PSSRU

Unit Costs of Health & Social Care 2020

Compiled by Lesley Curtis and Amanda Burns

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Contents

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 [Unit Costs of Health and Social Care | PSSRU]

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 Unit Costs | PSSRU

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

Undoubtedly, this year has been one of the most challenging in history for the NHS and local authorities and the impact of COVID-19 is immense, affecting many organisations and businesses throughout the world (University of Oxford, 2020). The Department of Health and Social Care (2020) has worked continuously to support an already stretched social care service as 'delivery of every aspect of care by all clinical and non-clinical departments in the UK's NHS is being reassessed and fundamentally reorganised' (Wilan et al., 2020). Although the long-term effects of the pandemic are not yet fully realised, it is evident that providers of health and social care will face challenges for some time to come. Many are hopeful that this may create an impetus to rethink policies, particularly in relation to the provision of Long Term Care where outbreaks of the virus have threatened to overwhelm the health care system (Gardner, States & Bagley, 2020)) and above-inflation pay rises for some health and social care staff have already been agreed (Walker, 2020).

In this volume, our costs reflect 2019/20 prices and therefore do not capture the full effects of any changes. Our particular challenge this year in terms of publishing our annual Unit Costs report has been collecting routine information from organisations to update our unit costs given that many staff involved in collating this information have been furloughed. Of course, this is a small consideration in the grand scheme of things and we have only had to make a few minor changes in order to publish on time. For example, our Agenda for Change salaries run from April to March instead of May to April. It is, however, inevitable that we will find it more difficult to obtain some data this year. Please be advised that where we have had to uprate costs due to new ones being delayed, this will be clearly shown in our notes.

Even though any limited seasonality has been averaged out over the year, we have noticed that there has been a larger increase than usual this year; for example nursing salaries have increased on average by 4.75 per cent compared with less than 1 per cent in 2018/19. This is not a result of the changed salary dates and neither is it COVID-19 related, but is due to the NHS pay structure reform (The NHS Staff Council, 2018). The aim of the reform, which covers a three-year period (April 2018 to March 2021) has been 'to reduce the complexity of the previous pay structure by removing overlaps between pay bands and inconsistent variation in the gaps between pay points.' This year (2019/20), some staff at the top of their pay band have had their pay point deleted and received annual pay uplifts and pay progression (incremental) on 1 April 2020. No further increase will be awarded on their pay step (incremental) date, because they will have received their pay progression early.

Our working group were able to give us some really useful ideas on how to improve our web presence and promotion of our material and as a result we have made improvements to our signposting and introduced a new infographic directing readers to our increasing amount of web-based material. We intend to circulate this in the new year as an alternative to the hard copy report. We have also been able to commission a highly topical guest editorial and a further three excellent articles as follows.

Guest editorials and articles

Guest Editorial

This guest editorial, written by Lina Maria Ellegard from Lund University, focuses on her research carried out on the use of telemedicine in Sweden. Now more than ever before, in England and elsewhere, there is a strong emphasis on developing digital services and even before the COVID-19 outbreak, new guidelines were published for online and video consultations in primary care (NHS, 2019). Of course in recent months, coronavirus has shone a light on this form of GP consultation with a vastly increased number of patients being treated in the safety of their own homes. As the Swedish system shares features with our system, this editorial provides some interesting insights.

Our colleagues at the Care Policy and Evaluation Centre, London (Michela Tinelli et al.) have written our first article which focusses on the EconomicS-of-Social-carE-CompEndium (ESSENCE) project (www.essenceproject.uk; 2017-2019) and their new project – ESSENCE-2 which builds on previous work. The ESSENCE database aims to make it easier for decision-makers to access and understand the economic consequences of different ways to meet care needs. The new project continues to help decision-makers and this article shares the different ways readers can get involved. It is envisaged that ESSENCE will be very helpful to the Unit Costs programme.

Helen Weatherly is the author of the third article which has been drawn from a longer paper discussing the methods of evaluating social care interventions. The paper draws upon the results of a NICE commissioned scoping review and summarises the methods used in published economic evaluations of social care interventions. It highlights recent developments in this area and points out some gaps where further work may be of benefit.

New work

Dementia Care Mapping (DCM)

Dementia Care Mapping (1.6), one way of offering person-centred care, is an observational tool that is only used in 'public' areas of care environments. In this schema, we have drawn on work carried out by Meads and colleagues (2020) to present the cost per care home using DCM and the cost per resident.

Re-ablement

In 2017, our costs for the re-ablement service drawn from the Glendinning et al. (2010) study reached their ten year shelf life and were listed in section V in case readers still wanted to refer to them. Now, in chapter 11.9, you will find costs drawn from a more recent study carried out by Bryony Beresford & colleagues (2019).

Reference costs

We have updated our reference costs this year in the usual way using the National Cost Collection: National Schedule of NHS Costs produced by NHS Improvement. In addition, this year we have referred to the early collection of Patient Level Information and Costing System (PLICS) information being collated by NHS Digital. This information is still in its early stages so the information is limited.

We have included some new mental health costs this year for gender identity disorder, together with those for those for specialised services for Asperger Syndrome and Autistic Spectrum Disorder. We have also replaced some of the costs in this schema as some of those reported in earlier volumes are no longer listed in the national schedule.

Our schema on the reference costs of Abortion services has changed to reflect the different reporting in the National Schedule this year. The schedule incorporates the cost of surgery relating to abortions and miscarriages.

Ratios of direct to indirect time and new ratio for a clinical psychologist.

In response to questions we have had about how these ratios are created and how we use them in the Unit Costs report, I have published a blog (https://www.pssru.ac.uk/blog/unit-costs-and-ratios-of-direct-to-indirect-time/). In addition, thanks to a study by James Shearer and colleagues (2019) on Radically Open Dialectical Behaviour Therapy (RO DBT), in chapter 9, we have been able to include a new ratio for a clinical psychologist which can be used to calculate the cost of a face-to-face contact.

Routine activities

Inflators

This year we have altered our source data for our Personal Social Services (PSS) pay and prices inflation indices following discussion with our colleagues at DHSC. This data is normally derived from information taken from the Annual Survey of Hours and Earnings but this year it was not possible to extract this data. We have therefore decided in conjunction with advice from our colleagues at DHSC to switch to Skills for Care indices. More information can be found in chapter 15.4 of Section V.

NHS superannuation

Every year we verify and update where necessary the employers' superannuation contribution rate for local authorities and the NHS, which is then reflected in our unit cost estimates. You will see that on 1 April 2019 the NHS Pension Scheme employer contribution rate increased from 14.38 per cent to 20.68 per cent (this includes an admin levy of 0.08%) https://www.nhsbsa.nhs.uk/employer-contribution-rate-arrangements-remain-202021). A transitional arrangement is operating this reporting year (2019/20) where employers in the Scheme are continuing to pay 14.38 per cent and the outstanding 6.3 per cent will continue to be paid centrally by NHS England. This arrangement will also remain in place in 2020/21.

Local Government superannuation

We have also searched the actuarial valuations produced by the administrators of the Local Government Pension Scheme (LGPS) to establish the rate employers contribute to superannuation for local government employees. Based on 43 valuations, the average contribution rate for employers (the primary rate) is 18 per cent and will remain at this rate until March 2023, when the administrators of the fund carry out the next valuation. Employee contributions have been excluded.

Other useful information

Internet Interventions

Icare provides a comprehensive range of care services to assist adults to live as independently as possible whilst remaining in their home. The service's care planning is driven by the person who needs care by way of a person-centred care plan. In 2019, Jennifer Beecham and colleagues' (2019) paper 'Assessing the costs and cost-effectiveness of Icare internet-based interventions', was published. This is particularly helpful to readers looking for information to support economic evaluation of home-based interventions.

Children's services

In February of this year, the National Centre for Excellence in Residential Child Care (NCERCC) and Revolution Consulting published a report which provided new insight and reference for anyone involved in children's social care (Rome, 2020). The research for this report is based on three extensive Freedom of Information disclosures by local authorities in England and reports average prices for 9,535 private and voluntary sector children's homes. This research found that average prices are in keeping with PSSRU costs drawn from section 251.

Blogs

Christmas blog https://www.pssru.ac.uk/blog/category/unit-costs/page/3/

Children's blog https://www.pssru.ac.uk/blog/category/unit-costs/

Adult Social Care https://www.pssru.ac.uk/blog/category/unit-costs/page/2/

Direct/Indirect cost blog https://www.pssru.ac.uk/blog/category/unit-costs/

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I would like to say a special thank-you to Jennifer Beecham who retired in April 2020 after working on the Unit Costs programme since its inception in 1992 and as Principal Investigator since 2012. During this time, she has been a huge source of support to me and will be missed from our annual working group meetings and especially from our office at PSSRU.

Thanks too to my co-author, Amanda Burns, and to Sarah Godfrey and Alan Dargan, and of course all the Working Group (Ross Campbell, Adriana Castelli, Ciara Donnelly, Sebastian Hinde, Tracey Sach, James Shearer, Adam Storrow and Jonathan White) for their input at our meetings.

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Guest Editorial: E-consultations

Lina Maria Ellegard

Introduction

The British and Swedish systems for primary care share features such as public funding based on capitation and persistent problems with long waiting times. Another more recent similarity is that traditional GP practices are being challenged by companies offering e-consultations via chats or video calls around the clock. In the UK, Babylon *GP at hand* (https://www.gpathand.nhs.uk/gp-clinics) is the most well-known example. In Sweden several companies compete fiercely on the market for e-consultations. Since the market emerged in 2016, it has grown remarkably: in 2018, e-consultations accounted for almost five per cent of all GP consultations in Sweden and around one per cent of total public expenses on primary care.[1] Unlike Babylon *GP at hand*, which has secured NHS funding by registering patients at their practice,[2] the Swedish companies have been working outside the regular capitation system, instead being reimbursed on a fee-for-service basis.

In this editorial, I provide a brief overview of how the e-consultation market emerged in Sweden and how policy-makers have responded. I also take the opportunity to share some results from a study, previously published in Swedish, on the degree of substitution between e-consultations and traditional primary care (Ellegård & Kjellsson, 2019).

The background: primary care in Sweden

The responsibility for Swedish health care is delegated to 21 independent regions, each deciding on how to organise and finance their health care system. In all regions, primary care is organised in group practices – primary care centres (PCCs) – staffed by a handful of employed GPs, nurses and other professional categories, e.g., physiotherapists and cognitive therapists. Public and private PCCs contract with the regions on equal terms (Anell, 2015).

Capitation, i.e. a fixed amount per listed patient, is the fundamental form of reimbursement of PCCs in all regions except Stockholm, where the reimbursement is approximately equally divided between capitation and fee-for-service based on the number of consultations provided.[3] Since 2010, all patients in Sweden have the right to register at any PCC in their region of residence (providers may not close their lists) and they may switch whenever they like. Notably, being listed at a PCC does not restrict patients from consulting other providers (Dietrichson, Ellegård, & Kjellsson, 2020; Anell et al., 2017). Despite this strong empowerment of patients, Swedish primary care is characterised by low accessibility and long waiting times (Blix & Jeansson,2019). Primary care centres often have limited telephone hours, and patients may have to wait for weeks to get an appointment for non-acute problems. Primary care centres are typically only open during office hours, although there are some practices open on evenings and weekends in urban areas.

E-consultations: the force awakens – and the empire strikes back

The emergence of the market for e-consultations was an unintended consequence of the Patient Right Law, enacted by the Swedish government in 2015, which gave patients the right to consult care providers outside their region of residence. Entrepreneurs realised that they could establish a company in one region, offer e-consultations to patients in other regions, and then bill their patients' home regions. Notably, this construction implies that e-consultation companies operate completely outside the regional patient choice and reimbursement systems. Instead, the payment is governed by the regulation of inter-regional reimbursements negotiated by the Swedish Association of Local Governments and Regions (SALAR). This implies that e-consultation companies are reimbursed on a fee-for-service basis for each consultation. Patients also pay a

[1] https://skr.se/halsasjukvard/ehalsa/digitalavardtjansteriprimarvarden.28301.html Last accessed May 7, 2020
[2] https://www.england.nhs.uk/london/our-work/gp-at-hand-fact-sheet/ , accessed June 8, 2020.
[3] Pay-for-performance (P4P) and other reimbursement types account for up to a few percentages of reimbursement, depending on region.

consultation fee according to the rules of the region where the company is located ranging from 0-250 SEK (Blix & Jeansson, 2019).

The three pioneering companies together serve 90 per cent of the market; the largest company handles almost half of all e-consultations. The number of e-consultations rose from 20,000 in 2016 to 1,159,000 in 2019. The billed amount rose from 37 million SEK to 0.5 billion SEK during the same period (data from SALAR (The Swedish Association of Local Authorities and Regions)).

When expenditures on interregional care started to rise in 2017, SALAR responded by developing new recommendations for the level of reimbursement for e-consultations. The recommendations were based on estimates of unit cost per consultation using assumptions on, e.g. wage levels, time spent per consultation and costs for laboratory services. The pre-2016 reimbursement level, which was based on the average cost for office-based GP consultations, was reduced by more than 50 per cent to SEK 650 for e-consultations with a GP, 600 for e-consultations with psychologists and behavioural therapists, and SEK 300 for e-consultations with nurses and other staff. In 2019, SALAR again reduced the reimbursement levels downwards slightly, after having revised their assumptions on wage levels, other costs, laboratory costs and productivity (SALAR 2019).

Interestingly, although the market for e-consultations operates in parallel to the ordinary primary care system, SALAR has not questioned the principle of fully covering the companies' costs (personal communication with Lars Kolmodin at SALAR). Notably, this principle does not only contrast with the capitation-based reimbursement ideal dominating Swedish primary care. It also assumes that the value created by e-consultation companies exceeds the value that would otherwise have been created by the same funds. In this regard, it is notable that health care system, by law, ought to give priority to patients according to their care need – i.e. policy-makers value more the treatment of sicker patients than the treatment of relatively healthy patients. The e-consultation companies, who are paid a fixed price per consultation (with no volume cap), have no financial incentive to serve patients with complex health problems. Indeed, as many have pointed out in the policy debate, many complex issues cannot be handled without a physical examination (Ellegård & Hoffmann, 2020).

Patient behaviour

Patients attending e-consultations have different characteristics compared to patients attending regular GP practices. Residents in metropolitan areas, in particular Stockholm, are over-represented among patients at e-consultation companies (Blix & Jeansson, 2019). The most striking difference is the age profile. Infants and adolescents account for a very large share of e-consultations, whereas the age profile of PCC patients is more skewed toward the 50+ age group (Blix & Jeansson, 2019; Ekman et al., 2019). An analysis of register data from Kronoberg Region showed that infections and skin conditions were the most common reasons for contacts with e-consultation providers in all age groups, whereas depression and hypertension were the most common reasons for contacts with regular PCCs (Ekman et al., 2019).

Given the financial incentives to avoid patients with complex health problems and the demographic differences, one might worry that the e-consultation market grows at the expense of patients with greater care needs. However, it is also possible that e-consultation companies relieve the public purse by replacing office-based visits with e-consultations. While it is not fully documented that the direct unit cost of an e-consultations is lower (Ekman 2018), there are reasons to believe that this might be the case. Representatives from SALAR point out that e-consultations shift some administrative costs from the public sector to the patient, and that it frees up time that the PCC staff would have spent on other things than the actual consultation (for example, showing the patient the way from the waiting room to the office, waiting for the patient to take on and off outerwear).

On the other hand, as the straightforward access to e-consultations effectively lowers the price patients face for contacting health care, the availability of e-consultations might induce contacts that would not have taken place if these services were not available. Patients may thus demand both e-consultations *and* PCC consultations

(Licurse 7 Mehrotra, 2018). E-consultations with GPs may also replace contacts with nurses, whose wage is considerably lower.

A first step towards an understanding of how e-consultations affect costs is to examine how patients substitute between self-care, traditional primary care and e-consultations. An analysis of care register data from Jönköping Region showed that 90 per cent of e-consultation patients did not consult any other provider in the surrounding period (Gabrielsson-Järhult, Areskoug-Josefsson & Kammerlind, 2019). While this figure suggests that patients were satisfied after the e-consultations, it does not indicate to which extent the e-consultations replaced physical consultations. It might reflect a 1:1 substitution – if all patients would otherwise have contacted traditional care, but it might also reflect a complete absence of substitution – if all these patients would have chosen self-care unless e-consultations had been available. In the absence of information on the share of these patients that would have contacted health care under all circumstances, it is impossible to determine the degree of substitution.

In a study published in the journal of the Swedish Medical Association, a colleague and I made an initial attempt to estimate the degree to which e-consultations replace office-based consultations in Sweden (Ellegård & Kjellsson, 2019). We studied a representative sample of residents in Region Skåne and their household members. Three percent of the sample had been in touch with e-consultation companies at least once in 2016-2018. Their average age was lower than that of the rest of the sample, but they had consulted PCCs more often (on average) in 2013-15. Their morbidity history – diagnoses registered at previous visits – also differed from that of the population at large. For instance, they were less likely to have a hypertension or diabetes diagnosis, but more likely to have been diagnosed with an infection, depression, anxiety or asthma.

We examined the association between the number of e-consultations and the number of consultations with PCCs and hospital emergency departments in 2016-2018. We adjusted as far as possible for differences between e-consultation patients and other individuals. First, we estimated regression models adjusting for previous diagnoses, age, sex, socioeconomic status etc. Second, we used data for 2013-15 to make before-after comparisons for each individual, thus removing the influence of unobserved time-invariant heterogeneity in, for instance, the propensity to seek care. In these regressions, we also gave higher weight to individuals with no experience of e-consultations who resembled e-consultation patients with respect to previous morbidity etc.

