Introduction

Decision-makers in central government, local authorities, provider organisations and local community groups, and also individual service users and carers organising or paying for their own care, have to consider the different ways of using the resources available to them. Comparing the costs and outcomes of alternative service options can help those decision-making processes. The fact that adult social care in England is under considerable budget pressure reinforces the need to understand the economic consequences of decisions.

Good-quality economic studies can guide decision-makers when there are insufficient resources to meet needs or satisfy wants, which is of course almost always the case. Economic evaluations provide evidence about the costs of alternative courses of actions relative to their respective outcomes, with the latter gauged in terms of improvements in wellbeing, independence, health and other considerations (Knapp & Kettunen, forthcoming). Whilst economic evaluation methods are well established in healthcare contexts, and widely applied in most high-income countries, they are less commonly found in social care contexts. Economic evaluations are gradually appearing in the adult social care field, but there is little critical discussion about which methods should be applied, and it can be hard for decision-makers to find empirical evidence or to judge its quality (Weatherly et al., 2017). Since 2012, the National Institute for Health and Care Excellence (NICE) has had responsibility in England for producing social care guidance. NICE makes recommendations for how economic evaluations should be conducted to feed into their guideline development process.

The EconomicS of Social care CompEndium (ESSENCE) project (https://essenceproject.uk/) was initiated to gather and build evidence (from any of the economic evaluation types described below) relevant to adult social care practice in England and to make it available to local decision-makers and other interested parties. We wanted to communicate evidence in accessible ways for everyone, not just researchers. When possible we added new evidence not currently mentioned in published guidance. Specific aims were to provide easily accessible information about what works and what is good value for money (with transparency about, and comments on, the methods used). We sought to improve understanding of this evidence by providing training and learning materials relevant to decision-makers. We also wanted to identify adult social care interventions where there has not yet been any economic evaluation but where studies could be undertaken in the future. The project was conducted with close support from an advisory group (see below).
Defining interventions in adult social care
We employed a broad definition of adult social care, taken from the helpful framework set out by the National Audit Office (NAO, 2018; see Figure 1).

The framework covers social work, personal care and practical support for adults with a physical disability, learning disability, or physical or mental illness, as well as support for their carers. In this project we wanted to cover the core set of adult social care services, including needs assessments, care and support planning, carer services, day services, home care, residential care homes and other types of supported housing. However, we also included interventions on the boundaries of adult social care with healthcare or other sectors if evidence was available, and so we covered areas such as employment support, intermediate care, occupational therapy, reablement and extra-care housing.

Before we describe what we found from our searching and how we developed the case summaries, we should explain what is meant by economic evaluation in this context.

Economic evaluations in social care
An economic evaluation has five key elements: clarification of the question to be addressed; specification of the intervention to be evaluated and the comparator; measurement of outcomes; measurement of costs (including the cost of implementing the intervention and any savings that might accrue); and combination of the data on outcomes and costs to generate recommendations to decision-makers.

In implementing these various elements, researchers can take different approaches, driven in part by the purpose of the study and in part by data availability. This in turn has led to the development of a few different types of economic evaluation. There are few differences between those approaches to evaluation when looking at the conceptualisation, definition and measurement of costs, but there are wider differences in how they define and measure outcomes. Those latter differences are primarily because of the need to address different resource allocation questions.

If the question is how best to respond to a specific set of needs (such as providing independent living for people with learning disabilities and which approach should be taken), then the outcomes most relevant to social care decision-makers would include the degree of independence achieved, the individuals’ subjective and objective quality of life, and perhaps the impacts on families, employers or communities. In this context, a cost-effectiveness analysis

Figure 1: Adult care services and other services.
would be suitable. Outcome measures used in this type of economic evaluation would be the same as any social care researcher would be likely to select, and costs would be measured with greater or lesser breadth, depending on the context (see below). A cost-effectiveness analysis tells decision-makers what course of action is likely to be the most efficient way to respond to a particular set of needs.

Strictly speaking, a cost-effectiveness analysis looks at a single outcome measure; if more than one outcome measure is considered, the evaluation is often called a cost-utility analysis. The multiple outcomes in this latter type of evaluation are not aggregated or combined in any way, and so decision-makers have to form their own opinions about the relative importance of each of the different outcomes.

There is often a need to address broader questions about how to use available resources. If, for example, a decision-maker with some unallocated budget wants to choose between expanding independent living arrangements for people with learning disabilities and introducing a new support programme for carers of people with dementia, they might want to know how the two options compare in terms of costs and outcomes. Costs can readily be calculated in the same way for the two options and then compared, but outcome measures will differ: what is most relevant as an outcome for people with learning disabilities will not be the same as what is most relevant for dementia carers. The decision-maker might benefit from being presented with evidence using a common measure of outcome that allows comparison between the options. Economists working in the healthcare field recommend measuring ‘utility’, operationalising it in measures of quality-adjusted life years (QALYs). When an evaluation uses a generic outcome measure like a QALY, it is sometimes called a cost-utility analysis. It tells the strategic health system (or care-system) decision-maker where they will get the biggest impact from their available resources.

