400, £27,450 and £46,050, respectively, per person per year which includes one-off costs of £6,415 per person related to end-of-life care, diagnosis, and social care assessment at 2015 prices.¹

Research carried out by Pennington & colleagues (2016)² investigated the costs of supporting patients with suspected dementia, including assessment and support six months after diagnosis. The study is based on the costs incurred by 1,353 patients from 69 Memory Assessment Services (MAS) and the mean patient age was 78 years (range 42-98 years). These costs were estimated using 2013/14 sources of data and have been updated using the appropriate inflators.

Table 1 shows that slightly under half of all costs were attributed to assessment but across MAS, total monthly costs attributable to assessment activities varied from £2,138 to £141 which was driven primarily by the number of staff employed. Between 4-54% was attributed to post-diagnosis and the proportion attributed to follow-up varied from 6-7%.

Table 2 shows the costs of additional health and social care reported by carers after imputation of missing data and after excluding psychosocial support that may have been provided by MAS.

Table 1 Cost per new patient associated with Memory Assessment Services

	Mean (£)	Standard Deviation (£)	Median (£)
Assessment (including imaging) ^a	£960	£807	£791
Post diagnosis support	£456	£379	£385
Follow-up	£568	£531	£409
Total	£1,984	£130	£1,683

^a Costs include a proportion of administration, management and audit costs

Table 2 Cost of care and services received outside memory assessment services reported by carers at baseline,

	Baseline (£)			3 month follow-up			6-month follow-up		
	Mean	Median	Range	Mean	Median	Range	Mean	Median	Range
Health care	£64	£0	£0-£7,383	£32	£0	£0-£589	£63	£2	£0-956
Social care	£79	£0	£0-£3,849	£105	£0	£0-£6,218	£176	£0	£0-£8,248
Psychosocial support	£13	£0	£0-£1,572	£5	£0	£0-£385	£13	£0	£0-£770
Social security benefits	£143	£0	£0-£698	£149	£0	£0-£698	£190	£14	£0-£698
Total cost of formal care	£159	£1	£0-£11,835	£144	£1	£0-£6,879	£252	£21	£0-£9,060
Informal Care	£1,710	£1,621	£0-£4,619	£1,749	£1,540	£0-£4,564	£1,857	£1,539	£0-£4,619
Total societal cost	£1,850	£1,769	£0-£14,877	£1,874	£1,539	£0-£9,937	£2,087	£1,652	£0-£12,093

¹ Wittenberg, R., Knapp, M., Hu, B., Comas-Herrera, A., King, D., Rehill, A., Shi, C., Banerjee, S., Patel, A., Jagger, C. & Kingston, A. (2018) The costs of dementia in England, Research Article, *Geriatric Psychiatry*, DOI: 10.1002/gps.5113.

² Pennington, M., Gomes, M., Chrysanthaki, T., Hendriks, J., Wittenberg R., Knapp, M., Black, N. & Smith, S. (2016) The cost of diagnosis and early support in patients with cognitive decline, *Geriatric Psychiatry*, <https://doi.org/10.1002/gps.4641>.

II. COMMUNITY-BASED HEALTH CARE STAFF

9. Scientific and professional staff

The table overleaf provides the unit costs for community-based allied health professionals (bands 4-8) and replaces the individual schema previously found in this section. Each Agenda for Change (AfC) band can be matched to professionals using the AfC generic profiles: <http://www.nhsemployers.org/your-workforce/pay-and-reward/pay/job-evaluation/national-job-profiles>. Examples of roles by band are shown below and in more detail by job type in Chapter 18. Reference should also be made to the explanatory notes when interpreting the unit costs.

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

9. Scientific and professional staff

A Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change (AfC) bands 4-9 of the May 2018/April 2019 NHS staff earnings estimates for allied health professionals.¹ See NHS Terms and Conditions of Service Handbook for information on payment for unsocial hours.² See Section V for further information on pay scales. The Electronic Staff Records (ESR) system shows that the mean basic salary for all physiotherapists is £34,731; hospital occupational therapists, £33,442; speech and language therapists, £34,892; dietitians, £34,810.

B Salary oncosts

Employer's national insurance is included plus 14.38 per cent of salary for employer's contribution to superannuation.

C Qualification costs

See Section V for detailed information on qualifications for each category of scientific and professional staff. These have been calculated using the method described in Netten et al. (1998).³ Current cost information has been gathered from various sources (see Schema 18). To calculate the cost per hour including qualifications for each profession, the appropriate expected annual cost shown in Schema 18 should be divided by the number of working hours. This can then be added to the cost per working hour.

D Overheads

Taken from the 2013/2014 financial accounts for 10 community trusts. Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff. Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.

E Capital overheads

Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of office space for administration, and recreational and changing facilities.^{4,5}

F Travel

No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used.⁶

G Working time

Working hours for each AfC band have been calculated by deducting sickness absence days as reported for NHS staff groups⁷ and training/study days from 225 working days.

H Ratio of direct to patient-related time

See previous editions for time spent on patient-related activities. See also Section V for information on a PSSRU survey carried out in 2014/2015 providing estimates of time use for community staff.

I London multiplier and non-London multiplier

See information produced by NHS Employers⁸ and NHS Improvement⁹ for information on Inner and Outer London supplements and the market forces factor (MFF) which estimates the unavoidable cost differences between healthcare providers, based on their geographical location.

¹ NHS Digital (2018) *NHS staff earnings estimates, 12-month period from May 2018 – April 2019* (not publicly available), NHS Digital, Leeds.

² NHS Employers (2018) *NHS Terms and Conditions of Service Handbook*, NHS Employers, London. <http://www.nhsemployers.org/tchandbook> [accessed 25 September 2018].

³ 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.

⁴ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁵ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁶ NHS Employers (2017) *Mileage allowances – Section 17*, NHS Employers, <http://www.nhsemployers.org/your-workforce/pay-and-reward/agenda-for-change/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 25 September 2018].

⁷ NHS Digital, NHS sickness absence rates, January 2019 to March 2019 and Annual Summary 2010-11 to 2018-19, NHS Digital, London. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/january-2019-to-march-2019-and-annual-summary-2010-11-to-2018-19> [accessed 1 October 2019]

⁸ NHS Employers (2019) Annex 9: High cost area supplements, <https://www.nhsemployers.org/tchandbook/annex-4-to-10/annex-9-high-cost-area-supplements> [accessed 1 October 2019].

⁹ NHS Improvement (2019) 2019/20 payment reform proposals, <https://improvement.nhs.uk/resources/201920-payment-reform-proposals/>. [accessed 1 October 2019].

9. Scientific and professional staff

This table provides the annual and unit costs for community-based scientific and professional staff. See notes facing for assistance in interpreting each cost item. See Chapter 18 for examples of roles in each band. See also Excel database on the PSSRU website. **Please note that there are no staff on Bands 1-3 for this staff group.**

Refer to notes on facing page for references	Band 4	Band 5	Band 6	Band 7	Band 8a	Band 8b	Band 8c	Band 8d	Band 9
A Wages/salary	£22,256	£24,212	£32,686	£40,180	£47,987	£57,495	£67,818	£81,836	£100,075
B Salary oncosts	£5,109	£5,660	£8,048	£10,160	£12,360	£15,040	£17,362	£21,899	£27,039
C Qualification	See note	See note	See note	See note	See note	See note	See note	See note	See note
D Overheads									
Management, admin and estates staff	£6,704	£7,319	£9,980	£12,333	£14,785	£17,771	£20,869	£24,415	£31,143
Non-staff	£10,454	£11,411	£15,561	£19,230	£23,053	£27,708	£32,539	£39,627	£48,557
E Capital overheads	£3,092	£5,237	£5,237	£5,237	£5,237	£5,237	£5,237	£5,237	£5,237
F Travel	See note	See note	See note	See note	See note	See note	See note	See note	See note
G Working time	43.2 weeks (1,618 hours) per year, 37.5 hours per week	42.6 weeks (1,599 hours) per year, 37.5 hours per week	42.6 weeks (1,599 hours) per year, 37.5 hours per week	42.6 weeks (1,599 hours) per year, 37.5 hours per week	42.6 weeks (1,599 hours) per year, 37.5 hours per week	42.6 weeks (1,599 hours) per year, 37.5 hours per week	42.6 weeks (1,599 hours) per year, 37.5 hours per week	42.6 weeks (1,599 hours) per year, 37.5 hours per week	42.6 weeks (1,599 hours) per year, 37.5 hours per week
H Ratio of direct to indirect time	See note	See note	See note	See note	See note	See note	See note	See note	See note
London/non-London multipliers	See note	See note	See note	See note	See note	See note	See note	See note	See note
Unit costs available 2018/2019									
Cost per working hour	£29	£34	£45	£54	£65	£77	£90	£109	£133

10. Nurses, doctors and dentists

10.1 Nurses

10.2 Practice nurse

10.3a General practitioner - cost elements

10.3b General practitioner - unit costs

10.3c General practitioner - commentary

10.4 The cost of online consultations

10.5 Telephone triage

10.6 NHS dentist - Performer-only

10.7 Dentist - Providing-Performer

10.8 NHS dental charges

10.1. Nurses

A. Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change (AfC) bands 4-9 of the May 2018/April 2019 NHS staff earnings estimates for qualified nurses.¹ See NHS Terms and Conditions of Service Handbook for information on payment for unsocial hours.² See Section V for further information on pay scales. The Electronic Staff Records (ESR) system shows that the mean basic salary for a community nurses is £32,949.¹ See Section V for further information on pay scales.

B. Salary oncosts

Employer's national insurance is included, plus 14.38 per cent of salary for employer's contribution to superannuation.

C. Qualifications

Qualification costs have been calculated using the method described in Netten et al. (1998).³ Current cost information has been gathered from various sources (see Schema 18 for more details).

D. Overheads

Taken from the 2013/2014 financial accounts for ten community trusts. See 2015 edition of the Unit Costs of Health & Social Care for more information. Management and other non-care staff costs are 24.5 per cent of direct care salary costs and include administration and estates staff. Non-staff costs are 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.

E. Capital overheads

Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of office space for administration, and recreational and changing facilities.^{4,5}

F. Travel

No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used.⁶

G. Working time

Working hours for each AfC band have been calculated by deducting sickness absence days⁷ as reported for NHS staff groups and training/study days from 225 working days.

H. Ratio of direct to indirect time

Based on a study by Ball & Philippou (2014)⁸ on average Grade 5 community nurses spent 44 per cent of their time on direct care and a further 18 per cent of their time on care planning, assessment and co-ordination. For Grade 6 these figures were 34 per cent and 21 per cent and for Grade 7/8, 27 per cent and 22 per cent. See Ball & Philippou (2014)⁹ for more detail and for the breakdown of time for different AfC bands which has been used to calculate the cost of an hour of face-to-face time. Also see the McKinsey report,⁹ for comparative purposes.

¹ NHS Digital (2018) *NHS staff earnings estimates, 12-month period from May 2018 – April 2019* (not publicly available), NHS Digital, Leeds.

² NHS Employers (2018) *NHS Terms and Conditions of Service Handbook*, NHS Employers, London. <http://www.nhsemployers.org/tchandbook> [accessed 25 September 2018].

³ 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.

⁴ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁵ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁶ NHS Employers (2018) *Mileage allowances – Section 17*, NHS Employers, London. <http://nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 1 October 2018].

⁷ NHS Digital, NHS sickness absence rates, January 2019 to March 2019 and Annual Summary 2010-11 to 2018-19, NHS Digital, London. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/january-2019-to-march-2019-and-annual-summary-2010-11-to-2018-19> [accessed 1 October 2019].

⁸ Ball, J. & Philippou, J. with Pike, G. & Sethi, J., (2014) *Survey of district and community nurses in 2013*, Report to the Royal College of Nursing, King's College London.

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

10.1. Nurses

This table provides the annual and unit costs for qualified nurses. See notes facing for assistance in interpreting each cost item. See Chapter 18 for examples of roles in each band. Refer to notes on facing page for references. See also Excel database on the PSSRU website. **Please note that there are no staff on Bands 1-3 in this staff group.**

	Band 4	Band 5	Band 6	Band 7	Band 8a	Band 8b	Band 8c	Band 8d	Band 9
A Wages/salary	£20,628	£26,894	£33,411	£39,994	£47,176	£56,102	£65,739	£77,494	£92,329
B Salary oncosts	£4,650	£6,416	£8,253	£10,108	£12,132	£14,647	£17,363	£20,675	£24,856
C Qualification	See note	See note	See note	See note	See note	See note	See note	See note	See note
D Overheads									
Management, admin and estates staff	£6,193	£8,161	£10,208	£12,275	£14,530	£17,334	£20,360	£24,051	£28,710
Non-staff	£9,656	£12,725	£15,916	£19,139	£22,084	£26,386	£30,955	£36,481	£43,454
E Capital overheads	£1,553	£4,471	£4,471	£4,471	£4,471	£4,471	£4,471	£4,471	£4,471
F Travel	See note	See note	See note	See note	See note	See note	See note	See note	See note
G Working time	42.4 weeks (1,589 hours) per year, 37.5 hours per week	41.9 weeks (1,573 hours) per year, 37.5 hours per week	41.9 weeks (1,573 hours) per year, 37.5 hours per week	41.9 weeks (1,573 hours) per year, 37.5 hours per week	41.9 weeks (1,573 hours) per year, 37.5 hours per week	41.9 weeks (1,573 hours) per year, 37.5 hours per week	41.9 weeks (1,573 hours) per year, 37.5 hours per week	41.9 weeks (1,573 hours) per year, 37.5 hours per week	41.9 weeks (1,573 hours) per year, 37.5 hours per week
H Ratio of direct to indirect time	See note	See note	See note	See note	See note	See note	See note	See note	See note
Unit costs available 2018/2019									
Cost per working hour	£27	£37	£46	£55	£64	£76	£89	£104	£124
Cost per hour of patient-related work		£60	£84	£112	£131	-	-	-	-

10.2 Nurse (GP practice)

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£26,894 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 of the May 2018/April 2019 staff earnings estimates for nurses. ¹ See NHS terms and conditions of service handbook for information on payment for unsocial hours. ² See Section V for further information on pay scales.
B. Salary oncosts	£6,416 per year	Employer's national insurance is included, plus 14.38 per cent of salary for employer's contribution to superannuation.
C. Qualifications	£8,687 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). ³ Current cost information has been gathered from various sources (see Schema 18). See Schema 18 for more details.
D. Overheads		<p>Management and administration</p> <p>Office, general business and premises (including advertising and promotion)</p>
	£8,161 per year	No information available on management and administrative overheads for practice nurses. The same level of support has been assumed for practice nurses as for other NHS staff (24.5 per cent of direct care salary costs).
	£12,363 per year	No information available on overheads for a practice nurse. All information on office and general business expenses is drawn from the GP earnings and expenses report. ⁴ Office and general business, premises and other expenses calculated as the ratio of practice nurse salary costs to all GP employees' salary costs.
E. Capital overheads		Calculated as the ratio of GP practice nurse salary costs to net remuneration of GP salary and based on new-build and land requirements for a GP practitioner's suite and annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. ^{5,6}
F. Travel		No information available on average mileage covered per visit. From July 2014, NHS reimbursement has been based on a single rate for the first 3,500 miles travelled of 56p per mile, and a reduced rate thereafter of 20p per mile, irrespective of the type of car or fuel used. ⁷
Working time	41.9 weeks per year 37.5 hours per week	Unit costs are based on 1,573 hours per year: 225 working days minus sickness absence 8 and training/study days as reported for all NHS staff groups.
Ratio of direct to indirect time on: face-to-face contacts		No current information available. See previous editions of this volume for sources of information.
Duration of contact		No current information available. See previous editions of this volume for sources of information.
Patient contacts		No current information available. See previous editions of this volume for sources of information.
London multiplier		See information produced by NHS Employers ⁹ and NHS Improvement ¹⁰ for information on Inner and Outer London supplements and the market forces factor (MFF) which estimates the unavoidable cost differences between healthcare providers, based on their geographical location.
Unit costs available 2018/2019 (costs including qualifications given in brackets)		
£37 (£42) per hour		

¹ NHS Digital (2018) *NHS staff earnings estimates, 12-month period from May 2018 – April 2019* (not publicly available), NHS Digital, Leeds.