We found that the e-consultation patients contacted regular PCCs more than other individuals in 2016-2018. For every three e-consultations, the number of contacts with a GP at a PCC increased by two. The increase mainly affected the number of telephone consultations. We found nothing to indicate that e-consultations replaced visits at the emergency department. Thus, some individuals seem to have a relatively high propensity to seek care; this group already consulted traditional care more than other individuals before the emergence of the e-consultation market, they have not reduced their utilisation of PCCs services since the emergence of the market – but they now also attend e-consultations.

The positive association between e-consultations and traditional consultations may reflect that e-consultation providers refer patients to their PCC. However, it might also reflect omitted variables that correlate with both the propensity to contact e-consultation companies and PCCs. Our research design did not fully account for new and temporary health problems – which are the most common causes for e-consultations. Notably though, while the estimates might underestimate the potential of e-consultations to replace office-based consultations, they are very far from indicating a 1:1 substitution. From a more positive angle, the fact that e-consultation patients are frequent visitors in PCCs as well suggests that a first prerequisite for substitution may be fulfilled: e-consultations can only replace consultations that would have taken place anyway.

Concluding remarks

In the past few years, Sweden has witnessed an unforeseen growth of new primary care providers using new technologies to provide GP consultations. Although the rules of the game in this market differ widely from

those facing traditional primary care providers, policy-makers have not made any efforts to level the playing field. The only policy response so far has been to reduce the reimbursement level for e-consultation companies. Speculatively, policy-makers are not uncomfortable with the fact that these companies increase the access to primary care and adopt new technologies.

There are nonetheless signs of convergence. As of today, the regular PCCs also either have access to, or plan to implement, e-consultation systems. The COVID-19 pandemic has intensified the adoption of such systems in traditional care. In parallel, e-consultation companies have established subsidiary units – PCCs – in a few regions. Hence, they are now able register patients and receive capitation, just like Babylon *GP at hand*, while still also taking advantage of the inter-regional reimbursement system for the e-consultations made by non-listed patients. Speculatively, the e-consultation companies will defend their market share as long as the inter-regional reimbursement system persists and aim at full cost reimbursement.

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ESSENCE: Examining the economic case for adult social care interventions

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Background

Comparing costs and outcomes of alternatives – which is what economic evaluations seek to do – can be a helpful part of social and health care decision-making processes when budgets are fixed. Economic evaluations provide evidence about the costs of two or more alternative courses of action relative to their respective outcomes. The outcomes chosen should relate to the objectives of the decision-maker. In social care, for example, key outcomes might include quality of life related to social care, improving independence, satisfaction with support and wellbeing.

The EconomicS-of-Social-carE-CompEndium (ESSENCE; www.essenceproject.uk; 2017-2019) was conducted by a team in the Care Policy and Evaluation Centre (CPEC) at LSE, with funding from the NIHR School for Social Care Research. The team reviewed and summarised economic evidence that could support decision-making in England's adult social care system. The aim was to make it easier for decision-makers to access and understand the economic consequences of different ways to meet care needs. Case summaries highlighted relevant evidence on a number of specific adult social care interventions. A searchable online database of evidence (the ESSENCE Toolkit) was created (https://essenceproject.uk/toolkit/).

A new project - ESSENCE-2 ('The ESSENCE continuation study: Examining the economic case for a range of adult social care interventions', 2020-2022) builds on our previous work. We are reviewing, summarising and updating evidence in the ESSENCE Toolkit. We are also summarising *new* economic evidence, drawing on studies of services and interventions relevant to the adult social care system in England. We will therefore be able to update material on the ESSENCE website to ensure that evidence is easily accessible. We will consult with potential users of the material to help us improve Toolkit layout and content. We will also work to raise awareness of the Toolkit and encourage its use. Alongside this activity, we want to improve wider understanding of this economic evidence by providing related training and developing learning materials.

The ESSENCE Toolkit, main activities and lesson learnt so far

Selecting social care interventions and assembling the economic evidence

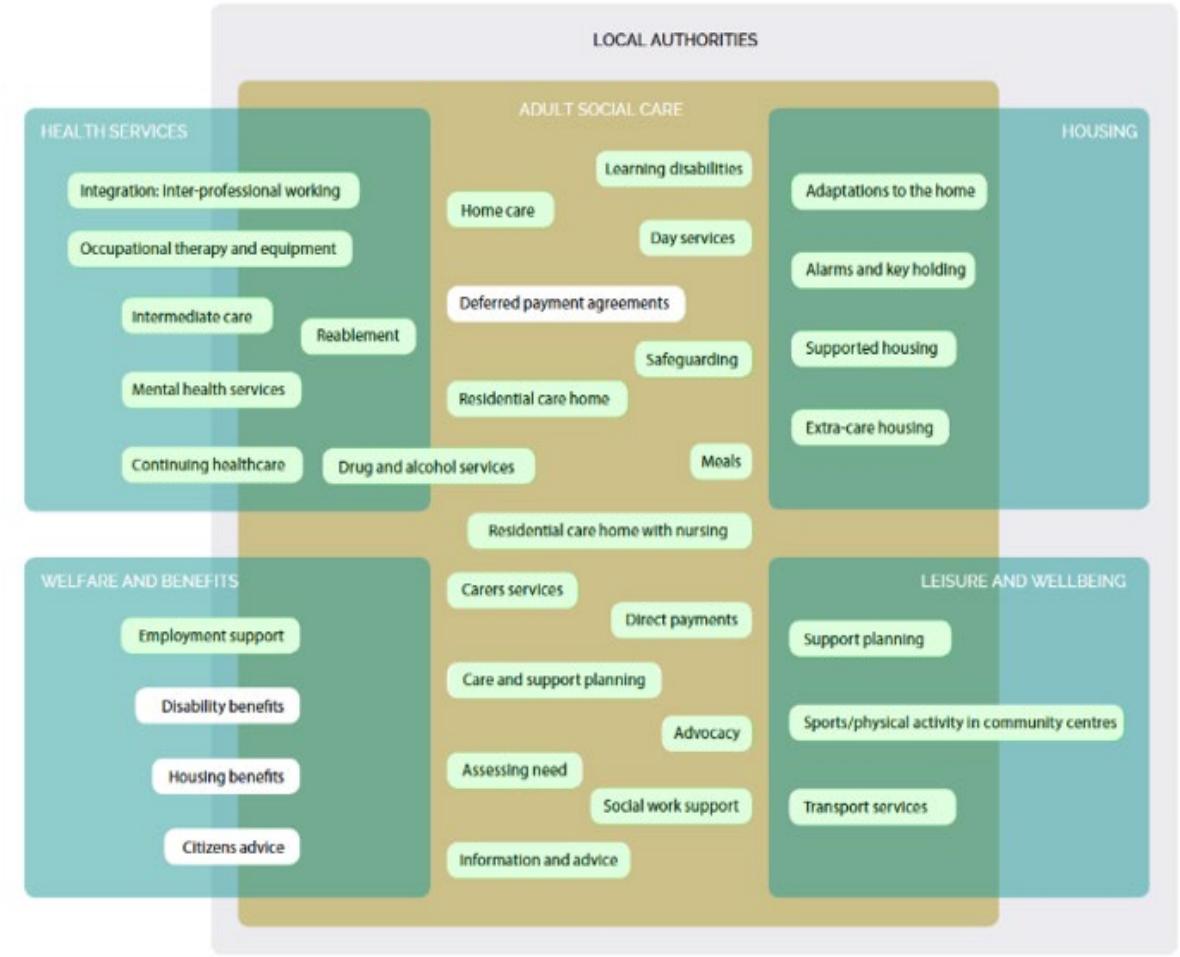
The ESSENCE Toolkit includes a collection of research studies. It summarises much of the evidence through individual case studies, and has a searchable database. By December 2019, when the previous project ended, 17 case summaries and a database with 231 sources of evidence had been included. Evidence was extracted from many sources, including: NICE guidelines on social care (online searchable database); the Public Health England Tool on return-on-investment and cost-effectiveness of public health programmes (Public Health England, 2017); a scoping review commissioned by NICE on social care economic evaluation methods (Weatherly et al., 2017); the Housing Learning and Improvement Network; EMBASE (online searchable database); NIHR SSCR-funded projects; the Social Care Institute for Excellence online searchable database; research at the Care Policy and Evaluation Centre (CPEC) LSE and the Personal Social Services Research Unit (Kent, Manchester); research at Centre for Health Economics, University of York; and the King's Fund's online searchable database.

Evidence stored in the ESSENCE toolkit will continue to be categorised by intervention using a framework borrowed from the National Audit Office's (2019) to describe social care interventions (see figure 1). Findings for each intervention will be extracted and summarised using the formats already tested as part of ESSENCE, in ways that make the information understandable to a wide range of people:

- Individual case summaries. For a selection of interventions – where we consider the evidence to be sufficiently robust – we will produce new or update existing case summaries. Each follows a structure that explains key matters of interest, includes a short summary, and provides a longer non-technical account. Each case summary will include: context and setting for delivery of the intervention; key points of interest and explanation of the intervention; summary information on effectiveness and cost-effectiveness; any evidence on what people think about the intervention; links to additional information such as online material and journal articles; and contact details for key experts in the relevant field (usually the authors of the main studies reported in the case summary). An example is provided in the box 1 below.

- A searchable database of evidence. The ESSENCE database of evidence allows the user to search for information about completed as well as ongoing projects to discover more, for example, about their focus, setting, type of intervention presented, population supported and main findings. Keywords can be entered to find studies of interest. Information can be filtered for comparison using an excel spreadsheet. In ESSENCE-2 we are updating the database to include new evidence.

Figure 1: ESSENCE organisational framework https://essenceproject.uk/toolkit/ (from National Audit Office 2019)



Annette Bauer, Danielle Guy (2019) Advance care planning: economic evidence. ESSENCE SUMMARY 10 (the resource is accessible here**)**

KEY POINTS

- Advance care planning is an important end of life care intervention that helps people plan for their future care and support needs, including medical treatment if they are at risk of losing their mental capacity or their ability to communicate.
- It helps people get the treatment they *want* during the final stage of their life and increases their chance to die in their preferred place of death. It benefits the mental health of the person caring for them.
- Advance care planning is likely to be cost-effective. This is due to improvements in carer's quality of life, reductions in the use of aggressive life-sustaining treatment and more people dying at their place of residence rather than in hospital.
- Future research needs to address gaps in implementation knowledge of advance care planning.
- Implementing advance care planning effectively is challenging and requires substantial organisation and system-wide changes.

Working with key partners

As we continue working on ESSENCE-2, we continue to benefit from regular dialogue with a range of experts, including local decision-makers, commissioners, service providers, care practitioners, and third sector organisations. Our advisory group includes stakeholders from these backgrounds, as well as researchers with substantial experience in social care interventions, a carer researcher and a researcher with lived experience of mental health services.

Communicating and discussing findings

The team has been sharing details of the project with a variety of groups, and we will continue to discuss findings with as many people who might be interested! Our aim is to support wider and deeper understanding of the usefulness and uses of the economic evidence in the social care field.

A recent journal paper describes the project in greater detail (Tinelli et al., forthcoming).

Delivering training

In 2019 we delivered a workshop at LSE and ran seminars for different stakeholder groups. Learning from recent experience, we will in future run more events online. Recorded webinars, such as the one we delivered for the NIHR SSCR in May 2020 (accessible here) offers participants the flexibility of learning, as they can access e-learning materials anywhere at times convenient to them. We will organise online workshops/webinars to explain what economic analysis/evaluation is, why it is useful and how to conduct and interpret economic evaluations in adult social care (for example: we will deliver a dedicated event as part of the NIHR SSCR Capacity Building Webinar).

Identifying future research recommendations

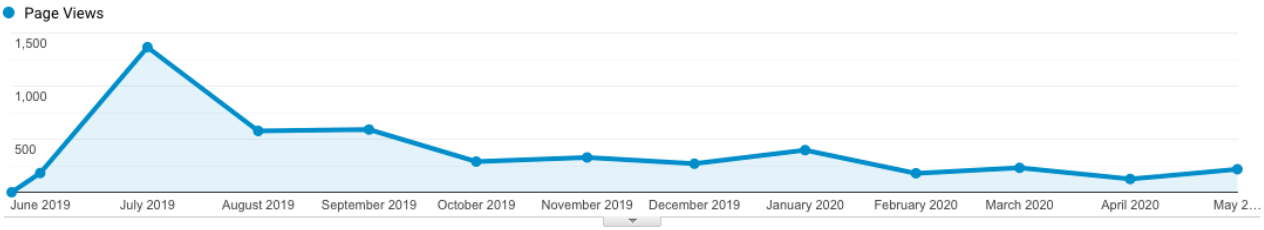
Keeping the ESSENCE Toolkit updated can also be useful for NIHR and other funding bodies to help identify areas that are not well supported with economic evidence, and so can point to research needs and opportunities.

Consulting with ESSENCE Toolkit users and seeking their feedback to optimise the layout and content of the ESSENCE Toolkit

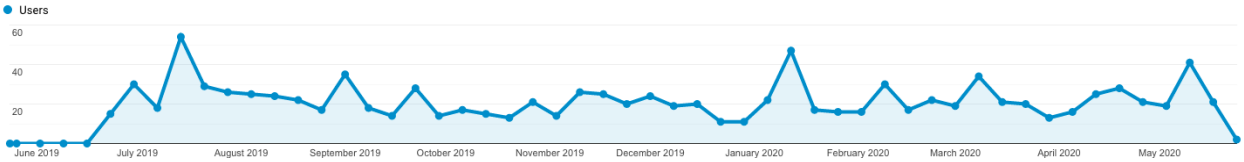
Top-line analytics on site usage data have been collected via Google Analytics (which tracks traffic per device, see figure 2) since the website launched in July 2019, A total of c. 5,000 page views by c. 880 visitors took place over the initial 11-month period with users viewing on average 3.7 pages and each visit lasting around 3 minutes. Of these, 13.6 per cent visited the site more than once (using the same device). The UK accounted for more than half of all traffic and Google search was the top source of traffic – the Google search term that generated most traffic was “Base case analysis”. The site has not been developed or significantly promoted since it began. In ESSENCE-2, we are addressing these points to increase both the usefulness and use of this resource.

Figure 2: ESSENCE Toolkit analytics

(a) Page views peaked at launch then settled to circa 300 per week



(b) Site users relatively consistent at circa 35 per week



Box 2: The most searched case summaries

1.	Carers services | NAO Keywords | The Essence Project
2.	Home care | NAO Keywords | The Essence Project
3.	Reablement | NAO Keywords | The Essence Project
4.	Care and support planning | NAO Keywords | The Essence Project
5.	Adaptations to the home | NAO Keywords | The Essence Project
6.	Adult with learning disabilities | NAO Keywords | The Essence Project
7.	Integration: Inter-professional working | NAO Keywords | The Essence Project
8.	Extra-care housing | NAO Keywords | The Essence Project
9.	Mental health services | NAO Keywords | The Essence Project
10.	Employment support | NAO Keywords | The Essence Project

The most popular resources on the site were the Case summaries (see box 2) followed by specific phrases in the Glossary. Economic evidence is presented to site visitors grouped by National Audit Office (2019) keywords (see mapping diagram above) and the top ten most viewed groupings are shown in the table to the left. We do not have statistics on individual downloads of PDFs for either Case Studies or evidence papers – this will be addressed as part of ESSENCE-2 via enhanced analytics; a deliverable in this phase.

ESSENCE-2 has already started: please get involved!

ESSENCE-2 will continue to help decision-makers to easily find evidence to help them make better use of the resources they control. If you would like to get involved, there are many ways that you can contribute to the project:

- Sharing relevant research (published or underway)
- Providing feedback to optimise the layout and content of the ESSENCE Toolkit
- Providing expert advice
- Raising awareness of the ESSENCE toolkit and promoting its use and the use of economic evaluation for decision-making
- Organising new training events

To get involved please contact the research team https://essenceproject.uk/contact/.

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Economic evaluation methods in social care: A scoping review

Helen Weatherly, Rita Faria, Bernard Van den Berg, Mark Sculpher, Peter O'Neill, Kay Nolan, Julie Glanville, Jaana Isojarvi, Erin Baragula,Mary Edwards.

Introduction

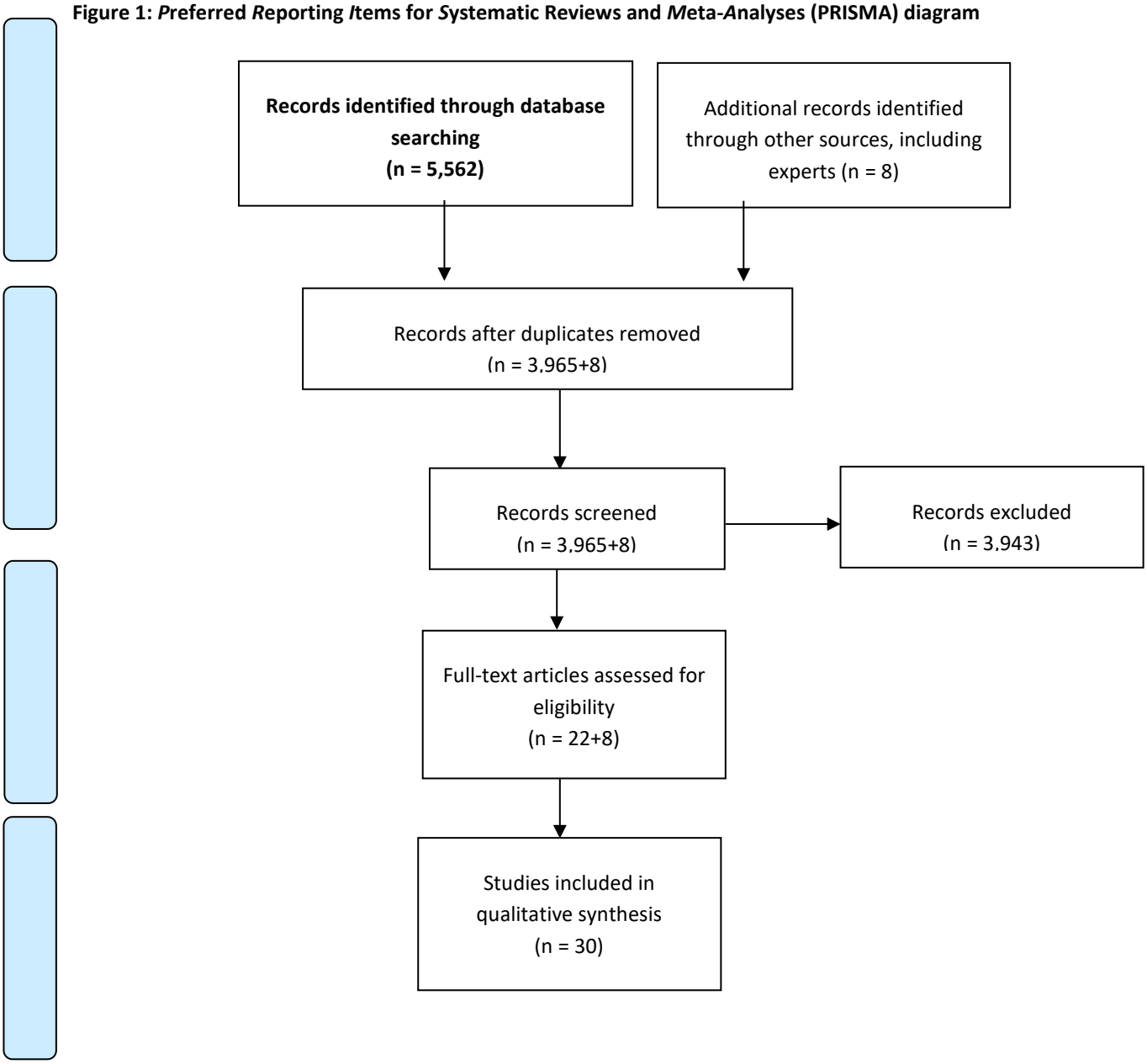
The purpose of economic evaluation is to inform decisions as to the relative value of different courses of action, in a systematic, transparent way. Cost-effectiveness analysis involves assessing the costs and effects of two or more competing, alternative interventions against other uses if the same resources were used elsewhere. Applied to the social care context, a commissioner with a constrained budget might use this information to consider whether to invest public funds in a new intervention, programme or service or whether standard care represents the optimal choice of provision.

In the context of the UK, the National Institute for Health and Care Excellence (NICE) has provided methods guidance for the economic evaluation of social care interventions (NICE, 2013 & 2014). In practice, there remains considerable uncertainty on methods for social care economic evaluation; for example, in the relevant perspective, inclusion of informal care, appropriate cost-effectiveness threshold, etc. To help resolve this uncertainty, NICE commissioned a scoping review to support developing a long-term strategy for how to consider social care economics in NICE guidelines. Full details for this study are available online (see Weatherly et al., 2017). This article summarises the methods used in published economic evaluations of social care interventions, briefly noting some recent methods developments, and it highlights key methods issues and gaps for addressing in the future.

Methods

A narrative synthesis explored the methods used in peer-reviewed publications of economic evaluations of adult social care interventions written in the English language and published between 2010 and 2016. The search strategy involved searching eight social care and economic bibliographic databases between 16 November 2016 and 18 November 2016. To select studies, two reviewers (HW, RF) screened the abstracts and full texts. Any disagreements were resolved through discussion between them and a third reviewer (MJS). Each study was assessed for key requirements for economic evaluation (Drummond et al., 2015) comprising; perspective, comparators, evidence, opportunity costs, uncertainty, equity. Experts in the field (see acknowledgements) informed the review by suggesting studies relevant for inclusion in the review, giving feedback on the methods issues raised by the review, and assisting in identifying additional methods issues and gaps beyond those identified in the review.

Figure 1: *P*referred *R*eporting *I*tems for *S*ystematic Reviews and *M*eta-*A*nalyses (PRISMA) diagram



Results

As reported in the PRISMA diagram (Figure 1), abstracts for almost 4,000 unique references were screened. Thirty studies were included in the review. Sixteen studies (63%) were UK-based and the other studies were based in Australia, Denmark, Finland, the Netherlands, Norway, Taiwan and the USA. The type of economic evaluation undertaken varied widely. Eight (27%) studies included more than one type, and not all studies specified the type of economic evaluation undertaken. Cost-effectiveness analysis (CEA) using measures of effect specific to the interventions under evaluation was the most common approach (16, 53%), followed by CEA based on quality-adjusted life years (QALYs) (10, 33%) and cost-consequence analysis (CCA) (9, 30%). One study used Cost Benefit Analysis (CBA) methods by including outcomes monetised to reflect individual preferences. The other two (7%) studies calculated outcomes in monetary units by multiplying a relevant health-related quality of life preference weight by the cost-effectiveness threshold of £20,000/QALY typically used by NICE, to derive an estimate of net benefit.

Perspective

Whilst some studies referred to methods guidelines e.g. the NICE, England (https://www.nice.org.uk/), the Dutch manual (Oostenbrink et al., 2002), the Gold Panel (Gold et al., 1996, Neumann et al., 2017) (now updated http://2ndcep.hsrc.ucsd.edu/) and Drummond et al. (2015), few stated the decision maker that the evaluation was intended to inform. Twenty-four (80%) studies stated the perspective of the analysis with some studies using multiple perspectives. Perspectives stated included the societal perspective (9, 30%), health and social care perspective (6, 20%), the public payer perspective (6, 20%), the carer perspective (2, 7%), the social care perspective (1, 3%) and the home agency perspective (1, 3%). Fourteen (47%) studies left the perspective of the analysis unstated, or the perspective that was stated did not appear consistent with the inferred perspective, based on the costs included in the evaluation. All studies evaluated interventions that appeared to have cost impacts across multiple parts of the public sector and the broader economy, and many studies measured multiple outcomes although these were not necessarily included in the economic evaluation.

Interventions and Comparators

All studies compared two interventions. Most studies compared an intervention, such as a new service, to usual care. It was not always clear if the intervention was used in addition to usual care, although in six (20%) studies this was stated to be the case. Where a rationale for selected interventions was given this included: improving management and provision of services to an expanding population of users with complex and long term care needs, improving a range of outcomes e.g. the quality of care and health-related/social care-related/quality of life and wellbeing/happiness of users, reducing or saving resource use and cost.

Evidence

Most analyses were based on primary studies (27, 90%) collecting individual client level data, whether for the effectiveness data, the resource use data or both, and three (10%) studies used mainly survey data. Fourteen (47%) studies involved an economic evaluation within a randomised controlled trial (RCT). The remaining studies used observational survey data, quasi-experimental study designs or decision modelling using a mixture of data from the literature and data direct from the services they were evaluating. Five (17%) studies included a simple decision model based on secondary evidence. Rarely did studies make it clear about the expected duration of the impacts on resource use/cost and effects of the interventions compared, or the rationale for the time horizon of the study.

QALYs were calculated for use in a CEA in ten (33%) studies and were the primary outcome in eight (27%) of these. Where more than one outcome was included in a CEA, results across the CEAs could differ (e.g. in statistical significance as in Jones et al., 2013). Social care-related quality of life was estimated in six (20%) studies, with four (13%) studies using ASCOT and two (7%) of studies using ICECAP. Other outcomes included process outcomes (e.g. quality of care or assessment satisfaction), resource-related outcomes (e.g. carer time), mortality outcomes (e.g. life years saved), outcomes focusing on function (e.g. Barthel Index or ADL),

outcomes measuring anxiety and depression (e.g. HAD or GHQ) and broad outcomes (e.g. happiness and subjective wellbeing).

Informal unpaid carer contribution was included in ten (33%) studies. Informal carer time was measured using carer hours, and valued using various approaches: the proxy good method, the opportunity cost method, QALY, carer burden and subjective wellbeing. In one study, outcomes for the informal carer only were evaluated, whilst for the other nine studies outcomes for the care recipient were assessed separately from those of the carer. In one of these studies, outcomes for the care recipient and the carer were combined. Of the studies that costed informal carer time, two studies undertook an analysis with and without informal carer costs, and two studies compared the use of different methods of costing informal care, to assess the impact on results.

In most studies, resource use was reported separately from unit costs (19, 63% of studies). Approaches to collecting data included asking direct questions at interview or via self-completed questionnaire. Resource use data collection tools used included use or adaptation of the Client Service Receipt Inventory (CSRI) (Beecham and Knapp, 2001) in seven (23%) studies, and the Resource Utilization in Dementia questionnaire (RUD (Wimo and Nordberg, 2007)) in one study. The remaining studies appeared to utilise resource use questionnaires bespoke to the study. Resource use data were obtained from the service user in most studies, although in a number of studies the data were obtained from the professional delivering the service or a relevant informal carer e.g. if the care recipient had cognitive impairment. In twenty-seven (90%) studies, resource use and costs falling on more than one sector of the economy were evaluated. Twenty-seven (90%) studies reported health care sector costs, with primary care costs being more commonly reported than secondary care sector costs. Typically, costs falling on different sectors were reported separately, by service and sector, and all studies aggregated these costs to calculate a total cost across all sectors covered in the study.

Opportunity costs

Across the studies, a range of approaches was undertaken to examine cost-effectiveness and these involved different decision rules. Eight of the ten CEA studies that used QALYs reported the cost-effectiveness threshold, and in six of these studies the NICE threshold was referred to and used to reflect opportunity cost. As expected, the CEAs reported an incremental cost and effect, and an incremental cost-effectiveness ratio (ICER). Typically, the ICER included aggregated costs across sectors despite the fact that costs (and savings) falling on different sector budgets are likely to generate different opportunity costs (and benefits) given that different sectors are likely to differ in their productivity and financial arrangements (Drummond et al., 2015). In the CEAs that did not include a QALY, a variety of methods were used to determine the cost-effective intervention. These included: comparing the ICER to a range of hypothetical threshold values, benchmarking the ICER to the ICERs of interventions evaluated in other published cost-effectiveness studies, or reporting the threshold at which the intervention might be considered cost-effective. In a few studies, there was no conclusion offered as to whether one intervention was cost-effective (i.e. generated greater benefits than opportunity costs – positive net benefit); as expected, based on the methods used, this was always the case for the CCA studies. For the CBA study, the cost of the intervention was subtracted from the WTP for the intervention (there was no comparator intervention involved) to calculate overall welfare gain/loss. The remaining two studies did not consider opportunity costs imposed by budgetary arrangements. Instead, they calculated a ‘net benefit economic value’ by subtracting the economic consequences of the intervention from the costs of the intervention. Some studies undertook more than one CEA within the evaluation thus estimating several ICERs/net benefits.

Uncertainty

Fifteen CEA studies (whether based on QALYs or not) calculated cost-effectiveness acceptability curves, and fourteen undertook univariate sensitivity analyses to test the robustness of the study findings to changes in parameter estimates used within the evaluation. No studies discussed sources of structural uncertainty. No studies undertook value of information analysis to establish whether the value of undertaking additional

research might be expected to outweigh its costs, and to assess the implications of this for funding and resource prioritisation decisions. Generalisability of the results was considered in a few of the studies. Typically, authors suggested that the study findings had restricted relevance due to the specific context and heterogeneity of the intervention e.g. that there were different models of a service, which might not be easily replicable in other parts of the jurisdiction, or reflect current practice elsewhere. In a few studies, heterogeneity in cost-effectiveness between sub-groups was anticipated, but this was not formally assessed. A few studies noted that results might be different if the follow-up of service users was extended, suggesting that the time horizon of the economic analysis may have been insufficient.

Equity

In relation to equity, although some interventions targeted vulnerable groups, none of the studies examined the equity implications associated with the interventions evaluated. The assumption (always implicit) was that a unit of outcome such as the QALY was of equal social value, no matter who received them. This is consistent with NICE health and social care and technology assessment reference cases (NICE, 2013), although variation is permitted in technology assessment in the cases of patients with very short expected survival and those with very rare diseases.

Summary

The scoping review highlights the range of methodological approaches used to undertake economic evaluations of social care interventions. Within the constraints of this review, it was not possible to give full expression to the approaches that are available for evaluation.

Economic evaluation is increasingly used to evaluate social care interventions, as evidenced by the ESSENCE project, which is an Economics of Social Care Compendium https://essenceproject.uk/ led by Professor Martin Knapp. The expanding implementation and use of economic evaluations of social care interventions highlights the need to develop the methods and guidance further. The recommendations below cover key methods issues and gaps identified by the review for further research, as well as relevant ongoing research.

Methods issues and gaps

- Agreement on the objectives of the social care sector, the appropriate outcome measures, systematic and relevant measurement and valuation of resource use, and the implications of these for the perspective of the economic evaluation and accounting for costs and benefits impacting different sectors. Ongoing research includes Walker et al., (2019) on cross-sectoral evaluation, methods to extend QALYs to a broader measure of wellbeing (https://mrc.ukri.org/documents/pdf/improving-cross-sector-comparisons-using-qalys-and-other-measures-a-review-of-alternative-approaches-and-future-research/), and increasing use of ASCOT (Netten et al., 2012) and ICECAP (Coast et al., 2008) outcome measures.
- Agreement on a cost-effectiveness threshold in social care given the opportunity cost of new interventions to decision-makers, the agreed outcome measures, and the appropriate perspectives. Ongoing research includes Longo et al. (2020) on the marginal productivity of the long term/social care.
- Development and use of methods for when evidence is sparse in the context of social care (e.g. decision analytic modelling (Briggs et al., 2006), expert elicitation (Bojke et al., 2019), value of information (Fenwick et al., 2020).
- Guidance on the methods to measure and value the contribution of informal care in the provision of social care, given the chosen perspectives; ongoing research includes outcome measurement in informal carers (Al-Janabi et al., 2011) and methods to incorporate carer outcomes in economic evaluations (Al-Janabi et al., 2016).
- Development of guidance on the scoping of economic evaluations of social care interventions to ensure that all the relevant alternatives are compared.
- Extending of methods to consider equity in economic evaluations of social care interventions given recent developments on the topic (Cookson et al., 2020).

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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 Dementia care mapping

1.7 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 £165.56.[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. As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	2019/2020 value	Notes
A. Fees	£857 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 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 £26 using care home data). Costs have been uprated 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.[11] This has been used as a proxy for personal consumption.
Short-term care		No current information is available on whether residents in short-term care are less costly than those who live full-time in a nursing home. See previous editions of this volume for sources of information.
Dependency		No current information is available on the relationship of dependency with cost. See previous editions of this volume for sources of information.
Occupancy	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 2019/2020		
£857 establishment cost per permanent resident week (A); £907 establishment cost plus personal living expenses and external services per permanent resident week (A to E); £123 establishment cost per permanent resident day (A); £130 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.

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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 Dataset[8] is higher than that reported using the ASC-FR returns.[2] As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	**2019/2020 value**	**Notes**
A. Fees	£712 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 uprated 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 2019/2020		
£712 establishment cost per permanent resident week (A); £762 establishment cost plus personal living expenses and external services per permanent resident week (A to E); £102 establishment cost per permanent resident day (A); £109 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.

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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. As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	2019/2020 value	Notes
Capital costs A. Buildings and oncosts	£98 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 G. GP services H. 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 & 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 uprated using the NHS cost inflation index.
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 2019/2020		
£1,241 establishment cost per permanent resident week (includes A to E); £1,291 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.

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[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 uprated using the PSS pay and prices inflator. The median and mean cost was £149 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. As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	**2019/2020 value**	**Notes**
Capital costs A. Buildings and oncosts	£6.60 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	£2.30 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)	£56 per client attendance	The median and mean cost per week is taken from PSS EX1 2013/14 and has been uprated using the PSS pay & prices index.[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 £56. 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 2019/2020		
£64 per client attendance (includes A to D); £14 per client hour; £49 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 £1,325. 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. Figures have been uprated to 2019/2020 values.

Costs and unit estimation	2019/2020 value	Notes
A. Wages/salary	£473,114 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	£142,897 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	£121,956 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	£195,901 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	£4,451 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 2019/2020		
Total annual cost £938,318; total cost per hour £465; cost per client £1,325.		

[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 Dementia Care Mapping

Dementia Care Mapping (DCM) is an observational tool that is only used in 'public' areas of care environments. It usually involves one or two trained mappers sitting in areas such as a lounge or dining area and observing what happens to people with dementia over the course of a typical day. At the end of a period of observation the results are analysed and fed-back to the care team so that care can be developed (https://bradford.ac.uk/dementia/dcm/dcm-data-sheets/Sample-Briefing-Document.pdf). Information for this schema has been drawn from Meads and colleagues (2019)[1] and provides the cost of delivering DCM mapping to a residential care home. Each DCM mapping cycle is assumed to be over 5 days. We have used appropriate inflators to uprate costs which are not current.