² NHS Employers (2018) *NHS Terms and Conditions of Service Handbook*, NHS Employers, London. <http://www.nhsemployers.org/tchandbook> [accessed 25 September 2018].

³ 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.

⁴ NHS Digital (2019) *GP earnings and expenses 2017/18*, NHS Digital, Leeds. <https://digital.nhs.uk/data-and-information/publications/statistical/gp-earnings-and-expenses-estimates> [accessed 18 September, 2019].

⁵ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁶ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁷ NHS Employers (2018) *Mileage allowances – Section 17*, NHS Employers, <http://www.nhsemployers.org/your-workforce/pay-and-reward/agenda-for-change/nhs-terms-and-conditions-of-service-handbook/mileage-allowances> [accessed 25 September 2018].

⁸ NHS Digital, NHS sickness absence rates, January 2019 to March 2019 and Annual Summary 2010-11 to 2018-19, NHS Digital, London. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/january-2019-to-march-2019-and-annual-summary-2010-11-to-2018-19> [accessed 1 October 2019].

⁹ NHS Employers (2019) Annex 9: High cost area supplements, <https://www.nhsemployers.org/tchandbook/annex-4-to-10/annex-9-high-cost-area-supplements> [accessed 1 October 2019].

¹⁰ NHS Improvement (2019) 2019/20 payment reform proposals, <https://improvement.nhs.uk/resources/201920-payment-reform-proposals/>. [accessed 1 October 2019].

10.3 General practitioner

10.3a General practitioner — cost elements

Costs and unit estimation	2018/2019 value	Notes (for further clarification see Commentary)
A. Net remuneration	£113,400 per year	Average income before tax for GPMS contractor GPs for England. ¹ This is an increase of 3.4 per cent on last year.
B. Practice expenses:		
Direct care staff	£27,712 per year	Ninety one per cent of FTE equivalent practitioners (excluding GP registrars and GP retainers) employed 0.62 FTE nurse (including practice nurses, advanced level nurses and extended role and specialist nurses includes salary and oncosts. ^{2,3}
Administrative and clerical staff	£34,252 per year	Each FTE equivalent practitioner (excluding GP registrars and GP retainers) employed 1.28 FTE administrative and clerical staff ^{1,2} , includes salary and oncosts.
Office and general business	£10,856 per year	All office and general business, premises and other expenses, including advertising, promotion and entertainment, are based on expenditure taken from the GP earnings and expenses report. ¹ Each GP employs 3.02 members of staff, including practice nurses, other patient care staff, plus administrators and clerical staff. ^{1,2}
Premises	£15,660 per year	Office and general business, premises, and other expenses calculated as the ratio of GP salary costs to all GP employees salary costs.
Other: includes advertising, promotion and entertainment	£17,053 per year	Based on information taken from the GP earnings and expenses report. ^{1,2}
Car and travel	£1,100 per year	Based on information taken from the GP earnings and expenses report. ^{1,2}
C. Qualifications	£42,219 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). ⁴ Current cost information has been provided by the Department of Health and Health Education England. ⁵
D. Ongoing training		No estimates available.
E. Capital costs:		
Premises	£16,081 per year	Based on new-build and land requirements for a GP practitioner suite. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years. ^{6,7}
Working time	42 weeks per year 41.4 hours per week	Based on information taken from the 9 th National GP Worklife Survey. ⁸ Respondents to this survey reported working an average of 41.8 hours per week and a mean number of 6.7 sessions.
Ratio of direct to indirect time:		
face-to-face time (excludes travel time)	1:0.64	Based on information taken from the 9 th National GP Worklife Survey, ⁸ direct patient care (surgeries, clinics, telephone consultations & home visits) took 61 per cent of a GP's time. Indirect patient care (referral letters, arranging admissions) absorbed 21 per cent of time. General administration (practice management etc.) formed 8.4 per cent of time, 3.7 per cent was spent on external meetings, with other activities (continuing education/development, research, teaching etc.) taking 5.9 per cent of a GP's time. No information was available on the percentage time allocated to out-of-surgery visits.
Patient-related time	1:0.22	
Consultations:		
Surgery	9.22 minutes	Based on a study carried out by Hobbs et al. (2016) of 398 English general practices, ⁹ the mean duration of a GP surgery consultation was 9.22 minutes. Based on research carried out by Elmore et al. (2016) ¹⁰ in which 440 video-recorded consultations were analysed from 13 primary care practices in England, the mean consultation length was 10.22 minutes.

Unit costs for 2018/2019 are given in table 10.3b

¹ NHS Digital (2019) *GP earnings and expenses 2017/18*, NHS Digital, Leeds. <https://digital.nhs.uk/data-and-information/publications/statistical/gp-earnings-and-expenses-estimates> [accessed 18 September, 2019].

² NHS Digital (2019) *General Practice Workforce, Final 31 March 2019, experimental statistics, England*, NHS Digital, <https://digital.nhs.uk/data-and-information/publications/statistical/general-and-personal-medical-services/final-31-march-2019-experimental-statistics> [18 September, 2019].

³ Based on personal correspondence with the Chairman of the East Midlands Regional Council, British Medical Association.

⁴ 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.

⁵ Personal communication with the Department of Health and Health Education England (HEE), 2015.

⁶ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁷ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁸ Gibson, J., Sutton, M., Spooner, S., & Checkland, K. (2018) *Ninth national GP worklife survey*, University of Manchester, Manchester. <http://blogs.ishtm.ac.uk/prucomm/files/2018/05/Ninth-National-GP-Worklife-Survey.pdf> [accessed 19 September 2018].

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

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

10.3b General practitioner — unit costs

Unit cost 2018/2019	Including direct care staff costs		Excluding direct care staff costs	
	With qualification costs	Without qualification costs	With qualification costs	Without qualification costs
Annual (including travel)	£278,759	£236,114	£243,648	£201,003
Annual (excluding travel)	£277,659	£235,014	£242,548	£199,903
Per hour of GMS activity ¹	£156	£132	£136	£112
Per hour of patient contact ¹	£255	£217	£223	£184
Per minute of patient contact ¹	£4.30	£3.60	£3.70	£3.10
Per surgery consultation lasting 9.22 minutes ¹	£39	£33	£34	£28
Per patient contact lasting 9.22 minutes (including carbon emissions (6 KgCO ₂ e) ² (carbon costs less than £1)	£39.23	£33.19	£34.20	£28.16
Prescription costs per consultation (net ingredient cost)	£33.10 ³			
Net ingredient cost including carbon emissions (17 KgCO ₂ e) ²	£34.19			
Prescription costs per consultation (actual cost)	£30.90 ³			
Actual cost including carbon emissions (16 KgCO ₂ e) ²	£32.12			

10.3c General practitioner — commentary

General note about GP expenditure. NHS England, the Government, and the British Medical Association's General Practitioners Committee reached agreement on changes to the GP contract in England for 2016/2017, which took effect from 1 April 2016: <https://www.england.nhs.uk/2016/02/gp-contract-16-17/>.

Allowing for time equivalence (FTE). NHS Digital has estimated that the number of FTE practitioners (excluding GP registrars and GP retainers) has reduced from 27,717 in 2018 to 27,232 FTE in 2019.⁴ FTE practice staff included 16,483 practice nurses (includes specialist nurses, advanced level nurses, extended role and specialist nurses), 12,976 direct patient care staff, and 67,036 administrative and clerical.² Assuming that administrative and clerical staff are shared equally between GP practitioners and direct patient care staff (including practice nurses), each FTE practitioner (n=56,691) employs 1.18 FTE administrative and clerical staff (n=67,036).

Direct care staff. On average in 2019, approximately 91 per cent of FTE equivalent practitioners (excluding GP registrars and GP retainers)⁵ employed 0.67 FTE nursing staff (16,483/27,232). All direct care staff have been costed at the same level as a band 6 GP practice nurse.

Qualifications. The equivalent annual cost of pre-registration and post-graduate medical education. The investment in training has been annuitised over the expected working life of the doctor.⁶ Post-graduate education costs have been calculated using information provided by the Department of Health and Health Education England.⁷ This includes the cost of the two-year foundation programme, two years on a General Practice Vocational Training Scheme (GP-VTS) and a further year as a general practice registrar.⁸

¹ Excludes travel.

² Costs provided by Richard Lomax, Sustainable Development Unit. Costs are <£1 for carbon emissions per patient contact lasting 9.22 minutes.

³ Personal communication with NHS Business Services Authority, 2019.

⁴ NHS Digital (2019) General Practice Workforce, England, Bulletin Tables March 2019. Experimental Statistics, <http://digital.nhs.uk/pubs/gpworkmay19>.

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

⁶ 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.

⁷ Personal communication with the Department of Health and Health Education England (HEE), 2015.

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

Environment costs. The cost of carbon emissions from patient and staff travel, electricity and gas for the building, along with embedded emissions in the goods and services used to provide the appointment. The embedded carbon in pharmaceuticals prescribed is shown separately and accounts for half of GP emissions. A carbon price of £44 per tonne of carbon dioxide emission has been used to value these externalities in line with the mix of traded and non-traded emissions and HM Treasury Green Book <https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal>.

Prescription costs. Prescription costs per consultation are £33.30 (net ingredient cost) and £31 (actual cost). The net ingredient cost (NIC) is the basic cost of the drug, while the actual cost is the NIC less the assumed average discount plus the container allowance, plus on-cost for appliance contractors. The NIC does not take account of dispensing costs, fees or prescription charges income. The prescription cost per consultation has been calculated by first dividing the number of prescriptions per GP by the number of consultations per GP (38,859/9,130)^{1,2} (no updated number of consultations per GP available) to give the number of prescriptions per GP consultation (4.25) and multiplying this by the actual cost per GP prescription (£7.30) and the NIC per GP prescription (£7.80). The total NIC and actual cost of GP prescriptions were £8,252,437,072 and £7,695,342,049 respectively.²

Activity. Hobbs and colleagues (2016)³ carried out a retrospective analysis of GP and nurse consultations of non-temporary patients registered at 398 English general practices between April 2007 and March 2014. They used data from electronic health records routinely entered in the Clinical Practice Research Datalink (CPRD), and linked CPRD data to national datasets. The dataset comprised 101,818,352 consultations and 20,626,297 person-years of observation. The mean duration of GP surgery consultations increased by 6.7 per cent, from 8.65 minutes to 9.22 minutes during that time.

¹ See news item issued by the RCGP Press office which says that GPs have an average of 41.5 patient contacts per day. (41.5 consultations per day x 220 working days per year x the number of FTE GP registrars and retainers; 27,773, gives a total of 253,567,490 GP consultations per annum). <http://www.rcgp.org.uk/about-us/news/2018/january/workload-in-general-practice-a-real-concern-says-rcgp.aspx>.

² Personal communication with NHS Business Services Authority, 2019.

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

10.4 The cost of online consultations

Information for this schema was taken from a 15 month observational study carried out in South West England by Hannah Edwards and colleagues¹ to evaluate an online consultation system in primary care. Thirty-six general practices covering 396,828 patients took part in the pilot and 7,472 patients completed an 'e-consultation'. Patient records (n=485) were abstracted for eight practices.

To contact their GP, a patient completed an online form describing the nature of their problem (hereafter referred to an 'e-consultation'). This was submitted to their practice, which committed to responding by the end of the next working day. The study calculated the average cost of all initial primary care actions in response to an e-consultation was £37.70. The cost was driven mainly by the time needed for a GP to triage the e-consultations (5 minutes assumed based on interviews with practice staff) and the relatively high proportion of e-consultations that resulted in a face-to-face or telephone consultation with a GP. When considering further follow-up actions taken in the subsequent 30 days, the average cost associated with an e-consultation increased to £47.10. Staff time was valued using data from the *Unit Costs of Health & Social Care 2015* and has been updated to current costs.

Table 1 shows that the cost needed for the GP to triage the e-consultations formed 32% of the total cost. Costs have been updated from 2015 to current values using the appropriate inflators.

Table 1 Average cost of all initial primary care actions in response to an e-consultation

All initial response actions	number	% all e-consultations (n=482)	Average cost per e-consultation
GP face-to-face appointments	186	39	£13.20
GP telephone calls	187	39	£8.00
Nurse face-to-face contacts	70	15	£1.80
Nurse telephone appointments	0	0	£0.00
Prescriptions	151	31	£1.30
Fit notes	31	6	£0.40
Routine referral letters	56	12	£0.70
2-week wait referral letters	10	2	£0.10
GP given advice by email	125	26	£0.00
Other GP actions	108	22	£0.00
Unknown GP actions	15	3	£0.00
GP-led triage cost	15	3	£12.10
Average cost of e-consultation			£37.60

¹ Edwards, H., Marques, E, Hollingworth, W., Horwood, J., Farr, M., Bernard, E., Salisbury, & Northstone, K. (2017) Use of a primary care online consultation system, by whom, when and why: evaluation of a pilot observational study in 36 general practices in South West England, *BMJ Open* 2017:7:e016901.

10.5 Telephone triage – GP-led and nurse-led

Telephone triage is increasingly used to manage workloads in primary care. A study carried out between 1 March 2011 and 31 March 2013 by John Campbell and colleagues^{1,2} aimed to assess the effectiveness and cost consequences of GP-led and nurse-led triage compared with usual care for requests for same-day appointments. Based on a review of 5,567 clinician contact forms for GP-led triage and 5,535 forms for nurse-led triage, the study found that mean clinician contact times for interventions were 4 minutes (SD 2.83) for GP triage and 6.56 minutes (SD 3.83) for nurse triage. Using national cost estimates (see schema 10.2 and 10.3), a detailed breakdown of the costs is provided below. Mean costs per intervention, including training, were £15.32 for GP-led triage and £7.80 (including computer decision support software) for nurse-led triage.