Costs and unit estimation	2019/2020 value	Notes
Delivery and training for each DCM Mapper A. Care Staff time	£563	Four categories of care staff are involved in the mapping: Home care worker (20%), senior home care worker (25%), nurse (20% based on a band 5 nurse) and a care home manager (35%). The proportion of staff in each category was based on a review of DCM EPIC trial records. Assumed course participation required four full working days (eight hours per day).
B. Training course fee	£975	DCM course booking form. Inclusive of lunch, refreshments and course materials.
C. Accommodation (four nights)	£300	Based on review of DCM EPIC trial records.
D. Meals/other subsistence	£70	Based on review of DCM EPIC trial records
E. Travel to/from the course	£100	Based on review of DCM EPIC trial records
Delivery and receipt of training (for each DCM mapper) F. Staff time per mapping cycle for each DCM mapper.	£1,630	Fees in London nursing homes were 14 per cent higher than the national average. Three mapping cycles have been assumed for each DCM mapper. No additional time was assumed for other staff to attend DCM briefings and feedback sessions. Each mapping cycle was £543.46.
Implementation costs (for each DCM mapper) G. Consultancy Fees for External DCM mapper H.Travel and subsistence expenses for DCM expert mapper	£2,100 £170	To support the intervention and fidelity in the first cycle of DCM mappings. It was assumed to be for 5 days (£420.00) per day. Based on a review of DCM EPIC trial data
Implementation costs (for each DCM expert mapper) I.Implementation costs (for each DCM expert mapper)	£2,270	Assumed each care home received one full cycle of DCM supported by the expert mapper. Includes consultancy fees for External DCM mapper and travel and subsistence expenses for DCM expert mapper.
London multiplier	1.14	Fees in London nursing homes were 14 per cent higher than the national average.
Unit costs available 2019/2020		
Per care home £9,547 (A-E x 2) + F-I Per resident £433. Assumed 22.06 residents per care home (calculation based on DCM EPIC trial data).		

[1] Meads, D., Martin, A., Griffiths, A., Kelley, R., Creese, B., Robinson, L., Mc Dermid, J., Walwyn, Ballard, C. & Surr, C. (2020) Cost-Effectiveness of Dementia Care Mapping in Care-Home Settings: Evaluation of a Randomised Controlled Trial, Applied Health Economics and Health Policy 18, 237-247(2020).

1.7 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 £116. All costs have been uprated 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	£1.86	£22.88	£10.44	£46.61	£12.63
Travel costs for review meeting 1		£3.17		£12.68	£3.25
Travel costs for review meeting 2		£2.12			
Total Costs	£1.86	£28.17	£10.44	£59.29	£15.88

[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 requiring mental health support

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 2018/2019* to report on the NHS reference costs for selected mental health services.[1] All costs have been uprated to 2019/2020 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. Carbon emissions costs were unavailable this year due to staff shortages.

	Mean £
MENTAL HEALTH SERVICES	
Mental health care clusters (per bed day)	£424
Mental health care clusters (initial assessment)	£311
Mental health specialist teams (per care contact)	
A&E mental health liaison services	£222
Criminal justice liaison services	£261
Prison health adult and elderly	£147
Forensic community, adult and elderly	£293
Psycho-sexual services, adult and elderly	£269
Secure mental health services	
High dependency secure provision MH or psychosis	£827
High dependency secure provision personality disorder	£726
Specialist mental health services	
Eating disorder (adults) – admitted (per bed day)	£544
Specialist perinatal – admitted (per bed day)	£859
Gender identity disorder services – community contacts	£252
Specialised services for Asperger syndrome and Autistic Spectrum Disorder – community contacts	£362

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

2.2 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. As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	**2019/2020 value**	**Notes**
Capital costs A. Buildings and oncosts	£109 per resident week	Based on the new-build and land requirements for homes for people requiring mental health support.[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) C. Overheads	£720 per resident week	The median revenue weekly cost estimate (£720) 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. 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 2019/2020		
Age 18-64 (using unique identifier 8713001; numerator in thousands of pounds, 8713002; denominator) £842 per resident week establishment costs (includes A to B); £867 per resident week (includes A to D). £120 per resident day establishment costs (includes A to B); £124 per resident day (includes A to D). **Age 65+ (using unique identifier 8716001; numerator in thousands of pounds, 8716002; denominator)** £599 (£609) median (mean) establishment costs per resident week £86 (£87) 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 £113 and mean cost was £117 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] As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	2019/2020 value	Notes
Capital costs		
A. Buildings and oncosts	£6.38 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	£2.23 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)	£30 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 2019/2020		
£39 per client attendance (includes A to D); £9.48 per client hour; £33 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 £114 per client week and the mean cost was £100 (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	**2019/2020 value**	**Notes**
Capital costs A. Buildings and oncosts	£6.60 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital 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	£2.30 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 requiring mental health support 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 2019/2020		
£38 per client attendance (includes A to D); £9 per client hour; £33 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 £17 (£19 with qualifications) and for 12 sessions £205 (£225 with qualifications).[1] Figures have been uprated to 2019/2020 values.

Costs and unit estimation	2019/2020 value	Notes
A. Wages/salary	£81,994 per year	Based on the mean full-time equivalent basic salary for two mental health nurses on AfC band 7 of the 2019/2020 NHS staff earnings estimates. [2]
B. Salary oncosts	£25,889 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).[3] This cost is for 2 mental health nurses.
D. Training for behavioural activation	£687 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		Taken from the 2013/2014 financial accounts for 10 community trusts.
Management, administration and estates staff	£26,431 per year	Management and other non-care staff costs were 24.5 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£41,211 per year	Non-staff costs were 38.2 per cent of direct care salary costs. They include costs to the provider for office, travel/transport, publishing, training courses and conferences, supplies and services (clinical and general), and utilities such as water, gas and electricity.
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.[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	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.[6]
Duration of contact		One-hour sessions included direct treatment time of 40-50 minutes and administration.
Unit costs available 2019/2020 (costs including qualifications given in brackets)		
Cost per session per person attending a group £17 (£19); Cost per 12 group sessions per person £205 (£225)		

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

[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] 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 £1,510. The standard deviation around the estimated cost of a single DoLS assessment was £451, and the 95 per cent confidence interval was £581 to £2,352. All costs have been uprated to 2019/2020 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	£538	£245	£627	£311	£267	£398
Assessments by best-interest assessor	£756	£454	£318	£1,106	£616	£650
Secretarial costs	£352	£198	£140	£635	£334	£332
Independent mental capacity advocates assessments	£122	£93	£66	£64	£79	£85
Court protection costs	£46	£46	£46	£46	£46	£46
Total costs	**£1,814**	**£1,036**	**£1,197**	**£2,162**	**£1,342**	**£1,510**

[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 issues. 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 uprated 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 £1,254 per family, while that of individual interventions is £2,737. 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 £1,550 per family.

School-based social and emotional learning programmes to prevent conduct issues in childhood

Context: Conduct issues 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 £174 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 £5,352 or £30 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 £3,884 per patient, compared with £979 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 £13,332. The first year of the early intervention team's input is estimated to cost £2,784 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 £23 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 require mental health support 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 require mental health support. 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 £1,398,219 (£72,468 for GP awareness training and £1,199,304 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

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 £4,014.

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 £40,783.

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

Context: Many people with long-term physical health conditions are at increased risk of developing the need for mental health support 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 £23,930.

Collaborative care for depression in individuals with Type II diabetes

Context: Depression is commonly associated with chronic physical health issues. 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 £833, compared with £422 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 £106 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 £189,708 (£59,623 for the signposting service and £130,085 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, 2014[1]). 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 issues. 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 uprated 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 issues), 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	£2,023	£3,394	The child's health and social care costs related in similar proportions to pre-term birth, emotional and conduct issues.
Education	£0	£4,448	85 per cent of education costs are a result of conduct issues, with the remainder due to emotional issues.
Criminal	£0	£2,366	All child criminal justice costs were incurred because of conduct issues.
Subtotal public sector costs	**£2,023**	**£10,249**	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 issues.
Wider societal perspective costs			
Productivity losses	£3,630	£6,787	42 per cent of child-related productivity losses are related to emotional issues.
Health-related quality of life losses	£20,080	£9,676	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	£332	£26,562	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	£17	
Victim of crime	£0	£8,926	12 per cent of total child costs are related to becoming a victim of crime.
Total wider societal perspective costs	**£25,730**	**£52,782**	Costs to the wider perspective for mother and child were £76,132.
Grand total	**£27,754**	**£63,030**	Mother and child costs of perinatal depression totalled £87,984, 42 per cent of child issues relate to loss of life, 35 per cent to conduct issues, 19 per cent to emotional issues 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, 2014[1]). 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 issues. 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 issues), 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. Figures have been uprated to 2019/2020 values.

Public sector costs	**Perinatal anxiety**		**Notes**
	Mother	**Child**	
Health and Social Care	£5,179	£5,365	20 per cent/32 per cent of the mother/child's costs were associated with health and social care expenditure.
Education	£0	£394	Over half of child education costs were associated with conduct issues, with a smaller amount associated with chronic abdominal pain.
Criminal	£0	£668	
Public sector costs	**£5,179**	**£6,428**	All mother's public sector costs relate to health and social care expenditure.
Wider societal perspective			
Productivity losses	£6,592	£2,084	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	£13,157	£3,044	Health-related quality of life losses were the largest share of total expenditure for the mother.
Out-of-pocket expenditure	£0	£456	
Unpaid care	£0	£2,268	Chronic abdominal pain was associated with unpaid care costs.
Victim of crime	£0	£2,524	Conduct issues were associated with victim of crime costs.
Wider societal perspective costs	**£19,750**	**£10,376**	Costs to the wider societal perspective for mother and child were £28,869 and accounted for 73 per cent of total costs.
Grand total	**£24,928**	**£16,804**	Mother and child costs totalled £39,575.

[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 2018/2019* to report on the NHS reference costs for selected drug or alcohol services.[1] All costs have been uprated to 2019/2020 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. Carbon emissions costs were unavailable this year due to staff shortages. Figures for children and adolescents have been removed as too few submissions.

Drug and alcohol services (adults)	**£ Mean**
Alcohol services – admitted	510
Drug services – admitted	499
Alcohol services – community contacts	93
Drug services – community contacts	121
Alcohol services – outpatients	68
Drug services – outpatients	103
Psycho-sexual services	
Psycho-sexual services - adult and elderly	147
Gender Identity Disorder	
Gender Identity Disorder - community	252
Gender Identity Disorder - outpatient	130

[1] NHS Improvement (2019) *National Schedule of Reference Costs 2018-19*, NHS Improvement, https://improvement.nhs.uk/resources/reference-costs/ [accessed 1 November 2019].

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	2019/2020 value	Notes
A. Wages/salary	£34,250 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 6 of the 2019/2020 staff earning estimates.[2] See *NHS terms and conditions of service handbook* for information on payment for unsocial hours and shift work.[3] See Section V for further information on salaries.
B. Salary oncosts	£10,329 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 *NHS foundation trusts accounts: consolidated (FTC) files 2014/2015*.[5]
Management, administration and estates staff	£10,585 per year	Management and other non-care staff costs were 23.7 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£18,852 per year	Non-staff costs were 42.3 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 2019/2020 (costs including qualifications given in brackets)		
£49 (£55) per hour. £72 (£81) 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. As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	**2019/2020 value**	**Notes**
Capital costs A. Buildings and oncosts	£6.60 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.[4]
B. Land	£2.30 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)	£66 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 £67. 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 2019/2020		
£72 per client attendance (includes A to D); £15.50 per client hour; £46.50 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 £5,016. 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. As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	2019/2020 value	Notes (for further clarification see Commentary)
A.Wages/salary	£39,236 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	£10,095 per year	Employer's national insurance is included plus 18 per cent of salary for employer's contribution to superannuation.
C. Overheads Management/supervision Direct overheads Indirect overheads	 £7,089 per year £3,453 per year £7,892 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). Premises costs (office, stationery, utilities etc.) are estimated at 7 per cent of salary costs.[2] 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. No new costs available for 2020.
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 2019/2020		
Average cost per working hour £31, average cost per client-related hour £53. (Estimates exclude travel costs). Average total cost £70,956; Total cost for project A: £41,957; Total cost for project B: £99,955. Average cost per advocacy intervention (based on 95 hours); £5,016 (Project A £2,965 and Project B £7,065).		

[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: 10.111.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 uprated 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 £1,578 per week and the mean cost was £1,573 per week [using unique identifiers: 8712401 (numerator in thousands of pounds), 8712402 (denominator)]. As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

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	£405	£935	£1,525
Management supervision	£101	£101	£101
Sleep-in costs	£19	£19	£19
Total staff costs	£525	£1,054	£1,644
Service user expenses			
Support overheads	£34	£34	£34
Living expenditure			
Other accommodation costs			
Central overheads	£104	£104	£104
Total operational costs (before rent)	**£138**	**£138**	**£138**
Rent (not known as paid by housing benefit)			
Mark-up (average for sample 6%).	£33	£59	£88
Grand total	**£696**	**£1,251**	**£1,871**

[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 LIN[1] for a more detailed definition).

Costs were collected from 29 registered providers. Research carried out by Housing LIN[1] 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	£202.41	£57.42	£1,458	£1,717
Self-contained SSH	£212.04	£53.29	£1,458	£1,723
All SSH	£253		£1,458	£1,711

[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 uprated to 2019/2020 values using the PSS Pay and Prices Inflators.

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	£1,652	£1,116,908.95
Costs		
Senior support staff	£1,040	£703,174
Sub-total	**£1,040**	**£703,174**
Waking nights	£35	£23,610
Sleep in staff	£27	£18,261
Manager	£127	£86,109
Sub-total	**£1,230**	**£831,156**
Recruitment	£11	£7,173
Training	£10	£6,812
Other staff overheads	£35	£23,973
Total staff support costs	**£56**	**£37,958**
Total costs (excluding management costs)	**£2,326**	**£1,572,288**
Management costs – area and central	**£321**	**£217,161**

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 uprated using the PSS inflators and the Retail Price Index.

When interpreting the costs, it should be taken into account that these clients have very specific needs, resulting in the necessity for a high level of staff support (usually one-to-one) and more specialist staff training and therefore higher salaries. There is also a need for specialist professionals, such as behavioural specialists and psychologists, and speech and language therapists who provide support in response to urgent need and fulfil a function that a LA specialist would be unable to meet. Given that the clients often display challenging behaviour, there is more staff sickness together with additional costs associated with furniture and equipment and the need to recruit specialists. The people these organisations support have issues 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	**2019/2020 value**	**Notes**
A. Wages/salary	£51,411 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	£7,324 per client year	Employer's national insurance contribution plus employer's contribution to superannuation.
C. Direct overheads Management and supervision	£11,024 per client year	Support staff and management including administrators, cooks and managers. Staff costs were 19 per cent of direct care salary costs.
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	£14,564 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	£4,208 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	£27,124 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 2019/2020		
Average annual cost per client (excluding day care); £100,755; average weekly cost per client £1,931. Average annual cost per client, (including day care); £127,879; average weekly cost per client £2,451.		

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 Iemmi 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 £2,709 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 (£270). The total cost of the PBS intervention lasting 15 months is estimated to cost £17,264 per adult. The total cost of services received for adults in receipt of additional support was £140,957 per year. These costs have been uprated 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 £180 per week) and those with more severe behavioural needs in less service-intensive residential accommodations (£1,293 to £4,066 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] Iemmi, 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 (£2019/2020), mean (SD)
Health and social care				
Supported housing (days)	1	182		£360 (£623)
Other than residential home (days)	1	35.5		£108 (£188)
Total residential care				**£469 (£554)**
Community-based care				
Psychiatrist	2	2 (0)	0.9 (0.2)	£15 (£13)
Nurse	3	5 (2.6)	0.8 (0.1)	£8 (£4.30)
Social worker	3	48.3 (17.2)	0.4 (0)	£147 (£64)
Care worker	1	182	24	£1,587 (£2,748)
Other services (paid through direct payments)	2	78		£151 (£131)
Total community-based care				**£1,908 (£2,588)**
Day care centre	1	78	6	£67 (£117)
Total health and social care				**£2,444 (£3,066)**
Positive behavioural support for adults with intellectual disabilities and behaviour that challenges				£266
Total health and social care (+PBSS)				**£2,709 (£2,885)**

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)

This table uses data from the ASC-FR data return (ASC-FR) for 2018/2019.[1] As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	2019/2020 value	Notes
Capital costs A. Buildings and oncosts	£177 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	£28 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	£859 per resident week	The median revenue weekly cost estimate (£818) 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 £1103 [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 2019/2020		
Age 18-64 (using unique identifier 8710701; numerator in thousands of pounds, 8710702; denominator) £1247 per resident week establishment costs (includes A to C); £1272 per resident week (includes A to E). £178 per resident day establishment costs (includes A to C); £181 per resident day (includes A to E).		

[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] As no new data is available this year we have uprated these figures to 2019/2020 values using the appropriate inflator.

Costs and unit estimation	2019/2020 value	Notes
Capital costs A. Buildings and oncosts	£169 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	£27 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) D. Overheads	£779 per resident week	The median weekly expenditure (£7795) 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 £838. 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 2019/2020		
Age 18-64 (using unique identifier 8710801; numerator in thousands of pounds, 8710802; denominator) £975 per resident week establishment costs (includes A to C); £1000 per resident week (includes A to E). £139 per resident day establishment costs (includes A to C); £143 per resident day (includes 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] 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 uprated using the PSS pay & prices inflator.

The median cost was £245 per client week and the mean cost was £245 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	**2019/2020 value**	**Notes**
Capital costs A. Buildings and oncosts	£6.60 per client attendance	Based on the new-build and land requirements for local authority day care facilities (which do not distinguish client group). Capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.[3]
B. Land	£2.30 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	£91 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 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 £91. 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 2019/2020		
£100 per client attendance (includes A to D); £21 per client hour.		

[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

'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 2018/2019* to report on the NHS reference costs for selected services for children and their families.[1] All costs have been uprated to 2019/2020 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	£75 (£103)
Occupational therapy	£141 (£144)
Speech therapy services	£84 (£102)
Community health services – nursing, average cost per care contact/group session	
School-based children's health core (other) services – group single professional	£43 (£54)
School-based children's health core (other) services – one to one	£70 (£53)
ELECTIVE INPATIENT (PAEDIATRICS), average cost per stay	
Elective inpatient (paediatrics), average cost per stay	£3,466
OUTPATIENT ATTENDANCES, average cost per attendance	
Paediatrics	£221
Paediatric consultant-led outpatient attendance	£237
Paediatric non-consultant-led outpatient attendance	£154
SPECIALIST PALLIATIVE CARE, average cost per bed day	
Hospital specialist palliative care support	£251
CRITICAL CARE	£1,608
Paediatric Critical Care, basic critical care	
CHILD AND ADOLESCENT MENTAL HEALTH SERVICES, average cost per patient contact	
Day care facilities – regular attendance	£608
Admitted patients	£788
Admitted patients – psychiatric intensive care	£1,536
Community contact	£225
Community contact, crisis resolution, home treatment	£252
Outpatient attendance	£288

[1] NHS Improvement (2019) *National Schedule of Reference Costs 2018-19*, NHS Improvement, https://improvement.nhs.uk/resources/reference-costs/ [accessed 5 November 2020].

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 (Children's Social Care Innovation Programme: insights and evaluation - GOV.UK (www.gov.uk). We report the unit costs from the evaluation reports, and users are advised to confirm the approach fits their requirements. 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
'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.	Pause works with partner agencies (such as health and domestic violence services) to design individual programmes for caseloads of 6-8 women.	Costs were captured for a cohort of 125 women. The cost of delivering Pause over 18 months - £2,525 (£20,202 per woman), equivalent to £1,638,487 (£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. In Round 2, costs for five sites between 2016 and 2019 is estimated at £6.0m and an average of £300k per annum per practice.
'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).	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.	Costs from Round 1 of this process. Round 2 costs are not yet available. 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.
Belhaven Service [3] 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.	A 5-bed residential home, in which 4 beds were funded as part of the DfE Innovation Programme (Stat guidance template (publishing.service.gov.uk)).	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.

[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, Stat guidance template (publishing.service.gov.uk)

What is the programme?	Who is involved?	Costs
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. Update 2020[2]: the programme was seen as a promising model by all participants although it would require time and careful consideration of decisions to be effective and sustainable.	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. As of March 2020[2], across 12 fostering services there were 41 Mockingbird constellations involving 320 satellite homes, 673 adults and 705 children and young people (CYP). 467 foster carer households and 921 care-experienced CYP took part between April 2017 and March 2020.	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. An evaluation report was published in September 2020[2]. Costs reflected the resources required to deliver the project in 12 sites from April 2017 to March 2020. The cost (adjusted to remove set-up costs) over the 3 year period was calculated to be £3,382,615.
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).[3] Specific Social Care Innovations include: 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.	**The edge of care offer** includes a key worker, a structured weekly activities programme and a volunteer mentor. **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.	A typical **edge of care** intervention costs £3,273. This includes £1,812 for the key worker, £1,065 for the Activities Programme, and £396.40 for support from the volunteer mentors. **Volunteering** Hampshire, £396.40 per substantive intervention, including the co-ordinator, marketing and admin, volunteer expenses, and overheads at 20% Isle of Wight, £304.65 per substantive intervention for the Volunteer Co-ordinator. **Addressing child exploitation** - £262,980 per team including staffing and approximate overheads at 20%.

[1] McDermid, S., Baker, C. & Lawson, D. with Holmes, L. (2016) The evaluation of the Mockingbird Family Model, Department for Education, Children's Social Care Innovation Programme: insights and evaluation - GOV.UK (www.gov.uk)
[2] Ott, E., McGrath-Lone, L., Pinto, V., Sanders-Ellis, D. & Trivedi, H. (2020) Mockingbird Programme Evaluation Report September 2020, Mockingbird Fostering Network Evaluation (publishing.service.gov.uk)
[3] 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.

Sefton Community Adolescent Service (CAS)[1] aimed to: 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; and f) reduce the number of young people at risk of Child Sexual Exploitation (p7).	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.	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.
A two stage evaluation taking place in 2019 and 2020, **SafeCORE**[2] was implemented in Greenwich and aimed at families with Domestic Violence and Abuse (DVA) as a presenting need. Greenwich has a high rate of repeat contacts, referrals and child and family assessments where this is a feature. Prior to the project, families received no active help from statutory services.	Between the beginning of February 2018, when the project started working with families, and 3rd March 2019, SafeCORE received 122 referrals. As of January 2020, SafeCORE had worked with 179 families with 248 children.	The total project funding, minus 10% to allow for start up costs, was £1,950,000. The estimated average cost of supporting a family through SafeCORE was £19,918. The average saving per family was £14,701 for the engaged families and £9,459 for the disengaged families. If it is assumed that the characteristics and needs of the two sets of families were broadly equivalent, the additional saving of remaining engaged was calculated as £5,242 per family.
Bradford B Positive Pathways[3] incorporated 2 practice models (No Wrong Door and Mockingbird) and was funded through Round 2 of the DfE's Children's Social Care Innovations Programme. Among its aims were to reduce the number of looked-after children by by a total of 75 and the number of out-of-authority placements by 20 over a 2 year period.	A total of 172 young people were reported to have stayed at home following BPP outreach support. The numbers of young people who would otherwise have gone in to each looked after setting were calculated by applying the rate of different placement types in Bradford to these 172 young people.	The base programme cost was £2,578,080. A total saving of £8,614,368 was achieved over the 2 year period of the programme operation. £4,167,540 in foster care, £108,000 in adoption, £118,668 in other accommodation, £4,075,968 in local authority residential and £144,192 for those placed with a parent.

[1] 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.

[2] Edbrooke-Childs, J., Costa da Silva, L., Allan, T. & Edridge, C. (2020) The SafeCORE Evaluation report, March 2020. SafeCORE Evaluation Report (publishing.service.gov.uk)

[3] Cresswell, C., Holmes, L. & Dixon, J. (2020) An evalution of the Bradford B Positive Pathways innovation programme, May 2020. An evaluation of the Bradford B Positive Pathways innovation programme (publishing.service.gov.uk)

6.3 Care home for children - local authority own-provision

This table presents the costs per resident week for a local authority own-provision home for children. Establishment costs are £4,971 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. Cost information for 2019 is unavailable.

See: Ofsted: developments in children's social care (blog.gov.uk) for a report on the children's homes sector.

Costs and unit estimation	2019/2020 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)	£4,792 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 2018/19.[3] The cost for a child for a week in an own-provision residential care home was £4,971. This was calculated by dividing total current expenditure for local authority (LA) provision children's care homes (£282,652,985) 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) (410,327).[4] This gives a cost of £689 per day or £4,822 per week, and £4,971 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 £4,792. 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	£14.58 per resident week for school support	Using Section 251 data,[3] and dividing total expenditure for 'education of looked-after children' (£46,750,611) by total children looked-after aged 5 and over (63,580),[5] a cost per child per year for education was calculated (£735). When uprated, this gives a cost of £14.58 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 2019/2020		
£4,971 establishment costs per resident week (includes A to C); £710 establishment costs per resident day (includes A to C); £4,986 per resident week (includes A to E); £712 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,2018-2019 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 2019,* Department for Education, London.

[5] Department for Education (2017) *Children looked after in England including adoption: 2018 to 2019*, https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2018-to-2019 [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 £3,847 per resident week.

Costs and unit estimation	2019/2020 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. No new information available for 2020.
B. Land	£31 per resident week	Based on Ministry of Housing, Communities & Local Government land estimates.[2]
C. Total expenditure (minus capital)	£3,668 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 2018/2019.[3] The cost for a child for a week in a non-statutory residential care home for children was £3,847. This was calculated by dividing total expenditure for other provision children's care homes (private and voluntary/third sector) (£1,020,625,591) 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) (1,915,337).[4] This gives a cost of £533 per day (£3,731 per week, and £3,847 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 £3,668. Local authorities reporting costs of less than £400 per week (20 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	£14.58 per resident week for school support	Using Section 251 data,[3] and dividing total expenditure for 'education of looked-after children' (£46,750,611) by total children looked-after aged 5 and over (63,580),[4] a cost per child per year for education was calculated (£735). When uprated, this gives a cost of £14.58 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 2019/2020		
£3,847 establishment costs per resident week (includes A to C); £550 establishment costs per resident day (includes A to C) £3,862 per resident week (includes A to E); £552 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: 2018 to 2019*, https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2018-to-2019 [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.

6.5 Foster care for children

This table provides the cost of foster care for children.

Costs and unit estimation	2019/2020 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 £1,702,234,922 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) (20,217,784),[2] the cost per day for all foster care for 2018/19 was £84 (£87 per day and £607 per week when uprated to 2019/20 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) have 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 £830,832,410 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) (12,911,276),[2] the cost per day for 2018/19 was £65 (£67 per day or £468 per week when uprated to 2019/20 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	£14.58 per resident week for school support	Using Section 251 data,[1] and dividing total expenditure for 'education of looked-after children' (£46,750,611) by total children looked-after aged 5 and over (63,580),[4] a cost per child per year for education was calculated (£735). When uprated, this gives a cost of £14.58 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 2019/2020		
£622 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: 2018 to 2019*, https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2018-to-2019 [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 (2019) *Children looked after in England including adoption: 2018 to 2019*, https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2018-to-2019 [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 uprated using appropriate inflators.

Local authority expenditure – Section 251

Based on the Section 251 budget summary for 2018/2019 and uprated, the total expenditure on adoption services is £339,999,033 up from £308,902,924 in 2018..[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 2019, 5,450 children had a placement order; 58,260 had a care order and there was a voluntary agreement (S20) in place for 14,130.[3] There were 3,570 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 (2020) 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: 2018 to 2019*, https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2018-to-2019 [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 [accessed 4 December 2017].

Table 1: Inter-agency fees

Local authorities	Costs for 2020/2021 (for introduction from 1 April 2020)[1]
Fees for one child	£32,063
Fees for two children	£51,714
Fees for three or more children	£70,331
Fees for four children	£80,674
Fees for five children	To be negotiated on an ongoing basis
Ongoing supervision per child	£889 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'[2] cases supported by local authority, voluntary and all adoption agencies. All costs have been uprated using the PSS Inflators.

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] CoramBAAF Adoption and Fostering Academy (2020) Inter-agency fees for 2020/2021, CoramBAAF, London. Inter-Agency Fees | CoramBAAF.[accessed 8 December 2020.]

[2] 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 2019/2020 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	£2,222	£2,274	£1,711	£1,640	£2,218	£2,164
Preparation, assessment of adopters	£4,414	£3,685	£4,094	£4,882	£4,309	£4,610
Adoption panel	£1,952	£1,449	£941	£1,784	£1,719	£1,696
Linking & matching	£3,957	£3,934	£1,573	£5,863	£2,830	£5,255
Placement of the child	£1,943	£2,066	£762	£2,588	£1,890	£2,386
Assessment for adoption support	£2,821	£3,429	£1,868	£3,505	£2,281	£3,981

Permanent improvement project

In 2017[1] and 2020[2], Coram published their Permanence Improvement Project aimed at enhancing the wellbeing of children who could not live safely at home and focussed particularly on where adoption was the permanence plan, with the intention of improving life chances for these children and removing barriers to timeliness in family finding. The 2017 study used a mixed methods approach to examine practices at two local authorities and enable them to be replicated nationally. The Coram Consultancy approach enabled an improvement in waiting times of an average of 246 days in 2014-15 to 113 days in 2015-2016.

The 2020 study, took place over four sites that had been identified as in need of improvement by Ofsted, to address delays in finding permanent stable homes. While this study did improve timeliness in all areas, this was not sustained in all beyond the life of the intervention. In one of the sites, the proportion of children who met the 12 week timescale from first to final Legal Planning Meeting, increased from 14% to 33%.

Helping birth families

See previous editions for sources of information.

Supporting direct contact after adoption

See previous editions for sources of information.

[1] Adoption: Coram's 'permanence improvement' project - GOV.UK (www.gov.uk)
[2] Coram-i Tavistock Final Report (publishing.service.gov.uk)

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,* https://academic.oup.com/bjsw/article-abstract/44/6/1508/1735480?redirectedFrom=fulltext

6.7 Parent training interventions for parents of disabled children with sleep or behavioural issues

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 issues. 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** £7,889 **Programme cost** £197 **Total** £8,086
The **Cygnet programme** is a group-delivered parent-training programme for parents of children with Autistic Spectrum Conditions, age 7 to 18.	Cygnet co-ordinator Autistic Support Group co-ordinator, child psychologist (8B), consultant clinical psychologist (8D), clinical psychologist (7), social worker, teacher, administrator (level 3), senior CAMHS practitioner (7), 3 STARS workers and a student nurse.	Delivered in CAMHS and voluntary sector community facilities in 6-weekly 2.5 hour sessions. There is a reunion session at three months. In total 51.5 hours were delivered by staff across 6 programmes.	**Staff cost** £4,156 **Programme cost** £197 **Total** £4,353
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** £3,841 **Programme cost** £261 **Total cost** £4,102
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** £3,435 **Programme cost** £294 **Total cost** £3,729
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** £1,942 **Programme cost** £128 **Total cost** £2,070

[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 uprated using the appropriate inflators.

Costs and unit estimation	2019/2020 value	Notes
Start-up costs		
Group leader training	£1,700 per year	Based on the cost of £283 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	£1,644 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	£15,589 per year	Based on the cost of £649 per day (includes salaries and overheads) for two group leaders for six days.
Teachers attending programme		
Supply cover	£11,338 per year	Supply cover provided for the 10 teachers attending the course at £189 per day for 6 days.
Incredible Years professional		
Supervision	£1,842 per year	Supervision provided by an Incredible Years professional for the 6 sessions. Based on a cost of £307 per session
Venue		Cost for venue is not known.
Course materials	£410 per year	Books and handouts at £41 per teacher for 10 teachers
Miscellaneous costs	£55 per annum £415 per annum	Incentives and materials Lunch and refreshments are based on a cost of £68 per session.
Certification/accreditation	£298 per annum	This promotes fidelity to the programme
Unit Costs for 2019/2020		
Start-up costs £3,344 (excluding airfare and accommodation for Incredible Years trainer).		
Cost per programme for 10 teachers excluding start-up costs £29,950.		
Cost per teacher excluding start-up costs £2,995.		

[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 uprated from 2016/2017 to 2019/2020 levels using the PSS inflators.

Costs and unit estimation	**2019/2020 value**	**Notes (for further clarification see Commentary)**
A.Wages/salary	£101,258 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	£19,928 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 Direct overheads Indirect overheads	 £36,275 per year £3,936 per year £18,741 per year	 This includes a services manager (21 hours per week) and an administrative assistant (18 hours per week). This includes rent, utilities, venue hire 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	£3,821 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	£21,140 per year	This includes an amount of £3,020 per head for equipment and buildings owned by the national children's charity.
G. Travel	£5,458 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 2019/2020		
Average cost per working hour £40, average cost per client-related hour £787. Average cost per advocacy intervention £782.		

* 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 uprated from 2016/2017 to 2019/2020 levels using the PSS inflators.

Costs and unit estimation	2019/2020 value	Notes (for further clarification see Commentary)
A.Wages/salary	£65,204 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	£14,805 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	£21,923 per year	This includes a services manager (PW111) (33% client-facing time) and an administrative assistant (12.5 hours per week).
Direct overheads	£2,624 per year	This includes rent, utilities and venue hire specific to the service.
Indirect overheads	£15,306 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	£2,183 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	£12,080 per year	A flat amount per head of £2,649 has been applied per staff member for equipment and buildings owned by the national children's society.
G. Travel	£5,731 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 2019/2020		
Average cost per working hour £49, average cost per client-related hour £97, average cost per counselling intervention £1,165.		

* 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 Specialist neuro-rehabilitation services

7.7 NHS reference costs for sexual health

7.8 Screening interventions for sexually-transmitted infections

7.9 Abortion reference costs

7.10 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 2018/2019* to report on the NHS reference costs for selected mental health services.[1] NHS Digital are also in the early stages of compiling data from their Patient Level Information Costing System (PLICS) (see article in 2019 volume for more information).[2] For comparison, the weighted average of all acute outpatient attendances from this collection was £154 and the average of all emergency medicine costs was £181. As this data collection expands, we intend to draw upon it more widely in future volumes. All costs have been uprated to 2019/2020 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	£4,168
Non-elective inpatient stays (long stays)	£3,366
Non-elective inpatient stays (short stays)	£602
Day cases HRG data (finished consultant episodes)	
Weighted average of all stays	£752
Outpatient attendances[3]	
Weighted average of all outpatient attendances	£135
PALLIATIVE CARE	
Inpatient, specialist palliative care (adults only), average cost per bed day	£447
Inpatient, specialist palliative care (same day) adults only	£143
Hospital specialist palliative care support (adults only)	£138
Outpatient, medical specialist palliative care attendance (adults and children)	£189
Outpatient non-medical specialist palliative care attendance	£103
AMBULANCE SERVICES (Weighted average of attendances)	
Calls	£7
Hear and treat and refer	£48
See and treat and refer	£214
See and treat and convey	£263
Average of all	£133
COMMUNITY SERVICES, average cost per group session (one-to-one)	
Physiotherapy	£55 (£64)
Occupational therapy	£106 (£85)
Speech therapy services	£147 (£109)
Dietician	£92

[1] NHS Improvement (2019) *National Schedule of Reference Costs 2018-19*, NHS Improvement, Leeds. https://improvement.nhs.uk/resources/reference-costs/ [accessed 1 November 2019].

[2] NHS Digital (2018) Analysis from the Acute Patient Level Information Costing System (PLICS) collection, 2017-18, NHS Digital, Leeds. https://digital.nhs.uk/data-and-information/publications/statistical/mi-acute-patient-level-activity-and-costing/data-quality-and-analysis-of-expanded-pilot-2017-18 [accessed 30 November 2020]

[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 uprated using the retail price index.

Although we have been unable to identify any recent studies on wheelchairs, current price information[2] suggests that powered wheelchairs range from £1000-£5000 and self- or attendant-propelled wheelchairs range from £100-£1,300.