Costs and unit estimation	Nurse-led triage	Notes	GP-led triage	Notes
	2018/2019 value		2018/2019 value	
A. Wages/salary and oncosts	£33,310 per year	Based on the salary of a GP practice nurse (AfC band 5) plus oncosts (see 10.2)	£113,400	Average income before tax. See 10.3.
B. Overheads				
Staff overheads	£8,161 per year	See schema 10.2	£34,252	See schema 10.3 (excludes cost for direct care staff)
Non-staff	£12,363 per year	See schema 10.2	£44,669	
C. Qualifications	£8,992 per year	See schema 10.2	£42,645	See schema 10.3
D. Capital	£3,814 per year	See schema 10.2	£16,081	See schema 10.3
E. Other costs				
Staff training	£5,950 per year	Taken from Table 25 ² and updated using the HS pay and prices inflator	£3,315	Taken from Table 25 ² and updated using the HS pay and prices inflator
Computer decision support software	£8,242 per year			
Working time	42 weeks per year 37.5 hours per week	Based on 1,573 hours per year	44 weeks per year 41.7 hours per week	Based on 1,791 hours per year
Ratio of direct to indirect time on: face-to-face contact	1:0.30	See schema 10.2	1:0.61	See schema 10.3
Average time per intervention (minutes)	6.56 (SD 3.83)	See Table 23 ²	4 (SD 2.83)	See table 23 ²
Unit costs available 2018/19				
Total annual costs excluding Other costs (including other costs)	£66,639 (£80,458)		£251,047 (£254,362))	
Cost per hour of face-to-face contact excluding Other costs (including set-up costs)	£55 (£72)		£230 (£233)	
Cost per intervention excluding Other costs (including other costs)	£6.00 (£7.80)		£15.32 (£15.52)	

¹ Campbell, J., Fletcher, E., Britten, N., Green, C., Holt, T., Lattimer, V., Richards, D., Richards, S., Salisbury, C., Calitri, R., Bowyer, V., Chaplin, K., Kandiyali, R., Murdoch, J., Roscoe, J., Varley, A., Warren, F., & Taylor, R. (2014) Telephone triage for management of same-day consultation requests in general practice (the ESTEEM trial): a cluster-randomised controlled trial and cost-consequence analysis, *The Lancet*,. Doi: 10.1016/S0140-6736(14)61058-8 [accessed 4 November 2015]

² Campbell, J., Fletcher, E., Britten, N., Green, C., Holt, V., Lattimer, V., Richards, D., Richards, S., Salisbury, C., Taylor, R., Calitri, R., Bowyer, V., Chaplin, K., Kandiyali, R., Murdoch, J., Price, L., Roscoe, J., Varley, A. & Warren, F. (2015) The clinical effectiveness and cost-effectiveness of telephone triage for managing same-day consultation requests in general practice: a cluster randomised controlled trial comparing general practitioner-led management systems with usual care (the ESTEEN trial), *Health Technology Assessment*, 19,13, DOI 10.3310/hta 19130.

10.6 NHS dentist – Performer-Only

A Performer-Only dentist is a qualified dentist who works in a Providing-Performer practice (eg. a local dental practice). They are sometimes referred to as Associates.¹ In 2015, a survey of dentists carried out by PSSRU in collaboration with the General Dental Council provided information to estimate practice staff overheads and equipment used by dentists working all or some of the time with NHS patients. In total, responses were received from 251 practices with some or all NHS activity. See article in *Units Costs of Health & Social Care 2017* for more information. The costs below apply only to Performer-Only dentists with registered NHS activity. Dentists who performed only private dentistry have been excluded (n=50). Values (except remuneration) have been uprated using the Health Services Inflation.

Costs and unit estimation	2018/2019 value	Notes
A. Net remuneration	£59,700 per year	This is the average taxable income (average gross earnings less average total expenses) for self-employed primary care Performer-Only dentists in 2017/2018. ² It has not been possible to identify an inflator to provide estimated net remuneration for 2018/2019.
B. Practice expenses: Direct care staff	£57,879 per year	Employee expenses are taken from the <i>Dental Earnings and Expenses</i> report ² . All office and general business, premises and other expenses including advertising promotion and entertainment are based on expenditure taken from the <i>Dental Earnings and Expenses</i> report ² .
Office and general business	£5,053 per year	All office and general business, premises and other expenses including advertising promotion and entertainment are based on expenditure taken from the <i>Dental Earnings and Expenses</i> report. ²
Premises	£3,436 per year	Includes insurance, repairs, maintenance, rent and utilities.
Car and travel	£909 per year	
Other	£25,692 per year	Includes a variety of expenses, including laboratory costs, materials costs, advertising, promotion and entertainment costs.
C. Qualifications	No costs available	See http://www.gdc-uk.org/Dentalprofessionals/Education/Pages/Dentist-qualifications.aspx .
D. Ongoing training	No costs available	See https://www.gdc-uk.org/professionals/cpd .
E. Capital costs		Assumed to be included as rent (see above). Based on the new-build and land requirements of a dentist surgery, but adjusted to reflect shared use of both treatment and non-treatment space, annuitised capital costs would be £8,617 per annum. ^{3,4}
F. Equipment costs	£ 7,262 per year	Total equipment costs (e.g. dentist chairs, cabinetry and all dental technology) per practice with all or some NHS activity was valued at £60,417 per FTE dentist. Costs have been annuitised over ten years as this was the most frequently-cited replacement time.
Working time	42.9 weeks per year 35.7 hours per week.	The average total number of weekly hours worked by Performer-Only dentists in 2017/2018 was 35.7. ⁵ The average total number of weekly NHS hours worked was 25.9. On average, dentists took 5 days of sickness leave and 4.5 weeks annual leave. Unit costs are based on 1,535 hours. ⁵
Ratio of direct to indirect time: Clinical time	1:0.27	Based on information taken from the <i>Dental working hours</i> survey, Performer-Only dentists spent 78.5 per cent of their working time on clinical activities.
Unit costs available 2018/2019		
£104 per hour; £133 per hour of patient contact, £105 per hour (with 22 kgCO ₂ e) ⁶ ; £135 per hour of patient contact (with 28 kgCO ₂ e).		

¹ NHS Digital (2019) *A guide to NHS dental publications*, NHS Digital, Leeds. <https://files.digital.nhs.uk/AD/73DD0A/nhs-dent-stat-eng-18-19-anx4-gui.pdf> [accessed 25 September 2019].

² NHS Digital (2019) *Dental earnings and expenses estimates, England and Wales, Time Series*, NHS Digital, Leeds. <https://digital.nhs.uk/data-and-information/publications/statistical/dental-earnings-and-expenses-estimates/2017-18> [accessed 18 September 2019].

³ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁴ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁵ NHS Digital (2018) *Dental Working Hours: Working Patterns, Motivation and Morale 2016/17 and 2017/18*, NHS Digital, Leeds. <https://files.digital.nhs.uk/D5/AB5837/Dental-Working-Hours-2016-17-and-2017-18-Working-Patterns-Motivation-and-Morale-Report.pdf> [accessed 25 September 2018]. NB. no statistics for 2018-19 available at the time of producing this report.

⁶ Costs provided by Richard Lomax, Sustainable Development Unit.

10.7 Dentist – Providing-Performer

The costs below relate to a Providing-Performer, which is a dentist who holds a health service contract and who also acts as a Performer, delivering dental services themselves.¹ In 2015, a survey of dentists carried out by PSSRU in collaboration with the General Dental Council provided information to estimate practice staff overheads and equipment used by dentists working all or some of the time with NHS patients. In total, responses were received from 251 practices with some or all NHS activity. See article in *Unit Costs of Health & Social Care 2017* for more information. The costs below apply only to Performer-Only dentists with registered NHS activity. Dentists who performed only private dentistry have been excluded. Values (except remuneration) have been updated using the Health Services Inflation.

Costs and unit estimation	2018/2019 value	Notes
A. Net remuneration	£118,000 per year	This is the average taxable income of self-employed primary care Providing-Performer dentists in 2017/2018. ² It has not been possible to agree an inflation to provide estimated net remuneration for 2018/2019.
B. Practice expenses:		
Employee expenses	£57,879 per year	As salary expenses for Performer-Only dentists are declared as an expense by Providing-Performer dentists, ² to avoid double-counting, employee expenses have been calculated using the PSSRU survey. This found that on average each FTE dentist (carrying out some or all NHS activity) employs 1.43 FTE of a dental nurse, 0.17 FTE of a hygienist/dental therapist, 0.23 FTE of a practice manager (AFC band 6) and 0.50 FTE of 'other' staff (AFC band 2, e.g. receptionist, dental technician, cleaner).
Office and general business expenses	£7,596 per year	All office and general business, premises and other expenses including advertising promotion and entertainment are based on expenditure taken from the <i>Dental Earnings and Expenses</i> report and updated using the Health Services Inflation. ²
Premises	£7,908 per year	Includes insurance, repairs, maintenance, rent and utilities.
Car and travel	£1,920 per year	
Other	£46,250 per year	Includes a variety of expenses, including laboratory costs, materials costs, advertising, promotion and entertainment costs, which have been divided equally between the dental staff (dentists and nurses/hygienists). ²
C. Qualifications	No costs available	See http://www.gdc-uk.org/Dentalprofessionals/Education/Pages/Dentist-qualifications.aspx .
D. Ongoing training	No costs available	See https://www.gdc-uk.org/professionals/cpd .
E. Capital costs		Assumed to be included as rent (see above). Based on the new-build and land requirements of a dentist surgery, but adjusted to reflect shared use of both treatment and non-treatment space, annuitised capital costs would be £8,617 per annum. ^{3,4}
F. Equipment costs	£7,262 per year	Total equipment costs (e.g. dentist chairs, cabinetry and all dental technology) per practice with all or some NHS activity was valued at £60,417 per FTE dentist. Costs have been annuitised to reflect that ten years was the most frequently-cited replacement time.
Working time	43 weeks per year 41.3 hours per week.	The average total number of weekly hours worked by Providing-Performer dentists in 2017/2018 was 41.3, with 25.5 hours devoted to NHS work. On average dentists took 4.9 days of sickness leave and 4.4 weeks annual leave. Unit costs are based on 1,777 hours. ⁴
Ratio of direct to indirect time: Clinical time	1:0.41	Based on information taken from the <i>Dental working hours survey</i> , ⁴ Providing-Performer dentists spent 70.7 per cent of their working time on clinical activities.
Unit costs available 2018/2019		
£139 per hour; £197 per hour of patient contact; £141 per hour (with 29 kgCO ₂ e) ⁵ ; £200 per hour of patient contact (with 42 kgCO ₂ e). ⁵		

¹ NHS Digital (2019) *A guide to NHS dental publications*, NHS Digital, Leeds. <https://files.digital.nhs.uk/AD/73DD0A/nhs-dent-stat-eng-18-19-anx4-gui.pdf> [accessed 25 September 2019].

² NHS Digital (2019) *Dental earnings and expenses estimates, England and Wales, Time Series*, NHS Digital, Leeds. <https://digital.nhs.uk/data-and-information/publications/statistical/dental-earnings-and-expenses-estimates/2017-18> [accessed 18 September 2019].

³ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁴ NHS Digital (2018) *Dental working hours: Working Patterns, Motivation and Morale 2016/17 and 2017/18*, NHS Digital, Leeds. <https://files.digital.nhs.uk/D5/AB5837/Dental-Working-Hours-2016-17-and-2017-18-Working-Patterns-Motivation-and-Morale-Report.pdf> [accessed 25 September 2018]. NB. no statistics available for 2018-19 at the time of producing this report.

⁵ Costs provided by Richard Lomax, Sustainable Development Unit.

10.8 NHS dental charges

Paying adults are charged according to the treatment band. The table below shows the NHS dental charges applicable to paying adults from 1 April 2019, by treatment band.

Treatment Band	Charges from 1 April 2019	
Emergency dental treatment	£21.60	This covers emergency care in a primary care NHS dental practice such as pain relief or a temporary filling.
Band 1	£21.60	Examination, diagnosis (including x-rays), advice on how to prevent future problems, a scale and polish if needed, and application of fluoride varnish or fissure sealant.
Band 2	£59.10	This covers everything listed in Band 1 above, plus any further treatment such as fillings, root canal work or removal of teeth.
Band 3	£256.50	This covers everything listed in Bands 1 and 2 above, plus crowns, dentures and bridges.

See: <https://www.nhs.uk/using-the-nhs/nhs-services/dentists/understanding-nhs-dental-charges/> for further information on NHS dental charges.

III. COMMUNITY-BASED SOCIAL CARE

11. Social care staff and services

11.1 Social worker (adult services)

11.2 Social worker (children's services)

11.3 Social work assistant

11.4 Community occupational therapist (local authority)

11.5 Home care worker

11.6 Home care manager

11.7 Support and outreach worker

11.8 Peer intern

11.9 Time banks

11.1 Social worker (adult services)

Costs and unit estimation	2018/2019 value	Notes
A. Salary	£34,748 per year	Information taken from the National Minimum Data Set for Social Care 2019 ¹ showed that the mean basic salary, based on the weighted mean annual salary for a local authority and independent sector social worker working in adult services was £34,748.
B. Salary oncosts	£9,540 per year	Employer's national insurance contribution is included, plus 17 per cent of salary for employer's contribution to superannuation. ²
C. Qualifications	£9,469 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). ³ Current cost information is drawn from research carried out by Curtis et al. (2011). ⁴
D. Ongoing training		The General Social Care Council sets out a requirement that all social workers, as a condition of their three-yearly renewal of registration, should engage in development activity to meet a 'post registration teaching and learning' requirement of 15 days or 90 hours. ⁵ No costs are available.
E. Overheads		
Direct overheads	£12,843 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	£7,086 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 resources departments. ⁶
F. Capital overheads	£3,191 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. ^{7,8} Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
G. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . ⁹
Working time	40.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. ⁹ Ten days for study/training and 8.7 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. ¹⁰ Unit costs are based on 1,513 hours per year.
Ratios of direct to indirect time on: Client-related work		No current information available on client-related activity. See previous editions of this publication for sources of information.
Duration of visit		It is not possible to estimate a cost per visit as there is no information available on the number or duration of visits.
London multiplier	1.19 x A	Allows for the higher costs associated with London compared to the national average cost. ¹
Non-London multiplier	0.96 x A	Allows for the lower costs associated with working outside London compared to the national average cost. ¹
Unit costs available 2017/2018 (costs including qualifications given in brackets)		
£45 (£51) per hour		

¹ Skills for Care (2019) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 3 October 2019].

² Local Government Pension Scheme Advisory Board (2017) *Fund Valuations 2016*, LGPS Advisory Board, London. <http://lgpsboard.org/index.php/schemedata> [accessed 12 November 2017].

³ 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.

⁴ Curtis, L. Moriarty, J. & Netten, A. (2011) The costs of qualifying a social worker, *British Journal of Social Work*, doi:10.1093/bjsw/bcr113. [http://bjsw.oxfordjournals.org/content/early/2011/08/22/bjsw.bcr113.short?rss=1/](http://bjsw.oxfordjournals.org/content/early/2011/08/22/bjsw.bcr113.short?rss=1) [accessed 26 September 2013].