Type of chair	Total value 2019/2020	Annual cost 2019/2020	Notes
Capital costs			Capital value has been annuitised over five years at a discount rate of 3.5 per cent to allow for the expected life of a new chair. In practice, 50 per cent of wheelchairs supplied have been reconditioned, not having been worn out by the time their first users ceased to need them.
Self- or attendant-propelled	£321	£71	
Active user	£802	£178	
Powered	£1,604	£355	
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 2019/2020			
£103 per self or attendant propelled chair per year; £209 per active user per chair per year; £481 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	£3,009	£14,447	£5,599 (£4,798)	£673 (£577)
Stair lift (straight)	21	£1,265	£3,405	£2,256 (£2,3178)	£272 (£279)
Stair lift (more complex)	7	£2,769	£7,961	£5,538 (£5,495)	£660 (£666)
Convert room for downstairs WC /washroom	7	£3,371	£26,486	£11,866 (£11,885)	£1,426 (£1,429)
Build downstairs extension for WC/washroom	5	£14,447	£36,118	£27,164 (£30,098)	£3,264(£3,618)
Build downstairs extension for bedroom	5	£14,447	£54,177	£32,162 (£30,9953)	£3,8660 (£3,726)
Build downstairs extension for bedroom and en suite facilities	6	£27,690	£54,177	£40,498 (£38,606)	£4,867 (£4,640)
Total	**52**				

[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-governent [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	£20	£119	£49 (£33)	£5.85 (£3.98)
Fit handrail – internal	10	£12	£78	£33 (£23)	£4.10 (£2.81)
Fit handrail to bath	8	£11	£34	£21 (£23)	£2.50 (£2.70)
Fit over bath shower	6	£377	£2177	£126 (£1405)	£15(£168)
Create step to front/back door	8	£25	£1814	£563 (£105)	£69(£13)
Create ramp to front/back door	5	£143	£820	£370 (141)	£46 (£16)
Lay new path, per metre cost	3	£118	£145	£133 (£141)	£16 (£17)
Widen doorway for wheelchair access	6	£352	£800	£628 (£773)	£77 (£93)
Install lighting to outside steps/path	5	£30	£726	£300 (£164)	£36 (£20)
Move bed to downstairs room	3	£36	£54	£47 (£53)	£5.85 (£6.32)
Raise electrical sockets/lower light switches	6	£48	£1780	£94 (£88)	£12 (£11)

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

	Average cost			
	Initial enquiry	OT	HIA administrator	Total mean staff cost
Fit handrail – external	£4	£58	£14	£76
Fit handrail – internal	£4	£49	£17	£71
Fit handrail to bath	£4	£29	£14	£47
Fit (handrail) over bath shower	£4	£58	£24	£86
Create step to front/back door	£4	£90	£17	£112
Create ramp to front/back door	£4	£247	£17	£268
Lay new path, per metre cost	£4	£132	£28	£163
Widen doorway for wheelchair access	£4	£312	£24	£341
Install lighting to outside steps/path	£4	£218	£7	£229
Move bed to downstairs room	£4	£53	£24	£829
Raise electrical sockets/lower light switches	£4	£107	£21	£132

Table 4 Mean costs for staff involved in providing major adaptations

	Average cost						
	Initial enquiry	OT	LA grants officer	HIA technical officer	HIA caseworker	Administrators (HIA and LA)	Total cost
Level access shower	£4	£144	£260	£441	£174	£123	£1,146
Stairlift (straight)	£4	£49	£105	£126	£287	£82	£654
Stairlift (more complex)	£4	£107	£425	£321	£58	£98	£1,013
Convert room for downstairs WC/washroom	£4	£341	£445	£706	£167	£237	£1,901
Build downstairs extension for WC washroom	£4	£559	£668	£1,657	£87	£205	£3,180
Build downstairs extension for bedroom and en-suite facilities	£4	£732	£762	£1,336	£225	£336	£3,395

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 uprated to 2019/2020 prices using the appropriate inflators. Further information on the specific research studies can be found in the reports named above, and King's Fund have produced a set of infographics that describe key facts about the public health system and the return on investment for some public health interventions https://www.kingsfund.org.uk/audio-video/public-health-spending-roi. 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		£194	£736		£930
Workplace intervention	£626				£626
Physical activity education and workplace visit		£194	£736	£55	£985

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 £91 and £203 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 £0.32 and £2.20 per person.

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

[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

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 (£51-£176 per person), bupriopion (£96-£103 per person), and combinations of NRT and bupriopion (£193-£199 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 £39.

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 £2,716, a GP appointment as (£40) and a half-hour practice nurse appointment (£19). 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)	£344	£76
Bluetooth-enabled pulse oximeter probe	£431	£95
Clinician reviewing summary of the oxygen saturation, heart rate, and symptom diary module, twice weekly.		£499
Total costs		**£672**

[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 Specialist neuro-rehabilitation services

Specialist rehabilitation services[1] 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 2019/2020 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	£621 (£539 - £713)	£465 (£400 - £512)
Level 1b - mixed dependency	£553 (£499 - £598)	£414 (£355 - £452)
Level 1c - mainly physically stable patients with cognitive/behavioural disabilities.[a]	£739 (£673 - £829)	£557 (£503 - £620)
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	£502 (£369 - £596)	£401 (£263 - £507)
Level 2b - local specialist rehabilitation services	£473 (£359- £581)	£395 (£337 - £482)
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	£761 (£724 - £797)	£475 (£449 - £502)

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.bsrm.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]

7.7 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 2018/2019* to report on the NHS reference costs for selected sexual health services.[1] All costs have been uprated to 2019/2020 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/.

2019/2020 costs	National average
Genito-Urinary Medicine (GUM) infections	
Elective/non elective Health Care Resource Group (HRG) data, average cost per episode	
Elective inpatient stays	£2,253
Non-elective inpatient stays	£2,622
Non-elective inpatient stays (short stays)	£430
Day cases	£348
Consultant-led (Multi-professional)	
Non-admitted, face-to-face, first	£164
Non-consultant-led	
Non-admitted,face-to-face, first	£146
Non-admitted, face-to-face, follow-up	£144
Community health services	
HIV/AIDS specialist nursing (adult)	
Face-to-face	£142
Non face-to-face	£71
Outpatient attendances	
Family planning clinic, consultant led	£101
Family planning clinic, non-consultant led	£82

[1] NHS Improvement (2019) *National Schedule of Reference Costs 2018-19*, NHS Improvement, https://improvement.nhs.uk/resources/reference-costs/ [accessed 1 November 2019].

7.8 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	£623	2	£1,248
Poster pack	Per pack	£60	2	£122
Test kit	Per player	£6.34	46	£293
Promotion	Per club	Captain-led [1]£151 Health advisor-led [2]£272 Poster-only [3]£151	2	[1]£293 [2]£543 [3]£302
Specimen collection box [4]	Per club	£62		£125
Transport of specimen collection box	Per club	£152		£306
Processing costs				
Additional storage facilities[4]		£13		£27
Sample processing	Per player tested	£12	Captain-led 28 Health advisor-led 31 Poster-only 31	£339 £376 £368
Patient admin and notification of results	Per player tested	£5.72	Captain-led 28 Health advisor-led 31 Poster-only 31	£159 £176 £176
Total cost per intervention				**Captain-led £2,920** **Health advisor-led 3,215** **Poster-only £2,973**
Average cost per player screened			**Captain-led 28** **Health advisor-led 31** **Poster-only 31**	**Captain-led £104** **Health advisor-led £103** **Poster-only £96**

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].

7.9 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 2018/2019* to report on the NHS reference costs for selected abortion services.[1] All costs have been uprated to 2019/2020 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

Abortion Services – Day Case	**2020** **£**
Surgical, Abortion or Miscarriage Care, over 20 weeks Gestation	269
Surgical, Abortion or Miscarriage Care, from 14 to 20 weeks Gestation	1599
Surgical, Abortion or Miscarriage Care, under 14 weeks Gestation, with Insertion of Long-Acting Contraceptive	5532
Surgical, Abortion or Miscarriage Care, under 14 weeks Gestation, without Insertion of Long-Acting Contraceptive	21881
Medical, Abortion or Miscarriage Care, over 20 weeks Gestation	66
Medical, Abortion or Miscarriage Care, from 14 to 20 weeks Gestation	1249
Medical, Abortion or Miscarriage Care, from 9 to under 14 weeks Gestation, with Insertion of Long-Acting Contraceptive	675
Medical, Abortion or Miscarriage Care, from 9 to under 14 weeks Gestation, without Insertion of Long-Acting Contraceptive	7281
Medical, Abortion or Miscarriage Care, under 9 weeks Gestation, with Insertion of Long-Acting Contraceptive	1537
Medical, Abortion or Miscarriage Care, under 9 weeks Gestation, without Insertion of Long-Acting Contraceptive	15892

[1] NHS Improvement (2019) *National Schedule of Reference Costs 2018-19*, NHS Improvement, https://improvement.nhs.uk/resources/reference-costs/ [accessed 1 November 2019].

Abortion services – non elective long stay	**2020** **£**
Surgical, Abortion or Miscarriage Care, over 20 weeks Gestation	177
Surgical, Abortion or Miscarriage Care, from 14 to 20 weeks Gestation	561
Surgical, Abortion or Miscarriage Care, under 14 weeks Gestation, with Insertion of Long-Acting Contraceptive	37
Surgical, Abortion or Miscarriage Care, under 14 weeks Gestation, without Insertion of Long-Acting Contraceptive	3112
Medical, Abortion or Miscarriage Care, over 20 weeks Gestation	465
Medical, Abortion or Miscarriage Care, from 14 to 20 weeks Gestation	475
Medical, Abortion or Miscarriage Care, from 9 to under 14 weeks Gestation, without Insertion of Long-Acting Contraceptive	375
Medical, Abortion or Miscarriage Care, under 9 weeks Gestation, without Insertion of Long-Acting Contraceptive	451

7.10 Cost of private abortion treatment

The costs are taken from The British Pregnancy Advisory Service[1] 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 1 November 2020. For costs of some NHS treatments see Schema 7.9.

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 & fitf2q1	1
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 Patient costs following discharge from acute medical units

8.2 End of life care

8.3 Smoking cessation services

8.4 Social prescribing

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

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

8.1 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 2019/2020 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 £2,051, and £2,026 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)	£1,800 (£3,589)	£1,717 (£3,326)
Inpatient care [(b)]	119 (2)	£1,236 (£3,362)	£1,128 (£3,103)
Day case care	71 (1)	£152 (£439)	£162 (£488)
Outpatient care	358 (3)	£403 (£429)	£411 (£386)
Critical care [(c)]	8 (1)	£9 (£105)	£15 (£142)
Ambulance service	20 (2)	£21 (£124)	£16 (£88)
Intermediate care	11 (Not applicable)	£12 (£176)	£3 (£44)
Mental health care	28 (4)	£43 (£206)	£50 (£203)
Social care	76 (4)	£176(£816)	£238 (£998)
Total costs (exc. primary care)	377 (5)	£2,051 (£3,819)	£2,026 (£3,652)
Primary care [(d)]	243 (6)	-	£258 (£271)
Consultations	113 (3)	-	£34 (£49)
Home visits	42 (7)	-	£28 (£114)
Procedures	25 (3)	-	£4 (£23)
Other events [(e)]	202 (22)	-	£60 (£63)
Medication	232 (21)	-	£121 (£154)
Wound dressings	64 (4)	-	£12 (£37)
Total costs including primary care [(f)]	248 (7)	-	£2,284 (£3,707)

SD: standard deviation

[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.

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.

The mean cost for these high cost patients across all services excluding primary care was £6,435, and £6,976 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: £6,435 versus £2,026; mean total cost including primary care: £6,976 versus £2,284).

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)	£5,543(£4,883)
Inpatient care [b]	52 (3)	£4,306(£4,980)
Day case care	24 (1)	£513 (£830)
Outpatient care	61 (4)	£662 (£399)
Critical care [c]	3 (1)	£62 (£280)
Ambulance service	5 (2)	£35 (£133)
Intermediate care	2 (not applicable)	£14 (£89)
Mental health care	12 (4)	£141 (£343)
Social care	27 (4)	£836 (£1,849)
Total costs (excl. primary care)	63 (9)	£6,568 (£4,973)
Primary care [d]	27 (11)	£408 (£414)
Consultations	26 (3)	£31 (£50)
Home visits	16 (12)	£69 (£208)
Procedures	4 (1)	£1 (£5)
Other events [e]	53 (28)	£89 (£83)
Medication	57 (32)	£196 (£220)
Wound dressings	22 (5)	£21 (£510)
Total costs including primary care [f]	63 (14)	£6,976 (£4,932)

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))

8.2 End of life care

Research carried out by the Nuffield Trust[1] 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 (£2,169 per decedent). Elective inpatient costs more than tripled in the same period (from £83 to £299 per decedent). Costs have been uprated from 2010/2011 to 2019/2020 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	**£558**	**£7,629**	**66%**	**65,624**	**£8,515**
Inpatient emergency	£397	£5,421	47%	54,577	£7,276
Inpatient non-emergency	£106	£1,446	12%	58,165	£1,821
Outpatient	£46	£622	5%	50,155	£909
A&E	£10	£140	1%	48,000	£212
Social care	**£310**	**£4,230**	**34%**	**20,330**	**£15,240**
Residential and nursing care	£248	£3,392	28%	10,896	£21,574
Home care	£48	£656	5%	10,970	£4,379
Other	£13	£183	1%	4,084	£3,275
Total	**£869**	**£11,859**	**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	£7,629	£4,231	£11,860
No diagnoses	22,118	£3,756	£5,199	£8,955
Any diagnosis	51,125	£9,303	£3,812	£13,115
Hypertension	21,241	£10,412	£3,498	£13,910
Cancer	19,934	£10,906	£1,634	£12,540
Injury	17,540	£11,236	£5,081	£16,317
Atrial fibrillation	13,567	£10,519	£4,142	£14,662
Ischaemic heart disease	13,213	£10,671	£3,529	£14,201
Respiratory infection	11,136	£11,677	£2,810	£14,487
Falls	10,560	£10,323	£6,433	£16,756
Congestive heart failure	10,474	£10,722	£4,008	£14,730
Chronic obstructive pulmonary disease	9,392	£10,474	£3,159	£13,633
Anaemia	9,210	£12,299	£3,809	£15,715
Diabetes	8,697	£10,705	£3,934	£14,278
Cerebrovascular disease	8,290	£10,541	£5,235	£15,380
Peripheral vascular disease	6,780	£12,146	£3,489	£15,255
Dementia	6,735	£8,793	£11,214	£20,007
Renal failure	6,570	£12,258	£4,026	£16,285
Angina	6,549	£11,463	£3,568	£15,031
Mental disorders, not dementia	4,814	£11,497	£4,533	£16,029
Iatrogenic conditions	4,190	£16,569	£3,178	£19,747
Asthma	3,480	£11,128	£3,115	£14,243
Alcoholism	2,437	£10,148	£1,455	£11,603
Non-rheumatic valve disorder	2,059	£12,494	£2,747	£15,241

8.3 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) - £21.55 per week; Varenicline - £82.96 per month and Bupropion £75.02 per month. Service use data was multiplied by an hourly charge of £28.43 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 £436 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.

[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.

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	£53,077	£104	116	23	£458
	20-29	1189	£137,738	£116	296	25	£465
	30-49	3911	£553,403	£142	1262	32	£439
	50-69	2955	£453,672	£154	1068	36	£425
	70+	538	£81,074	£151	192	36	£422
Gender	Male	4249	£606,466	£143	1425	33	£426
	Female	4867	£673,144	£138	1510	31	£446
Treatment	Nicotine replacement therapy	7373	£918,433	£125	2117	29	£434
	Varenicline/champix	1708	£356,526	£209	799	47	£446
	Bupropion/Zyban	35	£4,651	£133	19	54	£245
FTND[2]	0-3	1534	£255,556	£166	622	4141	£409
	4-5	1884	£323,391	£172	727	39	£445
	6-7	1676	£391,875	£174	641	38	£455
	8-10	766	£129,838	£170	236	31	£550
Deprivation	1-3	886	£146,958	£166	319	36	£461
	4-6	1838	£287,458	£156	635	35	£453
	7-8	2157	£324,430	£150	698	32	£465
	9-10	3321	£487,582	£147	1180	36	£413

8.4 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 £177. Including grants to providers and additional support grants, the average cost per person referred per year was £398. The average cost per person referred on to funded voluntary care services was £570. All costs have been uprated to 2019/2020 levels using PSS Inflators.

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 Doncaster[3] 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	£364,398	£341,364	£705,762	£220
Salaries and overheads	£251,688	£317,851	£569,539	£177
Total	**£616,085**	**£659,215**	**£1,275,301**	**£398**

[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.

8.5 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 uprated from 2013/2014 to current values.

The mean cost of the guided self-help intervention was over twice that of supported cCBT (£419 v £170). From baseline to 12 months, total health-and social-care costs were almost identical between the three groups (supported cCBT=£1,821, guided self-help= £1,833 and waiting list=£1,900. 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 (£2,383) compared with £2,406 for the cCBT group and £2,603 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, Pl, 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

	Intervention mean cost	
Cost component	**Supported cCBT**	**Guided self-help**
Number of sessions attended	2.3	4.11
Total session minutes	30.2	142.9
Cost of materials (£)	£70	£6.02
Cost of training (£)	£21	£38
Cost of PWP contacts (£)	£79	£375
Total cost (£)	£170	£418

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

	Intervention					
Costs	**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	£585	158	£788	158	£484
Employment losses, out-of-pocket expenses and out-of-pocket savings.	157	£233		£201	158	£188
Total costs	**157**	**£817**	**158**	**£989**	**158**	**£672**
Baseline to 12 months						
Health and social care costs	157	£1,821	158	£1,833	158	£1,900
Employment losses, out-of-pocket expenses and out-of-pocket savings.	157	£585	158	£550	158	£703
Total costs	**157**	**£2,406**	**158**	**£2,383**	**158**	**£2,603**

8.6 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 uprated 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]	£961	£808	£792
Post diagnosis support	£457	£380	£385
Follow-up	£568	£532	£410
Total	£1,986	£131	£1,684

[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	£66	£0	£0-£7,554	£33	£0	£0-£602	£65	£2	£0-978
Social care	£81	£0	£0-£3,969	£109	£0	£0-£6,411	£182	£0	£0-£8,504
Psychosocial support	£13	£0	£0-£1,620	£5	£0	£0-£397	£13	£0	£0-£794
Social security benefits	£147	£0	£0-£719	£154	£0	£0-£719	£196	£14	£0-£719
Total cost of formal care	**£164**	**£1**	**£0-£12,184**	**£148**	**£1**	**£0-£7,081**	**£261**	**£22**	**£0-£9,328**
Informal Care	£1,763	£1,671	£0-£4,762	£1,804	£1,540	£0-£4,706	£1,915	£1,587	£0-£4,762
Total societal cost	**£1,905**	**£1,821**	**£0-£15,315**	**£1,929**	**£1,539**	**£0-£10,230**	**£2,149**	**£1,701**	**£0-£12,450**

[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 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.

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 April 2019/March 2020 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 £35,881; hospital occupational therapists, £34,423; speech and language therapists, £35,995; dietitians, £35,985.

B Salary oncosts

Employer's national insurance is included plus 20.68 per cent of salary for employer's contribution to superannuation. See Preface for more information.

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 groups[7] and training/study days from 225 working days.

H Ratio of direct to patient-related time

Based on a study by Shearer et al. (2019),8 the ratio of direct to indirect time was 1:0.91 for a clinical psychologist (band 7); every hour of face-to-face time required 55 minutes of non-face-to-face time. See previous editions for time spent on patient-related activities for other professionals and also this blog https://www.pssru.ac.uk/blog/category/unit-costs/page/3/ to show how to apply the ratio. 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 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.

[1] NHS Digital (2019) *NHS staff earnings estimates, 12-month period from April 2019 – March 2020* (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] Shearer, J. Lynch, T., Chamba, R., Clarke, S., Hempel, R., Kingdon, D., O'Mahen, H., Remington, B., Rushbrook, S., Russell, I., Stanton, M.,.Swales, M., Watkins, A., Whalley, B. & Byford, S. (2019) refractory depression – cost-effectiveness of radically open dialectical behaviour therapy: findings of economic evaluation of RefraMED trial, BJPsych Open, file:///C:/Users/lac/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/RHVCST88/refractory_depression_costeffectiveness_of_radically_open_dialectical_behaviour_therapy_findings_of_economic_evaluation_of_reframed_trial.pdf.
[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].

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	£22,626	£25,023	£33,734	£41,226	£48,669	£58,176	£68,771	£82,118	£100,285
B Salary oncosts	£6,610	£7,437	£10,440	£13,024	£15,590	£18,868	£22,521	£27,123	£33,387
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	£7,163	£7,953	£10,823	£13,291	£15,743	£18,876	£22,367	£26,764	£32,750
Non-staff	£11,168	£12,400	£16,875	£20,723	£24,547	£29,431	£34,874	£41,730	£51,063
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 2019/2020									
Cost per working hour	**£31**	**£36**	**£48**	**£58**	**£69**	**£82**	**£96**	**£114**	**£139**

10. Nurses, doctors and dentists

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 April 2019/March 2020 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 £33,832.[1] See Section V for further information on pay scales.

B. Salary oncosts

Employer's national insurance is included, plus 20.68 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 days[7] 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 (2019) *NHS staff earnings estimates, 12-month period from Apr 2019 – Mar 2020* (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 17 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	£21,929	£27,350	£34,250	£40,997	£47,915	£57,003	£66,808	£79,149	£95,050
B Salary oncosts	£6,370	£8,239	£10,618	£12,945	£15,330	£18,463	£21,844	£26,099	£31,582
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	£6,993	£8,719	£10,992	£13,215	£15,494	£18,489	£21,719	£25,785	£31,024
Non-staff	£10,810	£12,934	£17,140	£20,606	£24,160	£28,828	£33,865	£40,205	£48,373
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 2019/2020									
Cost per working hour	**£30**	**£39**	**£49**	**£59**	**£68**	**£81**	**£95**	**£112**	**£134**
Cost per hour of patient-related work		**£63**	**£89**	**£120**	**£139**				

10.2 Nurse (GP practice)

Costs and unit estimation	2019/2020 value	Notes
A. Wages/salary	£27,350 per year	Based on the mean full-time equivalent basic salary for Agenda for Change band 5 of the April 2019/March 2020 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 20.68 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		Taken from the 2013/2014 financial accounts for 10 community trusts. See the Preface of the *Unit Costs of Health & Social Care* 2015 for more information.
Management and administration	£8,719 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).
Office, general business and premises (including advertising and promotion)	£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 Buildings	£3,814 per year	Calculated as the ratio of GP practice nurse salary costs to net remuneration of GP salary and based on new-build and land requirements for a GP practitioner's suite and annuitised over 60 years at a discount rate of 3.5 per cent, declining to 3 per cent after 30 years.[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 2019/2020 (costs including qualifications given in brackets)		
£38 (£42) per hour		

[1] NHS Digital (2019) *NHS staff earnings estimates, 12-month period from April 2019 – March 2020* (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	2019/2020 value	Notes (for further clarification see Commentary)
A. Net remuneration	£117,300 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 1.18 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] Office and general business, premises, and other expenses calculated as the ratio of GP salary costs to all GP employees salary costs.
Premises	£15,660 per year	
Other: includes advertising, promotion and entertainment	£17,053 per year	
Car and travel	£1,100 per year	Based on information taken from the GP earnings and expenses report.[1,2]
C. Qualifications	£45,256 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 9th 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:		Based on information taken from the 9th 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.
face-to-face time (excludes travel time)	1:0.64	
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 2019/2020 are given in table 10.3b		

[1] NHS Digital (2019) *GP earnings and expenses 2018/19*, 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.lshtm.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 2019/2020	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 KgCO2e)[2](carbon costs less than £1)	£39.23	£33.19	£34.20	£28.16
Prescription costs per consultation (net ingredient cost) Net ingredient cost including carbon emissions (17 KgCO2e)[2]	£33.10[3] £34.19			
Prescription costs per consultation (actual cost) Actual cost including carbon emissions (16 KgCO2e)[2]	£30.90[3] £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 1- month observational study carried out in South West England by Hannah Edwards and colleagues[1] 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 uprated 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 uprated 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	£13.80
GP telephone calls	187	39	£8.41
Nurse face-to-face contacts	70	15	£1.91
Nurse telephone appointments	0	0	£0.00
Prescriptions	151	31	£1.36
Fit notes	31	6	£0.40
Routine referral letters	56	12	£0.73
2-week wait referral letters	10	2	£0.13
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	£12.57
Average cost of e-consultation			£49.20

[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:eO16901.

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**
	2019/2020 value		**2019/2020 value**	
A. Wages/salary and oncosts	£35,589 per year	Based on the salary of a GP practice nurse (AfC band 5) plus oncosts (see 10.2)	£117,300	Average income before tax. See 10.3.
B. Overheads Staff overheads Non-staff	 £8,719 per year £12,934 per year	 See schema 10.2 See schema 10.2	 £35,969 £44,669	 See schema 10.3 (excludes cost for direct care staff)
C. Qualifications	£8,774 per year	See schema 10.2	£43,287	See schema 10.3
D. Capital	£3,878 per year	See schema 10.2	£16,081	See schema 10.3
E. Other costs Staff training Computer decision support software	 £6,087 per year £8,433 per year	Taken from Table 25[2] and uprated using the HS pay and prices inflator	 £3,392	Taken from Table 25[2] and uprated using the HS pay and prices inflator
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)	£69,864 (£84,386)		£253,405 (£254,362))	
Cost per hour of face-to-face contact excluding Other costs (including set-up costs)	£58 (£75)		£232 (£235)	
Cost per intervention excluding Other costs (including other costs)	£7.62 (£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 Inflator.

Costs and unit estimation	2019/2020 value	Notes
A. Net remuneration	£57,600 per year	This is the average taxable income (average gross earnings less average total expenses) for self-employed primary care Performer-Only dentists in 2018/2019.[2] It has not been possible to identify an inflator to provide estimated net remuneration for 2019/2020.
B. Practice expenses: Direct care staff	£60,787 per year	Employee expenses are taken from the *Dental Earnings and Expenses* report[2]. All office and general business, premises and other expenses including advertising promotion and entertainment are based on expenditure taken from the *Dental Earnings and Expenses* report[2].
Office and general business	£5,081 per year	All office and general business, premises and other expenses including advertising promotion and entertainment are based on expenditure taken from the Dental Earnings and Expenses report.2
Premises Car and travel Other	£3,455 per year £915 per year £25,695 per year	Includes insurance, repairs, maintenance, rent and utilities. 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	£ 7,541 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 *Dental working hours* survey, Performer-Only dentists spent 78.5 per cent of their working time on clinical activities.
Unit costs available 2019/2020		
£105 per hour; £133 per hour of patient contact.		

[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.

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 uprated using the Health Services Inflator.

Costs and unit estimation	2019/2020 value	Notes
A. Net remuneration	£113,100 per year	This is the average taxable income of self-employed primary care Providing-Performer dentists in 2018/2019. [2] It has not been possible to agree an inflator to provide estimated net remuneration for 2019/2020.
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 *Dental Earnings and Expenses* report and uprated using the Health Services Inflator.[2]
Premises Car and travel Other	£7,908 per year £1,920 per year £46,250 per year	Includes insurance, repairs, maintenance, rent and utilities. 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 *Dental working hours survey*,[4] Providing-Performer dentists spent 70.7 per cent of their working time on clinical activities.
Unit costs available 2019/2020		
£136 per hour; £197 per hour of patient contact;		

[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 2020, by treatment band.

Treatment Band	Charges from 1 April 2020	
Emergency dental treatment	£22.70	This covers emergency care in a primary care NHS dental practice such as pain relief or a temporary filling.
Band 1	£22.70	Examination, diagnosis (including x-rays), advice on how to prevent future problems, a scale and polish if needed, and application of fluoride varnish or fissure sealant.
Band 2	£62.10	This covers everything listed in Band 1 above, plus any further treatment such as fillings, root canal work or removal of teeth.
Band 3	£269.30	This covers everything listed in Bands 1 and 2 above, plus crowns, dentures and bridges and other laboratory work.

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 Reablement

11.1 Social worker (adult services)

Costs and unit estimation	2019/2020 value	Notes
A. Salary	£34,982 per year	Information taken from the Adult social care workforce data (Skills for Care, 2020)[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 £34,982.
B. Salary oncosts	£9,583 per year	Employer's national insurance contribution is included, plus 18 per cent of salary for employer's contribution to superannuation.[2]
C. Qualifications	£9,933 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	£13,026 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	£7,186 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 *Green Book: national agreement on pay and conditions of service*.[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 2019/2020 (costs including qualifications given in brackets)		
£45 (£51) per hour		

[1] Skills for Care (2020) *Adult social care workforce estimates*, https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/Topics/Pay-rates.aspx [accessed 11 November 2020].

[2] Local Government Pension Scheme Advisory Board (2020) *Fund Valuations 2019*, LGPS Advisory Board, London. http://lgpsboard.org/index.php/schemedata [accessed 22 June 2020].

[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/ [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-governent [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	2019/2020 value	Notes
A. Salary	£34,982 per year	Information taken from the Adult social care workforce data (Skills for Care, 2020)[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 £36,400.
B. Salary oncosts	£9,583 per year	Employer's national insurance contribution is included, plus 18 per cent of salary for employer's contribution to superannuation.[2]
C. Qualifications	£9,933 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. (2012).[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 Indirect overheads	 £13,026 per year £7,186 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.[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 *Green Book: national agreement on pay and conditions of service*.[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 2019/2020 (costs including qualifications given in brackets)		
£46 (£52) per hour; Cost per case £3,809		

[1] Skills for Care (2020) *Adult social care workforce estimates*, https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/Topics/Pay-rates.aspx [accessed 11 November 2020].

[2] Local Government Pension Scheme Advisory Board (2020) *Fund Valuations 2019*, LGPS Advisory Board, London. http://lgpsboard.org/index.php/schemedata [accessed 22 June 2020].

[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-governent [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	2019/2020 value	Notes
A. Salary	£25,408 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	£6,889 per year	Employer's national insurance contribution is included, plus 18 per cent of salary for employer's contribution to superannuation.[2]
C. Overheads Direct overheads Indirect overheads	 £9,366 per year £5,167 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]
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 *Green Book: national agreement on pay and conditions of service*.[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 2019/2020		
£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 (2020) *Fund Valuations 2019*, LGPS Advisory Board, London. http://lgpsboard.org/index.php/schemedata [accessed 22 June 2020].
[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	2019/2020 value	Notes
A. Wages/salary	£35,132 per year	Information taken from the Adult social care workforce data (Skills for Care, 2020)[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 £35,132.
B. Salary oncosts	£9,981 per year	Employer's national insurance contribution is included, plus 18 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	£13,083 per year	Direct overheads were 29 per cent of direct care salary costs. They include costs to the provider for administration and management, as well as for office, training and utilities such as water, gas and electricity.[5]
Indirect overheads	£7,218 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 2019/2020 (costs including training given in brackets)		
£45 (£49) per hour.		

[1] Skills for Care (2020) *Adult social care workforce estimates*, https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/Topics/Pay-rates.aspx [accessed 11 November 2020].

[2] Local Government Pension Scheme Advisory Board (2020) *Fund Valuations 2019*, LGPS Advisory Board, London. http://lgpsboard.org/index.php/schemedata [accessed 22 June 2020].

[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 Adult social care workforce data (Skills for Care, 2020).[1]

Costs and unit estimation	2019/2020 value	Notes
A. Wages/salary	£17,041 per year	Based on the weighted mean annual salary for a local authority and independent sector care worker for 2019/2020. The weighted mean hourly pay rate was £8.87. A senior care worker would earn £17,041 per year (£9.00 gross hourly salary).[1]
B. Salary oncosts	£4,228 per year	Employer's national insurance contribution is included, plus 18 per cent of salary for employer's contribution to superannuation.[2]
C. Overheads Direct overheads	£6,186 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.[3]
Indirect overheads	£3,403 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 *Green Book: national agreement on pay and conditions of service*.[4]
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),[5] 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.[6]
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 2019/2020		
Based on the price multipliers for independent sector home care provided for private purchasers: £24 per weekday hour (£26 per day-time weekend, £25 per night-time weekday, £26 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: £24 per weekday hour (£25 per day-time weekend, £25 per night-time weekday, £25 per night-time weekend). Face-to-face: £30 per hour weekday (£31 per day-time weekend, £31 per night-time weekday, £31 per night-time weekend).		

[1] Skills for Care (2020) *Adult social care workforce estimates*, https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/Topics/Pay-rates.aspx [accessed 11 November 2020].

[2] Local Government Pension Scheme Advisory Board (2020) *Fund Valuations 2019*, LGPS Advisory Board, London. http://lgpsboard.org/index.php/schemedata [accessed 22 June 2020].

[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] 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-governentf [accessed 9 October 2019].

[5] 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].

[6] 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 Adult social care workforce data (Skills for Care, 2020)[1] and has been based on the salary of a registered manager.

Costs and unit estimation	2019/2020 value	Notes
A. Wages/salary	£31,137 per year	Based on the weighted mean annual salary for a local authority and independent sector registered manager for 2019/2020. The weighted mean hourly pay rate was £16.[1]
B. Salary oncosts	£8,710 per year	Employer's national insurance contribution is included, plus 18 per cent of salary for employer's contribution to superannuation.[2]
C. Qualifications		No information available.
D. Overheads: Direct Indirect	 £11,556 per year £6,376 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.[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 *Green Book: national agreement on pay and conditions of service*.[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: 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	1.25 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 2019/2020		
£40 per hour.		

[1] Skills for Care (2020) *Adult social care workforce estimates*, https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/Topics/Pay-rates.aspx [accessed 11 November 2020].

[2] Local Government Pension Scheme Advisory Board (2020) *Fund Valuations 2019*, LGPS Advisory Board, London. http://lgpsboard.org/index.php/schemedata [accessed 22 June 2020].

[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-governent [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	2019/2020 value	Notes
A. Wages/salary	£18,714 per year	Information taken from the Adult social care workforce data (Skills for Care, 2020)[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 £18,714.
B. Salary oncosts	£4,760 per year	Employer's national insurance contribution is included, plus 18 per cent of salary for employer's contribution to superannuation.[3]
C. Qualifications		
D. Overheads Direct overheads Indirect overheads	 £6,807 per year £3,756 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]
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 2019/2020 (costs including training given in brackets)		
£25 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 (2020) *Adult social care workforce estimates*, https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/Topics/Pay-rates.aspx [accessed 11 November 2020].

[3] Local Government Pension Scheme Advisory Board (2020) *Fund Valuations 2019*, LGPS Advisory Board, London. http://lgpsboard.org/index.php/schemedata [accessed 22 June 2020].

[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 Melaugh[1] and Andy Healey of King's College, London and Mahir Demir and Helena Demetriou of the LWN Hub. Costs have been uprated using PSS Inflators.