⁵ British Association of Social Workers (2011) *Social work careers*, The British Association of Social Workers, www.basw.co.uk/social-work-careers/ [accessed 9 October 2013].

⁶ 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.

⁷ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁸ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁹ Local Government Employers (2019) *Green Book: National Agreement on pay and conditions of service*, Local Government Association, London. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government> [accessed 9 October 2019].

¹⁰ Local Government Association (2018) *Local government workforce survey 2016/17*, Local Government Association, London.

<https://www.local.gov.uk/sites/default/files/documents/LG%20Workforce%20Survey%202016-17%20-%20report%20final%2020180718.pdf> [accessed 20 October 2018].

11.2 Social worker (children's services)

Costs and unit estimation	2018/2019 value	Notes
A. Salary	£34,748 per year	Information taken from the National Minimum Data Set for Social Care 2019 ¹ showed that the mean basic salary for a social worker, based on the weighted mean annual salary for a local authority and independent sector social worker, working in children's services was £34,748.
B. Salary oncosts	£9,570 per year	Employer's national insurance contribution is included, plus 17 per cent of salary for employer's contribution to superannuation. ²
C. Qualifications	£9,469 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). ³ Current cost information is drawn from research carried out by Curtis et al. (2011). ⁴
D. Ongoing training		The General Social Care Council sets out a requirement that all social workers, as a condition of their three-yearly renewal of registration, should engage in development activity to meet a 'post registration teaching and learning' requirement of 15 days or 90 hours. ⁵ No costs are available.
E. Overheads		
Direct overheads	£12,843 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	£7,086 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 resources departments. ⁶
F. Capital overheads	£3,191 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. ^{7,8} Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
G. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . ⁹
Working time	41.4 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 6.3 days sickness based on the Children's Social Work workforce statistics for England. ¹⁰ Unit costs are based on 1,530 hours per year.
Caseload	17.4	Average caseload per children and family social worker. ¹¹
Ratios of direct to indirect time on: Client-related work		No current information available on client-related activity. See previous editions of this publication for sources of information.
London multiplier	1.19 x A	Allows for the higher costs associated with London compared to the national average cost. ¹
Non-London multiplier		
Unit costs available 2018/2019 (costs including qualifications given in brackets)		
£44 (£50) per hour; Cost per case £3,785		

¹ Skills for Care (2019) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 3 October 2019].

² Local Government Pension Scheme Advisory Board (2017) *Fund Valuations 2016*, LGPS Advisory Board, London. <http://lgpsboard.org/index.php/schemedata> [accessed 12 November 2017].

³ 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.

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

⁵ British Association of Social Workers (2011) *Social Work Careers*, The British Association of Social Workers <http://www.basw.co.uk/social-work-careers/> [accessed 9 October 2013].

⁶ 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.

⁷ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁸ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁹ Local Government Employers (2019) *Green Book: National Agreement on pay and conditions of service*, Local Government Association, London. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government> [accessed 9 October 2019].

¹⁰ Department for Education (2019) Experimental statistics: Children and family social work workforce in England, year ending 30 September 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/681546/SFR09-2018_Main_Text.pdf [accessed 10 September 2019].

11.3 Social work assistant

Costs and unit estimation	2018/2019 value	Notes
A. Salary	£25,238 per year	The mean basic salary of a social work assistant was £22,715 in 2012/13 ¹ . As no new salary estimates are available, this has been inflated to reflect changes in pay for social workers as reported in this volume.
B. Salary oncosts	£6,611 per year	Employer's national insurance contribution is included, plus 17 per cent of salary for employer's contribution to superannuation. ²
C. Overheads		
Direct overheads	£9,236 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 were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. ³
Indirect overheads	£5,096 per year	
D. Capital overheads	£3,191 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. ^{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.
E. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . ⁶
Working time	40.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 6.3 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities ⁷ Unit costs are based on 1,513 hours per year.
Ratios of direct to indirect time on: Client-related work		No current information is available about the proportion of social work assistant time spent on client-related outputs. See previous editions of this volume for sources of information.
London multiplier	1.16 x A	Allows for the higher costs associated with London compared to the national average cost. ¹
Non-London multiplier		Allows for the lower costs associated with working outside London compared to the national average cost.
Unit costs available 2018/2019		
£33 per hour.		

¹ Local Government Association Analysis and Research (2012) *Local Government Earnings Survey 2011/2012*, Local Government Association, London.

² Local Government Pension Scheme Advisory Board (2017) *Fund Valuations 2016*, LGPS Advisory Board, London.
<http://lgpsboard.org/index.php/schemedata> [accessed 12 November 2017].

³ 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.

⁴ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*,
<https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁵ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁶ Local Government Employers (2019) *Green Book: National Agreement on pay and conditions of service*, Local Government Association, London.
<https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government> [accessed 9 October 2019].

⁷ Department for Education (2019) Experimental statistics: Children and family social work workforce in England, year ending 30 September 2018.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/681546/SFR09-2018_Main_Text.pdf [accessed 10 September 2019].

11.4 Community occupational therapist (local authority)

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£34,436 per year	Information taken from the National Minimum Data Set for Social Care 2019 ¹ showed that the mean basic salary for an occupational therapist, based on the weighted mean annual salary for a local authority and independent sector occupational therapist, was £34,436.
B. Salary oncosts	£9,444 per year	Employer's national insurance contribution is included, plus 17 per cent of salary for employer's contribution to superannuation. ²
C. Qualifications	£5,454 per year	Qualification costs have been calculated using the method described in Netten et al. (1998). ³ Current cost information has been gathered from various sources (see Schema 18).
D. Overheads		
Direct overheads	£12,725 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. ⁵
Indirect overheads	£7,021 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 resources departments. ⁴
E. Capital overheads	£3,191 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. ^{5,6} Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
F. Working time	40.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.7 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. ⁷ Unit costs are based on 1,513 hours per year.
Ratio of direct to indirect time on: Client-related work		No current information is available on the proportion of time spent with clients. See previous editions of this volume for sources of information.
London multiplier	1.09 x A	Allows for the higher costs associated with London compared to the national average cost. ¹
Non-London multiplier		
Unit costs available 2018/2019 (costs including training given in brackets)		
£44 (£48) per hour.		

¹ Skills for Care (2019) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 3 October 2019].

² Local Government Pension Scheme Advisory Board (2017) *Fund Valuations 2016*, LGPS Advisory Board, London. <http://lgpsboard.org/index.php/schemedata> [accessed 12 November 2017].

³ 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.

⁴ Based on information taken from Selwyn et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

⁵ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁶ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁷ Local Government Association (2018) *Local government workforce survey 2016/17*, Local Government Association, London. <https://www.local.gov.uk/sites/default/files/documents/LG%20Workforce%20Survey%202016-17%20-%20report%20final%2020180718.pdf> [accessed 20 October 2018].

11.5 Home care worker

This table provides information on the costs of a home care worker. Salary information is taken from the National Minimum Dataset for Social Care (Skills for Care, 2019).¹ The ASC-FR return currently provides two rates for home care: one for the hourly rate of in-house home care provision (£32.05); and one for the average hourly rate paid to external providers of home care services (£16.86).² NHS Digital do not analyse the rate by primary support reason or age group. See the UKHCA Costing Model designed to assist any provider in the calculation of a fair price for social care services

<https://www.ukhca.co.uk/CostingModel/default.aspx> and <https://www.gov.uk/government/publications/care-homes-market-study-summary-of-final-report/care-homes-market-study-summary-of-final-report> for the most recent care homes market study. The latest UK domiciliary care market report is available on <https://store.mintel.com/uk-domiciliary-care-market-report>.

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£16,334 per year	Based on the weighted mean annual salary for a local authority and independent sector care worker for 2018/2019. The weighted mean hourly pay rate was £8.20. A senior care worker would earn £17,781 per year (£9.00 gross hourly salary). ¹
B. Salary oncosts	£3,868 per year	Employer's national insurance contribution is included, plus 17 per cent of salary for employer's contribution to superannuation. ³
C. Overheads		
Direct overheads	£5,859 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. ⁴
Indirect overheads	£3,232 per hour	Indirect overheads were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resource departments. ⁴
D. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . ⁵
Working time	41.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Five days for study/training and 8.7 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. ^{6,7} Unit costs are based on 1,551 hours per year.
Ratios of direct to indirect time on: Face-to-face contact	1:0.25	No current information available on the proportion of time spent with clients. It is likely, however, that if 19 per cent of a home care worker's time is spent travelling (see duration of visit below), ⁶ the proportion of total time spent with clients is approximately 80 per cent.
Duration of visit		Sixty-three per cent of local authority commissioned home care visits lasted 16-30 minutes. Ten per cent of visits lasted under 15 minutes, and 16 per cent were longer than 46 minutes. ⁷
Service use	7 hours per week (364 hours per year)	In England, 673,000 people used domiciliary care in 2014/15, and 249 million hours of domiciliary care were delivered. On average, individual service users received 370 hours of home care in 2014/2015 (7.1 hours per week). The average local authority-commissioned home care per person per week was 12.8 hours. ⁷
Price multipliers for unsocial hours ³	1.00 1.086 1.035 1.093 1.036 1.031 1.039	Day-time weekly Day-time weekend Night-time weekday for an independent sector home care hour Night-time weekend provided for private purchasers Day-time weekend Night-time weekday for an independent sector home care hour Night-time weekend provided for social services
Unit costs available 2018/2019		
Based on the price multipliers for independent sector home care provided for private purchasers: £23 per weekday hour (£24 per day-time weekend, £23 per night-time weekday, £25 per night-time weekend). Face-to-face: £28 per hour weekday (£31 per day-time weekend, £29 per night-time weekday, £31 per night-time weekend).		
Based on the price multipliers for independent sector home care provided for social services: £23 per weekday hour (£23 per day-time weekend, £23 per night-time weekday, £23 per night-time weekend). Face-to-face: £28 per hour weekday (£29 per day-time weekend, £29 per night-time weekday, £29 per night-time weekend).		

¹ Skills for Care (2019) National Minimum Dataset-Social Care online, <https://www.nmds-sc-online.org.uk/> [accessed 3 October 2019].

² Calculated using NHS Digital (2019) *Adult Social Care Finance Return (ASC-FR) (reference data table T49)*, NHS Digital 2017/18, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19> [accessed 30 October, 2019].

³ Local Government Pension Scheme Advisory Board (2017) *Fund Valuations 2016*, LGPS Advisory Board, London. <http://lgpsboard.org/index.php/schemedata> [accessed 12 November 2017].

⁴ 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.

⁵ Local Government Employers (2019) *Green Book: National Agreement on pay and conditions of service*, Local Government Association, London. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government> [accessed 9 October 2019].

⁶ United Kingdom Home Care Association (UKHCA) (2015) *A Minimum Price for HomeCare*. http://www.ukhca.co.uk/pdfs/AMPFHC_150719.pdf [accessed 20 October 2016].

⁷ United Kingdom Home Care Association (UKHCA) (2016) *An overview of the domiciliary care sector in the United Kingdom*, Home Care Association Limited, London. <http://www.ukhca.co.uk/pdfs/MarketOverviewV352016FINAL.pdf> [accessed 20 October 2016].

11.6 Home care manager

Salary information in this table is taken from the National Minimum Dataset for Social Care (NMDS-SC)¹ and has been based on the salary of a registered manager.

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£30,891 per year	Based on the weighted mean annual salary for a local authority and independent sector registered manager for 2018/2019. The weighted mean hourly pay rate was £15. ¹
B. Salary oncosts	£8,352 per year	Employer's national insurance contribution is included, plus 17 per cent of salary for employer's contribution to superannuation. ²
C. Qualifications		No information available.
D. Overheads:		
Direct	£11,381 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.
Indirect	£6,279 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 resources departments. ³
E. Capital overheads	£3,191 per year	Based on the new-build and land requirements of a local office and shared facilities for waiting, interviews and clerical support. ^{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.
F. Travel		No information available on average mileage covered per visit. For information see <i>Green Book: national agreement on pay and conditions of service</i> . ⁶
Working time	40.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Ten days for study/training and 8.7 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. ⁷ Unit costs are based on 1,513 hours per year.
Ratios of direct to indirect time on:		No current information is available on the proportion of time spent with clients.
Client-related work		See previous editions of this volume for sources of information.
London multiplier	1.25 x A	Allows for the higher costs associated with London compared to the national average cost. ¹
Non-London multiplier		Allows for the lower costs associated with working outside London compared to the national average cost.
Unit costs available 2018/2019		
£40 per hour.		

¹ Skills for Care (2019) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 3 October 2019].

² Local Government Pension Scheme Advisory Board (2017) *Fund Valuations 2016*, LGPS Advisory Board, London. <http://lgpsboard.org/index.php/schemedata> [accessed 12 November 2017].

³ 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.

⁴ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁵ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁶ Local Government Employers (2019) *Green Book: National Agreement on pay and conditions of service*, Local Government Association, London. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government> [accessed 9 October 2019].

⁷ Local Government Association (2018) *Local government workforce survey 2016/17*, Local Government Association, London. <https://www.local.gov.uk/sites/default/files/documents/LG%20Workforce%20Survey%202016-17%20-%20report%20final%2020180718.pdf> [accessed 20 October 2018].

11.7 Support and outreach worker

Community outreach workers act as a liaison between community programmes, services and community members. Their focus might be on health or education, and they often assist a particular ethnic group or segment of the population, such as older people. The job description varies according to the organisation and responsibilities.¹

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£18,368 per year	Information taken from the National Minimum Data Set for Social Care 2019 ² showed that the mean basic salary for a support and outreach worker, based on the weighted mean annual salary for a local authority and independent sector outreach worker, was £18,368.
B. Salary oncosts	£4,495 per year	Employer's national insurance contribution is included, plus 17 per cent of salary for employer's contribution to superannuation. ³
C. Qualifications		
D. Overheads		
Direct overheads	£6,630 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 were 16 per cent of direct care salary costs. They include general management and support services such as finance and human resources departments. ⁴
Indirect overheads	£3,658 per year	
E. Capital overheads	£3,191 per year	Based on the new-build and land requirements for a local authority office and shared facilities for waiting, interviews and clerical support. ^{5,6} Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.
F. Working time	40.9 weeks per year 37 hours per week	Includes 29 days annual leave and 8 statutory leave days. Five days for study/training and 8.7 days sickness leave have been assumed, based on the median average sickness absence level in England for all authorities. ⁷ Unit costs are based on 1,513 hours per year.
Ratio of direct to indirect time on: Client-related work		No current information is available on the proportion of time spent with clients. See previous editions of this volume for sources of information.
London multiplier	1.09 x A	Allows for the higher costs associated with London compared to the national average cost. ²
Non-London multiplier		Allows for the lower costs associated with working outside London compared to the national average cost.
Unit costs available 2018/2019 (costs including training given in brackets)		
£24 per hour.		

¹ Career Trend (2017) What is the job description of a community outreach worker? <https://careertrend.com/about-4618849-job-description-community-outreach-worker.html> [17 October 2018].

² Skills for Care (2019) *National Minimum Dataset-Social Care online*, <https://www.nmds-sc-online.org.uk/> [accessed 3 October 2019].

³ Local Government Pension Scheme Advisory Board (2017) *Fund Valuations 2016*, LGPS Advisory Board, London. <http://lgpsboard.org/index.php/schemedata> [accessed 12 November 2017].

⁴ Based on information taken from Selwyn et al. (2009) *Adoption and the inter-agency fee*, University of Bristol, Bristol; and Glendinning et al. (2010) *Home care re-ablement services: investigating the longer-term impacts*, Final Report, University of York, PSSRU Kent, Department of Health, London.

⁵ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁶ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁷ Local Government Association (2018) *Local government workforce survey 2016/17*, Local Government Association, London. <https://www.local.gov.uk/sites/default/files/documents/LG%20Workforce%20Survey%202016-17%20-%20report%20final%2020180718.pdf> [accessed 20 October 2018].

11.8 Peer intern

Information for this schema has been drawn from an evaluation of the Lambeth Living Well Network Hub (http://lambethcollaborative.org.uk/wp-content/uploads/2018/03/LWN-Hub-Year-Two-Evaluation-Report-December-2017_04.01.18.pdf) an innovative primary care mental health service that was developed to reduce the flow of people into secondary care by providing personalised networked support to people in Lambeth. It acts as the front door to mental health services and offers a shared care approach with general practitioners to support users of mental health and social care services at an earlier point (<http://www.lambethccg.nhs.uk/our-plans/mental-health-services/lambeth-living-well-network/Pages/default.aspx>).

The peer intern is a new and developing role with a very broad remit, from providing support throughout a person's care journey with the Hub to contributing in daily operations. They build on skills and knowledge to support other people with mental health issues whilst being supported themselves to develop the required skills to gain meaningful employment experience. This hub employs around 60 fte members of staff.

The costs for this schema have been prepared in collaboration with Alexandra Melaugh¹ and Andy Healey of King's College, London and Mahir Demir and Helena Demetriou of the LWN Hub. Costs have been updated using PSS Inflaters.

Costs and unit estimation	2018/2019 value	Notes
A. Wages/salary	£7,679 per year	Based on information taken from the Lambeth Living Well Network accounts. The Peer Interns in the study worked on average 15 hours per week . The FTE salary is £19,403.
B. Salary oncosts	£1,238 per year	Employer's national insurance is included, plus 17 per cent of salary for employer's contribution to superannuation.
C. Qualifications		
D. Overheads		
Direct overheads Management and administration	£2,959 per year	The peer intern is supported by an administrator (cost per hour £27.80), administrative assistant (cost per hour £15.50) and the Training and Education placement staff (cost per hour £24.90) who help with the smooth running of the office and referrals that are introduced to the Hub (3 hours in total per week, for 40.9 weeks per year).
	£692 per year	A programme manager oversees the running of the Hub. This cost has been calculated by dividing their salary costs between 60 fte members of staff which is then pro-rated to reflect part-time working.
Office, general business and premises (including advertising and promotion)	£943 per year	The total cost of rent for the two buildings plus utility bills divided by the number of FTE staff (60), and pro-rata to reflect part-time working.
Indirect overheads	£963 per year	Based on the salary costs of the programme director and divided by the number of FTE staff (60) and pro-rata to reflect part-time working. Also includes 20 hours per year for contracts/payroll and other human resources issues which are based on salary costs of a certified human resources advisor (cost per hour £26.70).
E. Capital		Rent has been included as a proxy for capital
Working time	40.9 weeks per year 15 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. Unit costs are based on 614 hours.
Ratio of direct to indirect time on:		Based on an activity log which was developed with peer interns so they could record their client-contact and client-related activity to allow the ratio of direct to indirect time to be calculated.
Face-to-face contacts	1:0.38	
Unit costs available 2018/2019 (costs including qualifications given in brackets)		
£24 per hour (based on 15 working hours per week); £33 per hour of client-related activities (based on 15 working hours per week).		

¹ For more information, please contact Alexandra Melaugh (Alexandra.melaugh@kcl.ac.uk).

11.9 Time banks

Rushey Green time bank was the first UK time bank to be based in a health care setting; it has established a reputation for pioneering work in this field. It services five hubs across Lewisham. See <https://www.rgtb.org.uk/>. The time bank supports Time Banking UK and promotes a National Health and Wellbeing project from the Department of Health and Social Care to reduce isolation and improve the health of older people. It also provides support and training to other Lewisham time banks, builds relationships with statutory and voluntary sector organisations, and delivers consultancy services/workshops to raise funds for the time bank.

Time banks use hours of time rather than pounds as a community currency, with participants contributing their own skills, practical help or resources in return for services provided by fellow time-bank members. They vary significantly in the way they are organised, including the way credits are exchanged, eligibility criteria, route of access, the administration of the database and ways of accessing it.^{1,2}

All costs have been updated to 2018/2019 levels using the PSS inflators.

Costs and unit estimation	2018/2019 value	Notes
A. Salaries	£90,637 per year	In total, the service employs 1 full-time manager, 1 part-time and 1 full-time broker/co-ordinator. Salaries have been based on the midpoint of the NJC pay scales ³ for a PO2-3 and 1 PT and 1 FT SO1 (Senior officers, 35 and 30 hours per week).
B. Oncosts	£13,414 per year	Employer's national insurance contribution is included, plus 5 per cent employer's contribution to superannuation.
C. Overheads Direct overheads Telephone, internet, software Printing, stationery, postage Volunteer expenses Events Training costs Workshops/consultancy Indirect overheads	£2,036 per year £3,281 per year £566 per year £2,263 per year £1,015 per year £2,829 per year £3,395 per year	Other expenses not included are those relating to the use of a house/garden for members' parties and those for attending funerals of members. This includes the training of staff, volunteers and board members. This includes human resources, legal, payroll and accounts.
D. Travel costs	£905 per year	Based on travel costs for staff and volunteers.
E. Capital costs Office costs Equipment costs	£3,814 per year £2,036 per year	Based on the office costs for a practice nurse (see Schema 10.2). Includes computers and other office equipment. Office (equipment) costs have been annuitised over 60 (5) years and discounted at a rate of 3.5 per cent, declining to 3 per cent after 30 years.
Working time		Opening hours for the time bank vary. The office is usually manned 10-12 hours per day.
Number of members	360	Currently the time bank has 360 members. It aimed to increase its membership to over 500 by March 2015.
Unit costs available 2018/2019		
Total annual cost if fully funded £126,192.		
Annual cost per member based on 360 members £351.		

¹ Bauer, A., Fernandez, J.L., Knapp, M. & Anigbogu, B. (2013) *Economic Evaluation of an "Experts by Experience" Model in Basildon District*, http://eprints.lse.ac.uk/29956/1/Internet_Use_and_Opinion_Formation_in_Countries_with_Different_ICT_Contexts.pdf. n.b. This work has been produced from research that forms part of a NIHR School of Social Care Research funded project on the economic consequences for social care interventions. This paper presents independent research and the views expressed in this publication are those of the authors and not necessarily those of the NIHR School for Social Care Research or the Department of Health, NIHR or NHS.

² Knapp, M., Bauer, A., Perkins, M. & Snell, T. (2013) Building community capital in social care: is there an economic case? *Community Development Journal*, 48, 2, 213-331.

³ National Joint Council (NJC) Salary scales for Local Government Services, *NJC pay scales 2017-18*, <https://www.derbyshirealc.gov.uk/uploads/2016-2018-national-salary-award.pdf> [accessed 20 October 2018].

IV. HOSPITAL-BASED HEALTH CARE STAFF

12. Hospital-based scientific and professional staff

The table overleaf provides the unit costs for hospital-based scientific and professional staff, and replaces the individual schema previously found in this section. Each Agenda for Change (AfC) band can be matched to professionals using the AfC generic profiles: <http://www.nhsemployers.org/your-workforce/pay-and-reward/pay/job-evaluation/national-job-profiles>. Examples of roles by band are shown below and in more detail by job type in Schema 17. Reference should also be made to the explanatory notes when interpreting the unit costs.

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

12. Hospital-based scientific and professional staff

A Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change (AfC) bands 4-9 of the May 2018/April 2019 NHS staff earnings estimates for allied health professionals.¹ See *NHS terms and conditions of service handbook* for information on payment for unsocial hours.² The Electronic Staff Records (ESR) system shows that the mean basic salary for all physiotherapists is £34,731; occupational therapists, £33,442; speech and language therapists, £34,892; dietitians, £34,810; and radiographers (diagnostic and therapeutic), £34,386.

B Salary oncosts

Employer's national insurance is included, plus 14.38 per cent of salary for employer's contribution to superannuation.

C Qualification costs

See Section V for detailed information on qualifications for each category of scientific and professional staff. These costs have been calculated using the method described in Netten et al. (1998).³ Current cost information has been gathered from various sources (see Schema 18). To calculate the cost per hour including qualifications for each profession, the appropriate expected annual cost shown in Chapter 18 should be divided by the number of working hours. This can then be added to the cost per working hour.

Note that the cost of the clinical placement for pharmacists has been provided by Dr Lynne Bollington.⁴ These costs exclude external training courses that supplement work-based learning and may cover specific components of the General Pharmaceutical Council's performance standards and/or examination syllabus. See Schema 18 for more details on training.

D Overheads

Taken from *NHS foundation trusts accounts: consolidated (FTC) files 2014/2015*.⁵ Management and other non-care staff costs were 24.2 per cent of direct care salary costs and included administration and estates staff. Non-staff costs were 43.1 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.

E Capital overheads

Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of office space for administration, and recreational and changing facilities.^{6,7}

F Working time

Working hours for each AfC band have been calculated by deducting sickness absence days as reported for NHS staff groups⁸ and training/study days from 225 working days per annum.

H Ratio of direct to patient-related time

See previous editions for time spent on patient-related activities. See also Section V for information on a PSSRU survey carried out in 2014/2015 providing estimates of time use for hospital-based staff.

London and non-London multipliers

See information produced by NHS Employers⁹ and NHS Improvement¹⁰ for information on Inner and Outer London supplements and the market forces factor (MFF) which estimates the unavoidable cost differences between healthcare providers, based on their geographical location.

¹ NHS Digital (2019) *NHS staff earnings estimates, 12-month period from May 2018 – April 2019* (not publicly available), NHS Digital, Leeds.

² NHS Employers (2018) *NHS Terms and Conditions of Service Handbook*, NHS Employers, London. <http://www.nhsemployers.org/tchandbook> [accessed 25 September 2018].

³ 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.

⁴ Bollington, L. & John, D. (2012) *Pharmacy education and training in the hospital service in Wales: Identifying demand and developing capacity*. STS Publishing, Cardiff.

⁵ Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415> [accessed 9 October 2017]

⁶ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

⁷ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018]

⁸ NHS Digital, NHS sickness absence rates, January 2019 to March 2019 and Annual Summary 2010-11 to 2018-19, NHS Digital, London. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/january-2019-to-march-2019-and-annual-summary-2010-11-to-2018-19> [accessed 1 October 2019]

⁹ NHS Employers (2019) Annex 9: High cost area supplements, <https://www.nhsemployers.org/tchandbook/annex-4-to-10/annex-9-high-cost-area-supplements> [accessed 1 October 2019].

¹⁰ NHS Improvement (2019) 2019/20 payment reform proposals, <https://improvement.nhs.uk/resources/201920-payment-reform-proposals/> [accessed 1 October 2019].

12. Hospital-based scientific and professional staff

This table provides the annual and unit costs for hospital-based scientific and professional staff. See notes facing for assistance in interpreting each cost item and the beginning of this chapter for examples of roles in each band. See also Excel database on the PSSRU website. **Please note that there are no staff on Bands 1-3 for this staff group.**

Refer to notes on facing page for references	Band 4	Band 5	Band 6	Band 7	Band 8a	Band 8b	Band 8c	Band 8d	Band 9
A Wages/salary	£22,256	£24,212	£32,686	£40,180	£47,987	£57,495	£67,818	£81,836	£100,075
B Salary on-costs	£5,109	£5,660	£8,048	£10,160	£12,360	£15,040	£17,362	£21,899	£27,039
C Qualifications (see notes)									
D Overheads									
Management, admin and estates staff	£6,622	£7,229	£9,858	£12,182	£14,604	£17,553	£20,614	£25,104	£30,761
Non-staff	£11,794	£12,875	£17,557	£21,697	£26,010	£31,262	£36,713	£44,710	£54,786
E Capital overheads									
-physiotherapists/OTs	£6,582	£6,582	£6,582	£6,582	£6,582	£6,582	£6,582	£6,582	£6,582
-radiographers	£9,650	£9,650	£9,650	£9,650	£9,650	£9,650	£9,650	£9,650	£9,650
-dietitians/speech and language therapists (or other professionals with a small treatment space or sharing facilities).	£5,362	£5,362	£5,362	£5,362	£5,362	£5,362	£5,362	£5,362	£5,362
F Travel									
G Working time	43.2 (1,618 hours) per year, 37.5 hours per week	42.6 (1,599 hours) per year, 37.5 hours per week	42.6 (1,599 hours) per year, 37.5 hours per week	42.6 (1,599 hours) per year, 37.5 hours per week	42.6 (1,599 hours) per year, 37.5 hours per week	42.6 (1,599 hours) per year, 37.5 hours per week	42.6 (1,599 hours) per year, 37.5 hours per week	42.6 (1,599 hours) per year, 37.5 hours per week	42.6 (1,599 hours) per year, 37.5 hours per week
H Ratio of direct to indirect time	See note	See note	See note	See note	See note	See note	See note	See note	See note
London/non-London multiplier	See note	See note	See note	See note	See note	See note	See note	See note	See note
Unit costs available 2018/2019									
Cost per working hour									
-physiotherapists/OTs	£32	£35	£47	£57	£67	£80	£93	£113	£137
-radiographers	£34	£37	£49	£59	£69	£82	£95	£115	£139
-dietitians/speech and language therapists	£32	£35	£46	£56	£66	£79	£92	£112	£136

13. Hospital-based nurses

The table overleaf provides the unit costs for hospital nurses bands 2-9 and replaces the individual schema previously found in this section. Each Agenda for Change (AfC) band can be matched to professionals using the AfC generic profiles: <http://www.nhsemployers.org/your-workforce/pay-and-reward/pay/job-evaluation/national-job-profiles>. Reference should be made to the explanatory notes when interpreting the unit costs. See below for examples of roles in each band.

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

13. Hospital-based nurses

A Wages/salary

Based on the mean full-time equivalent basic salary for Agenda for Change (AfC) bands 2-9 of the May 2018/April 2019 NHS staff earnings estimates for nurses.¹ See *NHS terms and conditions of service handbook* for information on payment for unsocial hours.² The Electronic Staff Records (ESR) system shows that the mean basic salary for all staff nurses is £31,117; matrons is £47,576; and nurse managers is £49,612.