Costs and unit estimation	2019/2020 value	Notes
A. Wages/salary	£8,273 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 £20,005.
B. Salary oncosts	£1,406 per year	Employer's national insurance is included, plus 18 per cent of salary for employer's contribution to superannuation.
C. Qualifications		
D. Overheads Direct overheads Management and administration Office, general business and premises (including advertising and promotion) Indirect overheads	 £3,189 per year £718 per year £1,557 per year £1,015 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). A programme manager overseas 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. 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. 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 absence level in England for all authorities. Unit costs are based on 614 hours.
Ratio of direct to indirect time on: Face-to-face contacts	 1:0.38	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.
Unit costs available 2019/2020 (costs including qualifications given in brackets)		
£28 per hour (based on 15 working hours per week); £39 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 Reablement

Reablement is a goals-focused intervention comprising intensive, time-limited (up to 6 weeks) assessment and therapeutic work delivered in the usual place of residence. Its purpose is to restore/regain self-care and daily living skills for individuals at risk of needing social care support, or an increase in its intensity to continue living in their own homes.[1]

In 2015, Beresford & colleagues (2019)[1] surveyed reablement services in 139 local authorities of the 152 local authorities in England. When collecting costs, data collection and analysis took the perspective of the NHS and Personal Social Services, therefore the relevant costs were those falling on the budgets of the CCG (representing the NHS) and/or local authorities (representing Personal Social Services). Although the authors recognised that overheads should be included, they were not sure in practice they were given, and they were not able to check with participants in the survey as to what they included (see page 21 of the referenced report for more information). The planned duration of reablement was, on average, six weeks, with one or two home visits per day. Actual duration was, on average, four weeks.

Using cluster analysis, the authors derived three types of reablement input:

1) functional reablement (services which reported that they re-enabled personal care, domestic, skills, safety, information, helping people to move about inside, health-related needs and confidence-building).

2) comprehensive reablement (services which said that they re-enabled in all of the domains. Thus, they were similar to services delivering 'functional' reablement, but also helped people with getting out and about, and with social activities).

3) social reablement (services which reported that they re-enabled in the areas of safety, information, getting out and about, social activities and confidence-building).

Of the 143 reablement services which were reported in the survey, 42 (29%) provided information on expenditure, and 100 (70%) provided information on annual caseload or the typical number of cases per month. Overall, the authors were able to calculate the cost per case for 37 (26%) reablement services.

The average cost per case was £1,445 overall and £1,728 when services which reported cost per case below £500 were excluded (n=6), which the authors considered to be implausible (see Table 1 below). Another study[2] referenced in the NICE guidelines (2017)[3] reported a mean cost per person of £1,484, based on annual service budgets of the commissioners and providers that voluntarily participated in the Audit. The mean duration of reablement was 34.5 days (see Bauer et al. 2019).[4] All costs have been uprated from 2014-15 using the appropriate inflators.

Table 1 Cost per case of reablement services

Expenditure on reablement services as reported by services	Average cost per case	Minimum cost per case	Maximum cost per case
Total expenditure for functional services (n=10)	£1,577	£533	£2,235
Total expenditure for comprehensive services (n=24)	£1,512	£20	£3,333
Total expenditure for social reablement services (n=3)	N/R	N/R	N/R
Total expenditure on reablement services (n=37)	**£1,728**	**£20**	**£3,333**

N/R: Not reported given the small number of services reporting cost data.

[1] Beresford, B., Mann, R., Parker, G., Kanaan, M., Faria, R., Rabiee, P., Weatherly, H., Clarke, S., Mayhew, E., Duarte, A., Laver-Fawcett, A. & Aspinal, F. (2019) *Reablement services for people at risk of needing social care: the MoRe mixed-methods evaluation*, https://www.ncbi.nlm.nih.gov/books/NBK540371/ [accessed 14 December 2020]

[2] NAIC (2015) *National Audit of Intermediate Care 2015*, NAIC, London. https://britishgeriatricssociety.wordpress.com/2015/11/11/national_audit_intermediate_care/.

[3] National Institute for Health and Care Excellence (2017) *Intermediate care including reablement*, NICE, London https://www.nice.org.uk/guidance/ng74/resources/intermediate-care-including-reablement-pdf-1837634227909 [accessed 14 December 2020]

[4] Bauer, A., Fernandez, J.L., Henderson, C., Wittenberg, R. & Knapp, M. (2019*) Cost-minimisation analysis of home care reablement for older people in England: A modelling study*, https://pubmed.ncbi.nlm.nih.gov/31006936/. [accessed 14 December 2020]

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 2019/April 2020 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 £35,881; occupational therapists, £34,423; speech and language therapists, £35,995; dietitians, £35,985; and radiographers (diagnostic and therapeutic), £35,448.

B Salary oncosts

Employer's national insurance is included, plus 20.68 per cent of salary for employer's contribution to superannuation (see Preface for further details)

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 Dr Lynne Bollington has provided the cost of the clinical placement for pharmacists.[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 groups[8] 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 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.

[1] NHS Digital (2020) *NHS staff earnings estimates, 12-month period from April 2019 – March 2020* (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://di65gital.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) 2019/2020 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	£22,626	£25,023	£33,734	£41,226	£48,669	£58,176	£68,771	£82,118	£100,285
B Salary on-costs	£6,610	£7,437	£10,440	£13,024	£15,590	£18,868	£22,521	£27,123	£33,387
C Qualifications (see notes)									
D Overheads									
Management, admin and estates staff	£7,075	£7,885	£10,690	£13,128	£15,551	£18,645	£22,093	£26,436	£32,349
Non-staff	£12,601	£13,990	£19,039	£23,382	£27,696	£33,206	£39,347	£47,083	£57,613
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 2019/2020									
Cost per working hour									
-physiotherapists/OTs	**£34**	**£38**	**£50**	**£61**	**£71**	**£85**	**£100**	**£118**	**£144**
-radiographers	**£36**	**£40**	**£52**	**£63**	**£73**	**£87**	**£102**	**£120**	**£146**
-dietitians/speech and language therapists	**£34**	**£37**	**£50**	**£60**	**£71**	**£84**	**£99**	**£118**	**£143**

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 2019/April 2020 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 2014/2015*.[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 groups[7] and training/study days from 225 working days per annum.

G Ratio of direct to patient-related time

See previous editions and Chapter 20 of Section V of this report for further information.

NHS Digital (2020) NHS staff earnings estimates, 12-month period from April 2019 – March 2020 (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]

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	£21,929	£27,350	£34,250	£40,997	£47,915	£57,003	£66,808	£79,149	£95,050
B Salary oncosts	£6,370	£8,239	£10,618	£12,945	£15,330	£18,463	£21,454	£25,470	£30,645
C Qualifications (see notes)									
D Overheads									
Management, admin and estates staff	£6,848	£8,613	£10,858	£13,054	£15,305	£18,263	£21,454	£25,470	£30,645
Non-staff	£12,197	£15,339	£19,338	£23,249	£27,259	£32,526	£38,209	£45,362	£54,578
E Capital overheads	£2,339	£3,482	£3,482	£3,482	£3,482	£3,482	£3,482	£3,482	£3,482
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
G Ratio of direct to indirect time on : Face to face contacts	See notes	See notes	See notes	See notes	See notes	See notes	See notes	See notes	See notes
Cost per working hour	£31	£40	£50	£60	£69	£82	£96	£114	£136

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.[1]
Registrar	A registrar is a specialist in training for medical consultancy.[2]
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 their entire 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]

[1] NHS, UK (2016) *The Foundation Programme*, http://www.foundationprogramme.nhs.uk/pages/home
[2] 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 2019/April 2020 Electronic Staff Record (ESR).[1] See *NHS terms and conditions of service handbook* for information on payment for unsocial hours and shift work.[2] See Section V for further information on pay scales.

B. Salary oncosts

Employer's national insurance is included plus 20.68 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).[3] 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.[4]

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.[6,7] 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 groups[8] and training/study days from 225 working days per annum. Under the European Working Time Directive (EWTD), the majority of foundation officers (Year 1) are working up to 48 hours per week, 19.7 per cent are working up to 56 hours, and 11.3 per cent are working 40 hours.[9]

G. London and non-London multiplier

See information produced by NHS Employers[10] and NHS Improvement[11] 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 (2020) NHS staff earnings estimates, 12-month period from April 2019 – March 2020 (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] National Health Service (2008) *Modernising medical careers*, National Health Service, London.
[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 1 October 2019]
[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] Provided by the Department of Health, 2010.
10 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].
11 NHS Improvement (2019) 2019/2020 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	£27,239	£31,592	£44,449	£87,267	£95,230	£91,522	£93,099
B Salary oncosts	£8,200	£9,702	£14,135	£28,898	£31,644	£30,366	£30,909
C Overheads							
Management, admin and estates staff	£8,576	£9,993	£14,177	£28,112	£30,704	£29,947	£30,010
Non-staff	£15,273	£17,798	£25,250	£50,067	£54,683	£52,534	£53,447
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 2019/2020							
Cost per working hour	£30	£35	£50	£117	£119	£114	£116
Cost per working hour, 56-hr week	£26	£30	£43	NA	NA	NA	NA
Cost per working hour, 40-hr week	£36	£41	£60	NA	NA	NA	NA

V. SOURCES OF INFORMATION

15. Inflation indices
16. NHS staff earnings estimates
17. Examples of roles in each Agenda for Change band
18. Training costs for health and social care professionals
19. Care home fees
20. Time use of community care professionals
21. Glossary
22. References
23. List of useful websites
24. List of items from previous volumes

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 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
2019	323.1	2.6	291.9	2.2

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 data used is taken from the 30 June 2020 publication. The BCIS PUBSEC tender price index (PUBSEC) is used by the 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	260	3.7
2019	2.2	264 (provisional)	1.2 (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 DHSC, in conjunction with the ONS 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 four broad categories: NHS providers, general practice, prescribing and dentistry to create an overall inflation measure for the NHS. This index gives a more accurate measure of productivity than previously.

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
2019/2020	1.62	2.53	2.21

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). This year we have agreed with them to use Skills for Care (SfC) data to calculate the Pay percentages from 2019/20 onwards, in place of the Annual Survey of Hours and Earnings (ASHE) data used for previous years. Skills for Care data are taken from the Adult Social Care Workforce Data Set (ASC-WDS) which consists of non-mandatory returns from the independent sector (covering 51% of all CQC regulated locations) and mandatory returns from all local authorities in England. Skills for Care weight the independent sector returns to remove any geographical, service type and sector biases. We checked that the Skills for Care and ASHE Pay percentages for 2013/14 to 2018/19 are closely comparable. They are very similar, though the Skills for Care data do show lower overall pay inflation for local authority staff over that period.

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	Pay data source
2008/2009	2.9	2.5	3.0	ASHE
2009/2010	2.1	0.7	2.4	ASHE
2010/2011	2.1	2.1	2.2	ASHE
2011/2012	0.1	0.4	-0.4	ASHE
2012/2013	0.6	1.0	0.2	ASHE
2013/2014	1.0	1.5	0.7	ASHE
2014/2015	1.0	1.6	0.9	ASHE
2015/2016	1.9	1.8	2.3	ASHE
2016/2017	3.4	4.0	3.8	ASHE
2017/2018	2.5	3.4	2.7	ASHE
2018/2019	3.0	3.0	3.4	ASHE
2019/2020	3.3	3.1	3.8	SfC

[1]Provided by the Department of Health, 2020.

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	Pay data source
2008/2009	3.1	2.6	3.2	ASHE
2009/2010	2.1	0.6	2.3	ASHE
2010/2011	1.9	1.9	1.9	ASHE
2011/2012	0.5	0.8	0.2	ASHE
2012/2013	0.4	0.8	-0.1	ASHE
2013/2014	1.5	2.0	1.4	ASHE
2014/2015	1.0	1.6	0.9	ASHE
2015/2016	3.2	3.0	4.1	ASHE
2016/2017	1.2	2.1	0.9	ASHE
2017/2018	2.7	3.6	2.9	ASHE
2018/2019	2.5	2.6	2.8	ASHE
2019/2020	3.3	3.1	3.8	SfC

[1] Provided by the Department of Health, 2020.

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	Pay data source
2010/2011	2.1	2.1	2.2	ASHE
2011/2012	0.0	0.4	-0.4	ASHE
2012/2013	0.7	1.1	0.2	ASHE
2013/2014	0.9	1.4	0.6	ASHE
2014/2015	1.0	1.6	0.9	ASHE
2015/2016	1.8	1.7	2.1	ASHE
2016/2017	3.6	4.2	4.1	ASHE
2017/2018	2.5	3.4	2.7	ASHE
2018/2019	3.0	3.0	3.4	ASHE
2019/2020	3.4	3.2	3.9	SfC

16. NHS staff earnings estimates[1]

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	£26,582
Administration and estates staff	£30,017
Healthcare assistants and other support staff	£18,688
Nursing, midwifery and health visiting staff	£31,237
Nursing, midwifery and health visiting learners	£23,606
Scientific, therapeutic and technical staff	£33,931
Healthcare scientists	£31,240

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	£21,929
Band 5	£27,350
Band 6	£34,250
Band 7	£40,997
Band 8a	£47,915
Band 8b	£57,003
Band 8c	£66,808
Band 8d	£79,149
Band 9	£95,050

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	£22,626
Band 5	£25,023
Band 6	£33,734
Band 7	£41,226
Band 8a	£48,669
Band 8b	£58,176
Band 8c	£68,771
Band 8d	£82,118
Band 9	£100,285

[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	£17,609
Band 2	£18,283
Band 3	£19,770
Band 4	£22,570
Band 5	£26,934
Band 6	£33,330
Band 7	£40,181
Band 8a	£47,749
Band 8b	£57,114
Band 8c	£67,758
Band 8d	£81,165
Band 9	£98,239

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	£33,503
Nursery nurses and nursing assistants	£19,706
Science technical & therapeutic staff (ST&T): allied health professionals	
Qualified	£36,120
Unqualified	£20,521
ST&T staff: other	
Qualified	£38,408
Unqualified	£21,686
Ambulance staff	
Qualified	£31,660
Unqualified	£19,622
Former pay negotiating council groups	
Senior managers	£83,152
Managers	£53,005
Administrative and clerical staff	£25,026
Maintenance and works staff	£23,081

Source of tables 17.1-17.6: NHS Digital (2019) *NHS staff earnings estimates, 12-month period from April 2019 – March 2020* (not publicly available), NHS Digital, Leeds.

General notes for NHS earnings estimates

See Preface for information on the effects on pay scales of the NHS pay structure reform which has led to larger than average increases in some cases

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]

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

	Pre-registration			Totals	
Professional (working life in years)	**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	£34,980	£4,742	£66,544	£5,446
Occupational therapist (23.5)	£26,822	£34,980	£4,742	£66,544	£5,454
Speech and language therapist (24.7)	£26,822	£34,980	£4,742	£66,544	£5,592
Dietitian (23.3)	£26,822	£34,980	£4,742	£66,544	£5,659
Radiographer (24.3)	£26,822	£34,980	£4,742	£66,544	£5,423
Hospital pharmacist (27.6)	£35,165	£44,912	£40,607	£120,685	£9,359
Community pharmacist (27.6)	£35,165	£44,912	£26,652	£106,729	£8,340
Psychologist (not estimated by PSSRU)[6]					
Nurse (24)	£26,822	£34,980	£4,742	£66,544	£8,744
Social worker (19) (degree)	£26,822	£34,980	£6,474	£68,277	£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 £3,270+MFF per annum in 2019/20 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	£45,256	£55,425	£146,868	NA		£247,549	£20,324
Post-graduate							
Foundation officer 1 (included in pre-reg training)	£45,256	£55,425	£146,868	£10,754	£54,483	£312,785	£25,680
Foundation officer 2	£45,256	£55,425	£146,868	£20,276	£59,676	£327,500	£28.478
Registrar group	£45,256	£55,425	£146,868	£40,155	£110,925	£398,629	£40,216
Associate specialist	£45,256	£55,425	£146,868	£48,496	£148,367	£444,411	£47,479
GP	£45,256	£55,425	£146,868	NA	£157,618	£405,166	£43,287
Consultant	£45,256	£55,425	£146,868	£65,144	£218,124	£530,816	£60,873

[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 £12,772; Foundation Officer 2 £24,924; Registrar £51,088; Associate specialist £63,860; Consultants £88,784. 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 and uprated to provide a 2019/2020 figures. New data was not available due to staff shortages caused by the Covid-19 pandemic.[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

Minimum and maximum fees for 2019/2020

	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	£780	£1,104	£942	£641	£900	£771
Learning disability	£686	£2,010	£1,349	£666	£1,712	£1,190
Mental health	£1,123	£1,199	£1,161	£488	£1,264	£875
Older people (65+)	£758	£955	£856	£623	£801	£712
Physical disability	£1,320	£1,468	£1,394	£402	£465	£433

Table 2 Care home fees in England – non-profit providers

Minimum and maximum fees for 2019/2020

	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	£1,037	£1,237	£1,137	£654	£804	£729
Learning disability				£1,111	£1,521	£1,317
Mental health	£790		£790	£689	£742	£716
Older people (65+)	£853	£1,112	£983	£610	£786	£698
Physical disability				£937	£1,856	£1,396

[1] Laing & Buisson (2019) *Laing & Buisson Care Homes Complete Dataset 2018/2019*, Laing & Buisson, London.

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 (bands 5-8)	**11**	41	35%	38%	22%	5%	132	1:0.37
Occupational therapists (bands 4-7)	**6**	40	51%	36%	11%	2%	42	1:0.15
Speech and language therapists (bands 5-6)	**7**	40	38%	50%	9%	3%	84	1:0.14

Clinical psychologists: Ratio of direct to indirect time on face-to-face contacts to all activity: 1:2:03 based on information taken from a study by Professor John Marsden and Colleagues.[1]

[1] 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 personalized psychosocial intervention in treatment-resistant maintenance opioid agonist therapy: a pragmatic, open-label, randomized controlled trial,*The Lancet*, 6, 5, 391-402.

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.

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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

2019

Guest editorial: transitioning from reference costs to patient-level costing
Understanding the cost of quality within an online sexual health service
The costs of obesity prevention and treatment

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

2019

Time Banks