B Salary oncosts

Employer's national insurance is included, plus 14.38 per cent of salary for employer's contribution to superannuation

C Qualification costs

See Section V for detailed information on qualifications for each grade of hospital-based nurses. These costs have been calculated using the method described in Netten et al. (1998).³ Current cost information has been gathered from various sources (see Schema 18). To calculate the cost per hour including qualifications for each grade, the appropriate expected annual cost shown in Chapter 18 should be divided by the number of working hours. This can then be added to the cost per working hour.

D Overheads

Taken from *NHS foundation trusts accounts: consolidated (FTC) files 2014/15*.⁴

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

Non-staff costs were 43.1 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.

E Capital overheads

Based on the new-build and land requirements of NHS hospital facilities, but adjusted to reflect shared use of office space for administration, and recreational and changing facilities.^{5,6}

F Working time

Working hours for each AfC band have been calculated by deducting sickness absence days as reported for NHS staff groups⁷ and training/study days from 225 working days per annum.

G Ratio of direct to patient-related time

Taken from the McKinsey report commissioned by the Department of Health in 2009,⁸ hospital nurses are estimated to spend 41 per cent of their time on patient care, and 59 per cent of their time spent on non-patient activities, such as paperwork and administration, handing over and co-ordination, discussion with other nurses, and preparing medication (away from patients). When the ratio of time spent on patient care to other activities is 1:1.44, each hour spent with a client requires 2.44 paid hours. As this report did not specify which AfC Bands these ratios apply to, the cost per hour of patient contact has been calculated only for Bands 5 and 6.

¹ NHS Digital (2019) *NHS staff earnings estimates, 12-month period from May 2018 – April 2019* (not publicly available), NHS Digital, Leeds.

² NHS Employers (2018) *NHS Terms and Conditions of Service Handbook*, NHS Employers, London. <http://www.nhsemployers.org/tchandbook> [accessed 25 September 2018].

³ 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.

⁴ Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415> [accessed 17 October 2016]

⁵ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London

⁶ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

⁷ NHS Digital, NHS sickness absence rates, January 2019 to March 2019 and Annual Summary 2010-11 to 2018-19, NHS Digital, London. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/january-2019-to-march-2019-and-annual-summary-2010-11-to-2018-19> [accessed 1 October 2019]

⁸ Department of Health (2010) *Achieving a world class productivity in the NHS, 2009/10-2013/14: the McKinsey report*, Department of Health, London.

13. Hospital-based nurses

This table provides the annual and unit costs for hospital-based nurses (see the notes facing for assistance in interpreting each cost item). See also the beginning of this chapter for examples of roles in each band. See also Excel database on the PSSRU website. **Please note that there are no staff on Bands 1-3 for this staff group.**

Hospital-based nurses										
Refer to notes on facing page for references	Band 4	Band 5	Band 6	Band 7	Band 8a	Band 8b	Band 8c	Band 8d	Band 9	
A Wages/salary	£20,628	£26,894	£33,411	£39,994	£47,176	£56,102	£65,739	£77,494	£92,329	
B Salary oncosts	£4,650	£6,416	£8,252	£10,108	£12,132	£14,647	£17,363	£20,675	£24,856	
C Qualifications (see notes)										
D Overheads										
Management, admin and estates staff	£6,117	£7,864	£9,828	£11,837	£13,990	£16,716	£19,610	£23,111	£27,528	
Non-staff	£10,895	£14,006	£17,504	£21,082	£24,917	£29,770	£34,926	£41,161	£49,028	
E Capital overheads	£2,339	£3,462	£3,462	£3,462	£3,462	£3,462	£3,462	£3,462	£3,462	
F Working time	42.3 weeks (1,589 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week	42 weeks (1,573 hours) per year, 37.5 hours per week
G Ratio of direct to indirect time on :										
Face to face contacts	N/A	1:1.44	1:1.44	1:1.44	N/A	N/A	N/A	N/A	N/A	
Cost per working hour	£28	£38	£47	£55	£65	£77	£91	£107	£127	
Cost per hour of patient contact	-	£92	£113	-	-	-	-	-	-	

14. Hospital-based doctors

The table overleaf provides the unit costs for hospital doctors and replaces the individual schema previously found in this section. Reference should be made to the explanatory notes when interpreting the unit costs. See below for examples of work performed under each title.

Work performed under each job title	
Foundation doctor FY1 Foundation doctor FY2	Foundation doctors are a grade of medical practitioner undertaking a two-year, general postgraduate medical training programme which forms the bridge between medical school and specialist/general practice training. They have the opportunity to gain experience in a series of posts in a variety of specialty and healthcare settings. ³²⁶
Registrar	A registrar is a specialist in training for medical consultancy. ³²⁷
Associate specialist	An associate specialist grade is normally reached by doctors taking a non-consultant career path involving becoming a staff grade after being a foundation doctor. ²
Consultant: medical, surgical and psychiatric	Consultants are senior hospital-based physicians or surgeons who have completed all of their specialist training and been placed on the specialist register in their chosen speciality. A consultant typically leads a team of doctors which comprises specialty registrars and foundation doctors, all training to work in the consultant's speciality, as well as other 'career grade' doctors such as clinical assistants, clinical fellows, speciality doctors, associate specialists and staff grade doctors. ²

³²⁶ NHS, UK (2016) *The Foundation Programme*, <http://www.foundationprogramme.nhs.uk/pages/home>

³²⁷ Prospects (2016) *Job profile, hospital doctors*, <https://www.prospects.ac.uk/job-profiles/hospital-doctor>

14. Hospital-based doctors

A. Wages/salary

The mean basic salary for hospital doctors has been taken from the May 2018/April 2019 Electronic Staff Record (ESR).³²⁸ See *NHS terms and conditions of service handbook* for information on payment for unsocial hours and shift work.³²⁹ See Section V for further information on pay scales.

B. Salary oncosts

Employer's national insurance is included plus 14.38 per cent of salary for employer's contribution to superannuation.

C. Qualification costs

See Section V for detailed information on qualifications for each category of hospital doctors. These costs have been calculated using the method described in Netten et al. (1998).³³⁰ Current cost information has been gathered from various sources (see Schema 18). For hospital doctors, post-graduate study consists of a two-year Foundation Programme, specialty registrar training involves three years' full-time post-graduate training with at least two of the years in a specialty training programme. Associate specialist training involves at least four years' full-time post-graduate training, and consultants' training requires six years in a specialty hospital setting.³³¹

D. Overheads

Taken from *NHS foundation trusts accounts: consolidated (FTC) files 2014/15*.³³²

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

Non-staff costs were 43.1 per cent of direct care salary costs. They include costs to the provider for drugs, office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.

E. Capital overheads

Based on the new-build and land requirements of NHS hospital facilities.^{333,334} Adjustments have been made to reflect shared use of administration and recreational facilities, including accommodation for night-time duties. Treatment space has not been included. Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.

F. Working time

Working hours for each Agenda for Change band have been calculated by deducting sickness absence days as reported for NHS staff groups³³⁵ and training/study days from 225 working days per annum. Under the European Working Time Directive (EWT), the majority of foundation officers (Year 1) are working up to 48 hours per week, 19.7 per cent are working up to 56 hours, and 11.3 per cent are working 40 hours.³³⁶

G. London and non-London multiplier

See information produced by NHS Employers³³⁷ and NHS Improvement³³⁸ for information on Inner and Outer London supplements and the market forces factor (MFF) which estimates the unavoidable cost differences between healthcare providers, based on their geographical location.

³²⁸ NHS Digital (2019) *NHS staff earnings estimates, 12-month period from May 2018 – April 2019* (not publicly available), NHS Digital, Leeds.

³²⁹ NHS Employers (2018) *NHS Terms and Conditions of Service Handbook*, NHS Employers, London. <http://www.nhsemployers.org/tchandbook> [accessed 25 September 2018]

³³⁰ 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.

³³¹ National Health Service (2008) *Modernising medical careers*, National Health Service, London.

³³² Monitor (2016) *NHS Foundation Trusts: Consolidation (FTC) files 2014/15*, <https://www.gov.uk/government/publications/nhs-foundation-trust-accounts-consolidation-ftc-files-201415> [accessed 1 October 2019]

³³³ Building Cost Information Service (2017) *Surveys of tender prices*, Royal Institute of Chartered Surveyors, London.

³³⁴ Ministry of Housing, Communities & Local Government (2018) *Land value estimates for policy appraisal 2017*, <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017> [accessed 25 September 2018].

³³⁵ NHS Digital, NHS sickness absence rates, January 2019 to March 2019 and Annual Summary 2010-11 to 2018-19, NHS Digital, London. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/january-2019-to-march-2019-and-annual-summary-2010-11-to-2018-19> [accessed 1 October 2019]

³³⁶ Provided by the Department of Health, 2010.

³³⁷ NHS Employers (2019) Annex 9: High cost area supplements, <https://www.nhsemployers.org/tchandbook/annex-4-to-10/annex-9-high-cost-area-supplements> [accessed 1 October 2019].

³³⁸ NHS Improvement (2019) 2019/20 payment reform proposals, <https://improvement.nhs.uk/resources/201920-payment-reform-proposals/>. [accessed 1 October 2019].

14. Hospital-based doctors

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

Hospital-based doctors							
Refer to notes on facing page for references	Foundation doctor FY1	Foundation doctor FY2	Registrar	Associate specialist	Consultant: medical	Consultant: surgical	Consultant: psychiatric
A Wages/salary	£27,074	£31,148	£43,157	£84,038	£91,970	£91,522	£93,099
B Salary oncosts	£6,467	£7,615	£10,999	£22,519	£24,755	£24,628	£25,073
C Overheads							
Management, admin and estates staff	£8,117	£9,381	£13,106	£25,787	£28,247	£28,108	£28,598
Non-staff	£14,456	£16,707	£23,341	£45,926	£50,308	£50,061	£50,932
D Capital overheads	£4,737	£4,737	£4,737	£4,737	£6,149	£6,149	£6,149
E Working time	44.5 weeks (2,137 hours) per year 48 hours per week	44.5 weeks (2,137 hours) per year 48 hours per week	42.4 weeks (2,038 hours) per year 48 hours per week	42.5 weeks (1,701 hours) per year 40 hours per week	42.5 weeks (1,841 hours) per year 43.3 hours per week	42.5 weeks (1,841 hours) per year 43.3 hours per week	42.5 weeks (1,841 hours) per year 43.3 hours per week
London multiplier/non-London multiplier	See note	See note	See note	See note	See note	See note	See note
Units costs available 2018/2019							
Cost per working hour	£29	£33	£47	£108	£109	£109	£111
Cost per working hour, 56-hr week	£24	£28	£40	NA	NA	NA	NA
Cost per working hour, 40-hr week	£34	£39	£56	NA	NA	NA	NA

V. SOURCES OF INFORMATION

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15. Inflation indices

15.1 The Building Cost Information Service (BCIS) house rebuilding cost index and the retail price index

The BCIS calculates the house rebuilding cost index for the Association of British Insurers (ABI). The index is based on an average of house types and cannot therefore reflect changes in all rates as regional trends, labour and materials contents differ.¹ The retail price index is a measure of inflation published monthly by the Office for National Statistics (ONS). It measures the change in the cost of a basket of retail goods and services.²

Year	BCIS/ABI ¹		Retail price ²	
	Rebuilding cost index (1988=100)	Annual % increases on previous year	Index (1986/87= 100)	Annual % increases on previous year
2008	243.5	6.5	212.9	0.9
2009	236.9	-2.7	218.0	2.4
2010	239.5	1.1	228.4	4.8
2011	252.0	5.2	239.4	4.8
2012	253.0	0.4	246.8	3.1
2013	257.8	1.9	253.4	2.7
2014	274.8	6.6	257.5	1.6
2015	283.6	3.2	260.6	1.2
2016	292.1	3.0	267.1	2.5
2017	304.4	4.2	278.1	4.1
2018	315.0	3.5	285.6	2.7

15.2 Gross domestic product (GDP) deflator and the tender price index for public sector buildings

Her Majesty's Treasury's (HMT) GDP deflator is a measure of general inflation in the domestic economy. HMT produces the GDP deflator from data provided by the ONS and extends the series to future years by applying forecasts of the inflation rate. The BCIS PUBSEC tender price index (PUBSEC) is used by the Office for National Statistics (ONS) to deflate capital expenditure in health and social care.

Year	Gross domestic product ³ annual % increases	Tender price index for public sector building (non-housing) (PUBSEC) ³	
		Index (1995=100)	Annual % increases on previous year
2008	2.9	188	-1.2
2009	1.6	168	-10.9
2010	1.5	171	2.2
2011	1.9	177	3.1
2012	1.6	184	4.0
2013	1.9	194	5.9
2014	1.7	207	6.4
2015	0.4	209	1.0
2016	2.1	227	8.9
2017	2.2	251	10.6
2018	1.9	259 (Provisional)	3.1 (Provisional)

¹ Building Cost Information Service (2019) *Indices and forecasts*, Royal Institute of Chartered Surveyors, London <http://www.rics.org/uk/knowledge/bcis/about-bcis/rebuilding/bcis-house-rebuilding-cost-index/> [accessed 1 October 2019].

² See: <http://www.swanlowpark.co.uk/retail-price-index> [accessed 1 October 2019].

³ Provided by the Department of Health, 2019.

15.3 The NHS cost inflation index (NHSCII)

Until 2016/2017, a hospital & community health services (HCHS) index was calculated by the DHSC. The hospital and community health services (HCHS) pay and price inflation was a weighted average of two separate inflation indices: the pay index was calculated using the annual increase in NHS salaries and the Health Service Cost Index (HSCI) measured the price change for each of 40 sub-indices of goods and services purchased by the HCHS. These were weighted according to the proportion of expenditure on pay and prices to give the HCHS pay and prices index. In 2016, this index was discontinued, and has now been replaced by the NHS cost Inflation Index (NHSCII) constructed by the Department of Health and Social Care, in conjunction with the Office for National Statistics who have worked with NHS and the University of York to address the gap.

The NHSCII identifies an appropriate inflation measure for each item of spend in six broad categories: NHS providers, general practice, prescribing, dentistry, ophthalmology, and residual, to create an overall inflation measure for the NHS. This index gives a more accurate measure of productivity than previously. **For detailed information on how the index has been constructed, see our website.**

NHS Provider non-pay index is lower than the HCHS HSCI prices inflation: this is most likely due to the HSCI having a high (~12%) inflation for medical services from supply chain data. We believe this was due to poor data quality of the supply chain data at the time.

HCHS/NHS inflators all sectors			
Annual % increases on previous year			
Year	HCHS prices	HCHS pay	HCHS pay and prices
2009/2010	-1.30	1.80	0.60
2010/2011	2.80	3.10	3.00
2011/2012	4.10	0.90	2.10
2012/2013	3.10	0.90	1.70
2013/2014	1.80	0.70	1.10
2014/2015	1.70	0.30	0.90
2015/2016	2.70	0.30	1.30
Annual % increases on previous year			
	NHSCII prices	NHSCII pay	NHSCII pay and prices
2015/2016	0.45	0.30	0.35
2016/2017	2.16	2.10	2.12
2017/2018	1.07	1.22	1.16
2018/2019	2.43	2.24	2.31

15.4 The Personal Social Services (PSS) pay and prices index

The Adult PSS pay and prices index is calculated by the Department of Health and Social Care (DHSC). Significant changes to the timing of index components and the approach to weighting the components together were made last year and have been described in last year's volume. No new changes to the method have been made this year.

15.4.1 The PSS annual percentage increases for adult services (all sectors)

Year	PSS all sectors, adults only ¹		
	Annual % increases on previous year		
	Pay & prices (excluding capital)	Pay & prices (including capital)	Pay
2008/2009	2.9	2.5	3.0
2009/2010	2.1	0.7	2.4
2010/2011	2.1	2.1	2.2
2011/2012	0.1	0.4	-0.4
2012/2013	0.6	1.0	0.2
2013/2014	1.0	1.5	0.7
2014/2015	1.0	1.6	0.9
2015/2016	1.9	1.8	2.3
2016/2017	3.4	4.0	3.8
2017/2018	2.5	3.4	2.7
2018/2019	3.0	3.0	3.4

¹Provided by the Department of Health, 2019.

15.4.2 The PSS annual percentage increases for adult local authority services

Year	PSS local authority, adults only ¹		
	Annual % increases on previous year		
	Pay & prices (excluding capital)	Pay & prices (including capital)	Pay
2008/2009	3.1	2.6	3.2
2009/2010	2.1	0.6	2.3
2010/2011	1.9	1.9	1.9
2011/2012	0.5	0.8	0.2
2012/2013	0.4	0.8	-0.1
2013/2014	1.5	2.0	1.4
2014/2015	1.0	1.6	0.9
2015/2016	3.2	3.0	4.1
2016/2017	1.2	2.1	0.9
2017/2018	2.7	3.6	2.9
2018/2019	2.5	2.6	2.8

15.4.3 The PSS annual percentage increases for adult independent sector services

Year	PSS independent care, adults only ¹		
	Annual % increases on previous year		
	Pay & prices (excluding capital)	Pay & prices (including capital)	Pay
2010/2011	2.1	2.1	2.2
2011/2012	0.0	0.4	-0.4
2012/2013	0.7	1.1	0.2
2013/2014	0.9	1.4	0.6
2014/2015	1.0	1.6	0.9
2015/2016	1.8	1.7	2.1
2016/2017	3.6	4.2	4.1
2017/2018	2.5	3.4	2.7
2018/2019	3.0	3.0	3.4

¹ Provided by the Department of Health, 2019.

16. NHS staff earnings estimates¹

16.1 Mean annual basic pay per FTE for non-medical occupational groupings, NHS England

Non-medical occupational grouping	Mean annual basic pay per FTE
Ambulance staff	£25,873
Administration and estates staff	£29,344
Healthcare assistants and other support staff	£18,452
Nursing, midwifery and health visiting staff	£30,532
Nursing, midwifery and health visiting learners	£22,180
Scientific, therapeutic and technical staff	£32,985
Healthcare scientists	£30,594

16.2 Mean annual basic pay per FTE for nursing, midwifery & health visiting staff by Agenda for Change band, NHS England

Band	Mean annual basic pay per FTE
Band 2	Not available
Band 3	Not available
Band 4	£20,628
Band 5	£26,894
Band 6	£33,411
Band 7	£39,994
Band 8a	£47,176
Band 8b	£56,102
Band 8c	£65,739
Band 8d	£77,494
Band 9	£92,329

16.3 Mean annual basic pay per FTE for allied health professional staff by Agenda for Change band, NHS England

Band	Mean annual basic pay per FTE
Band 4	£22,256
Band 5	£24,212
Band 6	£32,686
Band 7	£40,180
Band 8a	£47,987
Band 8b	£57,495
Band 8c	£67,818
Band 8d	£81,836
Band 9	£100,075

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

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

Band	Mean annual basic pay per FTE
Band 1	£17,440
Band 2	£18,123
Band 3	£19,355
Band 4	£22,219
Band 5	£26,394
Band 6	£32,201
Band 7	£38,664
Band 8a	£46,783
Band 8b	£55,947
Band 8c	£66,404
Band 8d	£79,677
Band 9	£96,381

16.5 Mean annual basic pay per FTE for NHS staff groups

NHS staff group	Mean basic salary per full-time equivalent
All nurses, midwives and health visiting staff	
Qualified	£32,693
Nursery nurses and nursing assistants	£19,376
Science technical & therapeutic staff (ST&T): allied health professionals	
Qualified	£35,036
Unqualified	£20,100
ST&T staff: other	
Qualified	£37,381
Unqualified	£21,165
Ambulance staff	
Qualified	£28,572
Unqualified	£19,478
Former pay negotiating council groups	
Senior managers	£82,161
Managers	£51,292
Administrative and clerical staff	£24,391
Maintenance and works staff	£23,235

Source of tables 17.1-17.6: NHS Digital (2019) *NHS staff earnings estimates, 12-month period from May 2018 – April 2019* (not publicly available), NHS Digital, Leeds.

General notes for NHS earnings estimates

Inspection of data suggests that discretionary point payments are sometimes included with basic pay for consultants.

These figures represent payments made using the Electronic Staff Record (ESR) to NHS Staff who are directly paid by NHS organisations. It does not include, for example, elements of pay for clinical staff which are paid to the individual by universities, or other non-NHS organisations providing NHS care.

Figures rounded to the nearest £100.

Figures based on data from all NHS organisations who are using ESR (two Foundation Trusts have not taken up ESR).

17. Examples of roles in each Agenda for Change band

Allied health professionals

Physiotherapist

Band 2	Clinical support worker (physiotherapy)
Band 3	Clinical support worker higher level (physiotherapy)
Band 5	Physiotherapist
Band 6	Physiotherapist specialist
Band 7	Physiotherapist advanced, specialist physiotherapist, physiotherapy team manager
Band 8a	Physiotherapist principal
Bands 8a-b	Physiotherapist consultant

Occupational therapist

Band 2	Clinical support worker (occupational therapy)
Band 3	Clinical support worker higher level (occupational therapy)
Band 4	Occupational therapy technician
Band 5	Occupational therapist
Band 6	Occupational therapist specialist
Band 7	Occupational therapist advanced/team manager
Band 8a	Occupational therapist principal
Bands 8a-b	Occupational therapist consultant

Speech and language therapist

Band 2	Clinical support worker (speech and language therapy)
Band 3	Clinical support worker higher level (speech and language therapy)
Band 4	Speech and language therapy assistant/associate practitioner
Band 5	Speech and language therapist
Band 6	Speech and language therapist specialist
Band 7	Speech and language therapist advanced
Band 8a	Speech and language therapist principal
Bands 8a-c	Speech and language therapist consultant

Chiropodist/Podiatrist

Band 2	Clinical support worker (podiatry)
Band 3	Clinical support worker higher level (podiatry)
Band 4	Podiatry technician
Band 5	Podiatrist
Band 6	Podiatrist specialist
Band 7	Podiatrist advanced/team manager
Band 8a	Podiatrist principal
Bands 8a-b	Podiatric registrar
Bands 8c-d	Podiatric consultant
Band 9	Podiatric consultant

Psychologist

Band 4	Clinical psychology assistant practitioner
Band 5	Clinical psychology assistant practitioner higher level, Counsellor entry level
Band 6	Clinical psychology trainee, Counsellor
Band 7	Clinical psychologist, Counsellor specialist
Bands 8a-b	Clinical psychologist principal
Bands 8a-c	Counsellor professional manager/consultant
Bands 8c-d	Clinical psychologist consultant
Bands 8d & 9	Professional lead/Head of psychology services

Pharmacist

Band 2	Pharmacy support worker
Band 3	Pharmacy support worker higher level
Band 4	Pharmacy technician
Band 5	Pharmacy technician higher level/Pharmacist entry level
Band 6	Pharmacist
Band 7	Pharmacist specialist
Bands 8a-b	Pharmacist advanced
Bands 8b-c	Pharmacist team manager
Bands 8b-d	Pharmacist consultant
Bands 8c-Band 9	Professional manager pharmaceutical services

18. Training costs of health and social care professionals

Tables 18.1 and 18.2 provide a breakdown of the training costs incurred using standard estimation approaches.¹ The investment costs of education should be included when evaluating the cost-effectiveness of different approaches to using health service staff so that all the costs implicit in changing the professional mix are considered. For the most part, these investment costs are borne by the wider NHS and individuals undertaking the training, rather than NHS trusts. The tables show details of the total investment incurred during the working life of the professional **after allowing for the distribution of the costs over time**. The expected working life of the professional, based on previous research carried out at PSSRU, has been noted in brackets in Table 18.1 after the title of the professional group.² See preface for changes to the expected working life made this year.

The cost of training for health service professionals covers both pre-registration and post-graduation training. They include the costs of tuition; infrastructure costs (such as libraries); costs or benefits from clinical placement activities; and lost production costs during the period of training where staff are away from their posts. Although further training is available to all professionals to enable them to progress to higher grades, the cost of post-graduate training is only known for doctors. Each year after registration a substantial proportion of the salary (100% or 60% depending on the level of seniority) can be attributed to the investment costs of training for subsequent stages in the doctor's career. This cost, together with additional expenditure representing infrastructure costs for maintaining post-graduate medical education, is taken as the total training cost for that year. During training Health Education England pays 50 per cent of the professional's salary plus oncosts to the employing NHS Trust.

18.1 Training costs of health and social care professionals, excluding doctors

Professional (working life in years)	Pre-registration			Totals	
	Tuition ³	Living expenses/lost production costs ⁴	Clinical placement ⁵	Total investment	Expected annual cost discounted at 3.5%
Scientific and professional					
Physiotherapist (24.3)	£26,822	£36,191	£4,742	£66,544	£5,446
Occupational therapist (23.5)	£26,822	£36,191	£4,742	£66,544	£5,454
Speech and language therapist (24.7)	£26,822	£36,191	£4,742	£66,544	£5,592
Dietitian (23.3)	£26,822	£36,191	£4,742	£66,544	£5,659
Radiographer (24.3)	£26,822	£36,191	£4,742	£66,544	£5,423
Hospital pharmacist (27.6)	£35,165	£48,254	£37,714	£118,770	£9,359
Community pharmacist (27.6)	£35,165	£48,254	£25,338	£105,839	£8,340
Psychologist (not estimated by PSSRU) ⁶					
Nurse (24)	£26,822	£36,191	£4,742	£66,544	£8,744
Social worker (19) (degree)	£26,822	£34,728	£6,939	£69,029	£9,469

1 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.

2 Estimates of expected working life have been calculated using the 2001 census and where possible, the 2017/18 Labour Force Survey.

3 Based on the maximum fee loan; <https://www.thecompleteuniversityguide.co.uk/university-tuition-fees/university-tuition-fees-and-financial-support/if-you-come-from-england/> [accessed October 2019].

4 Drawn from <https://university.which.co.uk/advice/student-finance/whats-the-average-cost-of-living-at-university> [accessed October 2019].

5 The placement tariff for non-medical placements is £3,112+MFF per annum in 2018/19. Gov.uk (2019) Education & Training Tariffs, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791560/education-and-training-tariffs-2019-to-2020.pdf [accessed October, 2019].

6 NHS England (2016) *Review of clinical and educational psychology training arrangements*, National College for Teaching and Leadership, London.

18.2 Training costs of doctors (after discounting)

Doctor (working life in years)	Tuition	Living expenses/lost production costs	Clinical placement	Placement fee ^{1,2} plus Market Forces Factor (a)	Salary (inc overheads) and post-graduate centre costs	Total investment	Expected annual cost discounted at 3.5%
Doctor (22)							
Pre-registration training: years 1-5	£45,134	£55,425	£144,532	NA		£245,213	£20,132
Post-graduate							
Foundation officer 1 (included in pre-reg training)	£45,134	£55,425	£144,532	£10,754	£51,708	£307,675	£25,261
Foundation officer 2	£45,134	£55,425	£144,532	£20,276	£56,605	£322,094	£28,008
Registrar group	£45,134	£55,425	£144,532	£40,155	£105,711	£391,079	£39,455
Associate specialist	£45,134	£55,425	£144,532	£48,496	£141,715	£435,424	£46,519
GP	£45,134	£55,425	£144,532	NA	£150,966	£396,179	£42,327
Consultant	£45,134	£55,425	£144,532	£65,144	£208,412	£518,769	£59,492

¹ Gov.uk (2019) Education & Training Tariffs, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791560/education-and-training-tariffs-2019-to-2020.pdf [accessed October, 2019].

² Placement fees for post-graduate doctors in training before discounting are: Foundation Officer 1 £12,152; Foundation Officer 2 £24,304; Registrar £48,608; Associate specialist £60,760; Consultants £85,064. Tariff for placement activity should also include a market forces factor. Placement fees are not provided for GP placements.

19. Care home fees

The fees reported in this schema have been calculated using the Laing & Buisson Care Homes Complete Dataset 2018/2019.¹ Table 1 provides the midpoints of the minimum and maximum fees paid to for-profit providers of nursing and residential homes in England, presented by client group. It also provides the median of the minimum and maximum fee. Table 2 provides the same information but for non profit providers.

Table 1 - Care home fees in England – for-profit providers ²

Minimum and maximum fees for 2018/2019

	Midpoint of Minimum fee	Midpoint of Maximum fee	Median of min and max fee	Midpoint of Minimum fee	Midpoint of Maximum fee	Median of min and max fee
	Nursing Homes			Residential Homes		
Dementia	£757	£1,071	£914	£622	£873	£748
Learning disability	£665	£1,950	£1,308	£646	£1,661	£1,154
Mental health	£1,089	£1,163	£1,126	£473	£1,226	£849
Older people (65+)	£735	£926	£830	£604	£777	£691
Physical disability	£1,280	£1,424	£1,352	£390	£451	£420

Table 2 Care home fees in England – non profit providers ²

Minimum and maximum fees for 2018/2019

	Midpoint of Minimum fee	Midpoint of Maximum fee	Midpoint between min and max fee	Midpoint of Minimum fee	Midpoint of Maximum fee	Midpoint between min and max fee
	Nursing Homes			Residential Homes		
Dementia	£1,006	£1,200	£1,103	£634	£780	£707
Learning disability				£1,078	£1,475	£1,277
Mental health	£766		£766	£668	£720	£694
Older people (65+)	£827	£1,079	£953	£592	£762	£677
Physical disability				£909	£1,800	£1,354

¹ Laing & Buisson (2019) *Laing & Buisson Care Homes Complete Dataset 2018/2019*, Laing & Buisson, London.

² Laing & Buisson have confirmed that although fees appear to be lower than those reported last year for certain client groups, this is due to changes in the formulae used rather than due to actual reductions in fees.

20. Time use of community care professionals

The following table provides information from an online survey carried out by PSSRU in 2014/2015 (see Preface to the *Unit Costs of Health & Social Care 2015* for more details). The link for the survey was distributed non-selectively through various channels. Given the small sample from which the ratios of direct to indirect time have been calculated, the ratios have not been used in the unit cost calculations, but have been tabulated here so that readers can use them where appropriate.

Community professionals	Sample size	Average number of hours worked (including unpaid overtime)	% of hours worked spent with patients	% of hours worked spent on other patient-related tasks (a)	% of hours worked spent on non-direct activities (b)	Other time (definition not provided but includes travel)	Average mileage per professional per week	Ratios of direct to indirect time on: client-related work
Nurses								
(bands 5 and 6)	44	39	54%	29%	13%	5%	102	1:0.20
(bands 7 and 8)	31	40	42%	33%	19%	6%	71	1:0.33
Physiotherapists	11	41	35%	38%	22%	5%	132	1:0.37
(bands 5-8)								
Occupational therapists	6	40	51%	36%	11%	2%	42	1:0.15
(bands 4-7)								
Speech and language therapists	7	40	38%	50%	9%	3%	84	1:0.14
(bands 5-6)								

References from past editions:

Clinical Psychologist: Ratio of face-to-face contacts to all activity: 1:1:25. Based on the National Child and Adolescent Mental Health Service Mapping data and returns from over 500 principal clinical psychologists, 44.5 per cent of time was spent on direct clinical work. (See: Department of Health (2002) National child and adolescent mental health service mapping data, Department of Health, London).

GP Practice Nurse: Ratio of direct to indirect time on face-to-face contacts to all activity: 1:0:30. Time spent on surgery consultations (67.9%), phone consultations (5.2%), clinics (2.5%) and home and care home visits (1.2%). Taken from the 2006/2007 UK General Practice Workload Survey. (See: Information Centre (2007) 2006/2007 UK General practice workload survey, Primary Care Statistics, Information Centre, Leeds).

Nurse advanced/nurse practitioners: Ratio of patient contacts to all activity: 1:0:71. Based on information provided by 27 nurse practitioners, 58% of time was spent on surgery consultations, 0.4% on home visits, 6.4% on telephone consultations and 1.4% of time was spent on getting prescriptions signed. See Curtis, L. & Netten, A. (2007) The costs of training a nurse practitioner in primary care: the importance of allowing for the cost of education and training when making decisions about changing the professional mix, *Journal of Nursing Management*, 15, 4, 449-457.

- a) Includes time researching and gathering information before each patient/client contact, writing-up case notes after each patient/client contact, and liaising with or meeting with other professionals in relation to patients/clients
- b) Non-direct activities include training (either others or self), supervision and general administration.

21. Glossary

Annuitising Converting a capital investment (such as the cost of a building) into the annual equivalent cost for the period over which the investment is expected to last.

Child and adolescent mental health services (CAMHS) is a name for NHS-provided services for children with mental health needs in the UK. In the UK they are often organised around a tier system. Tier 3 services, for example, are typically multidisciplinary in nature and the staff come from a range of professional backgrounds.

Capital overheads The cost of buildings, fixtures and fittings employed in the production of a service.

Care package costs Total costs for all services received by a patient.

Department for Work and Pensions (DWP) is the largest government department in the United Kingdom, created on 8 June 2001, from the merger of the employment part of the Department for Education and Employment and the Department of Social Security and headed by the Secretary of State for Work and Pensions, a Cabinet position.

Discounting Adjusting costs using the time preference rate spread over a period of time to reflect their value at a base year.

Durables Items such as furniture and fittings.

Long-term The period during which fixed costs such as capital can be varied.

Marginal cost The cost of an additional unit of a service.

Oncosts Essential associated costs: salary oncosts, for example, include the employer's national insurance contributions.

Opportunity cost The value of the alternative use of the assets tied up in the production of the service.

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

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

Overheads

NHS overheads

Management and other non-care staff overheads include administration and estates staff.

Non-staff overheads include costs to the provider for office, travel/transport and telephone, education and training, supplies and services (clinical and general), as well as utilities such as water, gas and electricity.

Local authority overheads

Direct overheads include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.

Indirect overheads include general management and support services, such as finance and human resource departments.

SSMSS Social services management and support services: overhead costs incurred by a local authority, as defined by CIPFA guidelines. These include indirect overheads such as finance and personnel functions.

Time use and unit costs

Per average stay Cost per person for the average duration of a typical stay in that residential facility or hospital.

Per client/patient hour Cost of providing the service for one hour of client/patient attendance. The costs of time not spent with clients are allocated to the time spent with clients.

Per clinic visit Cost of one client attending a clinic. This allows for overall time spent on non-clinical activity to be allocated to the total time spent with clients in any setting.

Per consultation Cost per attendance in a clinic or surgery. This also allows for overall time spent on non-clinical activity to be allocated to the total time spent with clients.

Fee per resident week For example, in care homes the fee charged is assumed to cover care costs, accommodation and hotel costs, ancillary costs and operator's profit.

Per example episode Cost of a typical episode of care, comprising several hours of a professional's time.

Per home visit Cost of one visit to a client/patient at home. This includes the cost of time spent travelling for the visit, the proportion of time spent on non-clinical activity which is attributable to visiting patients in their own home, and the time spent on visiting patients at home.

- Per hour of home visiting** Cost of one hour spent by a professional undertaking visits to clients/patients at home. This includes the cost of time spent travelling. It also allows for overall time spent on non-clinical/patient activity to be allocated to the total time spent with clients/patients in any setting.
- Per hour in clinic** Cost of one hour spent by a professional in a clinic. Time spent on non-clinical activity is allocated to the total time spent with clients/patients in any setting.
- Per hour of direct contact/per hour of face-to-face contact** Hourly cost of time spent with, or in direct contact with, the client/patient. Some studies include travel time in this cost. When this is the case, it has been noted in the schema.
- Per hour on duty** Hourly cost of time spent by a hospital doctor when on duty. This includes time spent on call when not actually working.
- Per hour worked** Hourly cost of time spent by a hospital doctor when working. This may be during the normal working day or during a period of on-call duty.
- Per inpatient day** Cost per person of one day and overnight in hospital.
- Per patient day** Cost per person of receiving a service for one day.
- Per procedure** Cost of a procedure undertaken in a clinic or surgery. This includes the cost of time spent on non-clinical activity and the total time spent with clients.
- Per resident week** Cost per person per week spent in a residential facility.
- Per client attendance** Cost per person per attendance.
- Per client session** Cost for one person attending one session. The length of a session will be specified in the schema and may vary between services.
- Per short-term resident week** Total weekly cost of supporting a temporary resident of a residential facility.
- Price base** The year to which cost information refers.
- Ratio of direct to indirect time spent on client/patient-related work/direct outputs/face-to-face contact/clinic contacts/home visits** The relationship between the time spent on direct activities (such as face-to-face contact) and time spent on other activities. For example, if the ratio of face-to-face contact to other activities is 1:1.5, each hour spent with a client requires 2.5 paid hours.

22. References

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23. List of useful websites

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

Building Cost Information Service: <http://www.bcis.co.uk/site/index.aspx>

BCIS is the UK's leading provider of cost and price information for construction and property occupancy.

Care Quality Commission: <http://www.cqc.org.uk/>

The Care Quality Commission is the health and social care regulator for England and replaces the Healthcare Commission, Commission for Social Care Inspection and the Mental Health Act Commission which all ceased to exist on 31 March 2009.

Centre for Child and Family Research: <http://www.lboro.ac.uk/research/ccfr/>

Chartered Institute of Public Finance and Accountancy (CIPFA): <http://www.cipfa.org/>

The CIPFA Statistical Information Service (SIS) was established as a partnership between individual authorities and CIPFA. SIS has been undertaking detailed annual surveys of local authority operations for more than a century, and the 'CIPFA Statistics' still remain the only impartial and comprehensive account of the extent and achievements of each individual council. Surveys are conducted in the following areas: education, environmental services, environmental health, housing, leisure, planning, public protection, social services, transport.

Department for Education: <http://www.education.gov.uk/>

Department of Health and Social Care : <https://www.gov.uk/government/organisations/department-of-health-and-social-care>

Department for Work and Pensions: <http://www.dwp.gov.uk/>

Family Resource Survey: <http://research.dwp.gov.uk/asd/frs/>

Federation of Ophthalmic & Dispensing Opticians: <http://www.fodo.com/>

Hospital Episode Statistics (HES): <http://www.hesonline.nhs.uk/>

This is the national statistical data warehouse for England of the care provided by NHS hospitals and for NHS hospital patients treated elsewhere. HES is the data source for a wide range of health-care analysis for the NHS, Government and many other organisations and individuals. The HES database is a record-level database of hospital admissions and is currently populated by taking an annual snapshot of a sub-set of the data submitted by NHS Trusts to the NHS-Wide Clearing Service (NWCS). Quarterly information is also collected. A separate database table is held for each financial year, containing approximately 11 million admitted patient records from all NHS Trusts in England.

Joseph Rowntree Foundation: <http://www.jrf.org.uk/>

This website provides information on housing and care.

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

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

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

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

National Council for Palliative Care: <http://www.ncpc.org.uk/>

National End of Life Care Intelligence network: <http://www.endoflifecare-intelligence.org.uk/home/>

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

NHS Digital is the new name for the Health & Social Care Information Centre, a Special Health Authority set up on 1 April 2005 to take over most DHSC statistical collection and dissemination and some functions of the former NHS Information Authority. This includes information on Personal Social Services Expenditure.

National Institute for Health and Clinical Excellence: <http://www.nice.org.uk/>

Personal Social Services Expenditure Data (PSS EX1 data): <http://www.ic.nhs.uk/statistics-and-data-collections/>

Pub Med: <http://www.pubmedcentral.nih.gov/>

Reference Costs: <https://improvement.nhs.uk/resources/reference-costs/>

This website gives details on how and on what NHS expenditure was used. The Reference Costs/Reference Costs Index publication is the richest source of financial data on the NHS ever produced. As in previous years, its main purpose is to provide a basis for comparison within (and outside) the NHS between organisations, and down to the level of individual treatments.

Social Care Institute for Excellence: <http://www.scie.org.uk/>

Social Care Online: <http://www.scie-socialcareonline.org.uk/>

Social Policy Research Unit, University of York: <http://www.york.ac.uk/inst/spru/>

YoungMinds: <http://www.youngminds.org.uk/>

YoungMinds is a national charity committed to improving the mental health of all children and young people.

24. List of items from previous volumes

All articles from our 2003 edition onward can also be searched and downloaded from our article database at <http://www.pssru.ac.uk/ucarticles/>

Editorials and articles

2007

The costs of telecare: from pilots to mainstream implementation

The Health BASKET Project: documenting the benefit basket and evaluating service costs in Europe

Recording professional activities to aid economic evaluations of health and social care services

2008

Guest editorial: National Schedule of Reference Costs data: community care services

The challenges of estimating the unit cost of group-based therapies

Costs and users of Individual Budgets

2009

Guest editorial: Economics and Cochrane and Campbell methods: the role of unit costs

Estimating unit costs for Direct Payments Support Organisations

The National Dementia Strategy: potential costs and impacts

SCIE's work on economics and the importance of informal care

2010

The costs of short-break provision

The impact of the POPP programme on changes in individual service use

The Screen and Treat programme: a response to the London bombings

Expected lifetime costs of social care for people aged 65 and over in England

2011

The costs of extra care housing

Shared Lives – model for care and support

Calculating the cost and capacity implications for local authorities implementing the Laming (2009) recommendations

2012

Guest editorial: Appropriate perspectives for health care decisions

Using time diaries to contribute to economic evaluation of criminal justice interventions

Costing multi-site, group-based CBT workshops

A review of approaches to measure and monetarily value informal care

2013

Guest editorial: Widening the scope of unit costs to include environmental costs

Cognitive behaviour therapy: a comparison of costs

Residential child care: costs and other information requirements

The costs of telecare and telehealth

2014

Guest editorial: Big data: increasing productivity while reducing costs in health and social care
 Cost of integrated care
 Shared Lives – improving understanding of the costs of family-based support
 RYCT & CSP intervention costs

2015

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

2016

Guest editorial: Agency staff in the NHS
 Costs of the Well London Programme
 PUCC: The Preventonomics Unit Cost Calculator

2017

Guest editorial: Estimating medication costs for economic evaluation
 Health care costs in the English NHS
 A survey of English dental practices with costs in mind

2018

A comparison of two sources of primary and social care resource use data in a care home setting
 GP prescription costs – changes over time

Tables**2007**

All children's social care services withdrawn, but reinstated in 2010

2008

Paramedic and emergency ambulance services

2009

Cost of maintaining a drugs misuser on a methadone treatment programme
 Unpaid care

2010

Voluntary residential care for older people
 Nursing-Led Inpatient Unit (NLIU) for intermediate care
 Local authority sheltered housing for older people
 Housing association sheltered housing for older people
 Local authority very sheltered housing for older people
 Housing association very sheltered housing for older people
 Local authority residential care (staffed hostel) for people with mental health problems
 Local authority residential care (group home) for people with mental health problems
 Voluntary sector residential care (staffed hostel) for people with mental health problems
 Private sector residential care (staffed hostel) for people with mental health problems
 Acute NHS hospital services for people with mental health problems
 NHS long-stay hospital services for people with mental health problems
 Voluntary/non-profit organisations providing day care for people with mental health problems
 Sheltered work schemes for people with mental health problems
 Village communities for people with learning disabilities

The costs of community-based care of technology-dependent children

2011

Approved social worker

2012

High-dependency care home for younger adults with physical and sensory impairments

Residential home for younger adults with physical and sensory impairments

Special needs flats for younger adults with physical and sensory impairments

Rehabilitation day centre for younger adults with brain injury

Comparative costs of providing sexually abused children with individual and group psychotherapy

2013

Rapid response service

2014

Community rehabilitation unit

Intermediate care based in residential homes

Counselling services in primary medical care

Group homes for people with learning disabilities

Fully-staffed living settings (people with learning disabilities)

Semi-independent living settings (people with learning disabilities)

Hospital-based rehabilitation care scheme

Expert patients programme

Community care packages for older people

Nursing homes for people with dementia

Private and other independent sector residential homes for people with dementia

2015

Individual placement and support

Some home care services for adults with learning disabilities

Key worker services for disabled children and their families

Services for children in care

Services for children in need

Common assessment framework (CAF)

Palliative care for children and young people

2016

Multi-dimensional treatment foster care (MTFC)

2017

Extra-care housing for older people

Geriatric resources for assessment and care of elders (GRACE)

Mindfulness-based cognitive therapy – group-based intervention

Residential rehabilitation for people who misuse drugs or alcohol

Inpatient detoxification for people who misuse drugs or alcohol

Specialist prescribing

Cognitive Behavioural Therapy

Local safeguarding children's boards

Parenting programmes for prevention of persistent conduct disorder

Independent reviewing officer (IRO)

Social care support for older people/people with learning disabilities/people with mental health problems and people with physical disabilities

Support for children and adults with autism

Support care for children
Young adults with acquired brain injury in the UK
Residential parenting assessments
Social work team leader/senior practitioner/senior social worker
Family support worker
Health and social care teams

2018

Residential care homes for adults requiring learning disability support
End of life care for children at home
Decision-making panels
Costs of reunification
Short break provision for disabled children and their families
Health care support received by people with mental health problems, older people (over 75) and other service users
Reablement services