There might be an even broader question to address, such as when a decision has to be taken about how to allocate resources between very different areas of public policy: more on social care or more on education, say? Again, an economic evaluation can straightforwardly compare costs between the alternatives, but to compare outcomes it would need a very broad measure, such as the monetary value of the various outcomes, or maybe some quite high-level wellbeing construct, such as life satisfaction or happiness (Layard & O’Donnell, 2015). The analysis using monetary value is usually called a cost-benefit analysis.

Findings in the wellbeing literature (from single wellbeing tool, such as the ONS4, Office for National Statistics 2016) can be monetised (Fujitara & Campbell, 2011) and used to generate valuations for cost-benefit analysis where monetary value approaches have proved inadequate and the wellbeing tool has relevance and validity across all areas of public policy (Brazier et al., 2019).

Some economic evaluations collect new (‘primary’) data, while others rely on data from already published sources and integrate those data in different types of models (McKelvie, 2013). For evaluations that collect new data, there are various study designs to choose from, with the randomised controlled trial often seen as strongest, although it is not always feasible or appropriate to employ such a design (Woods & Russell, 2014). Other primary data studies might use pragmatic randomised designs, quasi-experimental designs (with no randomised control) or observational designs. So long as the samples of individuals are large enough, statistical analyses can be used to tease out any cost and outcome differences associated with different interventions (Thyer, 2012), adjusting for factors that might have influenced outcomes such as age, income, health or wellbeing at baseline (e.g., Bauer & Fernandez, 2017).

It is important to recognise that uncertainty surrounds any evaluation findings, in part because of the inherent variability between individuals, providers or regions, and in part because of measurement imprecision. An example might be the cost of a type of support that is delivered differently in different parts of the country and where costs thus vary. Economists might therefore conduct sensitivity analyses to reveal whether and to what extent the conclusions from a study vary with (i.e., are sensitive to) the assumptions made in relation to cost and outcome measures. A good example is provided by the ESSENCE case summary on telecare, drawing on the randomised trial conducted by Henderson et al. (2014). There was uncertainty about the long-term cost of purchasing the telecare equipment, because the market price would probably fall as both demand and competition increased. Similarly, expansion of provision would allow providers to benefit from economies of scale in support services.

**Outcomes**

The question to be answered by an economic evaluation therefore heavily influences the choice of outcome measure (and hence the type of evaluation). At the core of each approach to outcome measurement should be the needs, preferences and wellbeing of individuals, their families or unpaid carers. Two outcome measures in adult social care are now used with increasing frequency in economic evaluations. One is the Adult Social Care Outcomes Toolkit (ASCOT), developed as a measure of social care-related quality of life, distinguishing between capabilities and functioning in response levels (Netten et al., 2012). ASCOT can be used to generate the social care equivalent of the QALY (Bulamu et al., 2015; Makai et al., 2014). Another generic tool is ICECAP for older people, based on a capability approach (Coast et al., 2008), which is particularly suitable for people without or with only mild social care needs (Proud et al., 2019).

Challenges often encountered when trying to assess outcomes are the same in an economics study as in other evaluations. Some dimensions are inherently difficult to measure, such as those that rely on the subjective views of people who might find it hard to gauge or express their personal experiences. Nevertheless, numerous tools have been developed and tested for their reliability and validity (Rand et al., 2017; Afentou et al., 2020). Another challenge is that the consequences of adult social care interventions might become visible only in the long term, so research would ideally seek to measure long-term impacts.
Research should also look at effects beyond the individual who uses services, such as the wider effects on families or unpaid carers.

Capturing these long-term effects and wider impacts is important because otherwise the costs of a service, especially one that needs some initial lump-sum investment, could appear quite high and potentially dissuade decision-makers from introducing a new service or approach. If those decision-makers operate within constrained boundaries of responsibility and with an annual budgetary cycle, then this could be argued to be quite rational from their perspective. Capturing long-term impacts (outcomes and costs) can either be through long-term observational studies (which are unusual, not least because they are expensive) or mathematical modelling methods that allow extrapolation of short-term impacts to longer-term estimates.

**Costs**

When considering new investments in social care, cost will always be a key component. Costs can be measured narrowly or broadly, depending on the purpose of the study. In the former case, the purpose might be to inform resource allocation decisions within a particular agency (such as a public or a private sector provider agency). In the latter case, the purpose might be to inform decision-making within a wider welfare system in a city and therefore covering all provider sectors and funding sources, whether public or private. Another purpose (looking at a broader measure of costs) might be to consider the value of an investment to the whole economy or society. For example, broader perspectives are needed to understand and tackle the challenges of how to respond to population ageing and the burden it might place on family and other unpaid carers.

Commonly, an intervention will lead to new costs or generate savings beyond the social care sector. For example, an intervention that is successful in supporting people to remain living at home rather than going into a care home will reduce the costs associated with residential care but may increase the costs of healthcare in the community, as well as the (often hidden) costs of unpaid care.

For example, many adults with enduring or profound needs will be likely to use more than one social care service annually and indeed will often in addition use healthcare, housing and other support services as well. Therefore, evaluations must often broaden their cost perspective to cover all of these different policy sectors. There might also be costs for people who use services and their families, such as out-of-pocket payments for services, travel costs, or lost earnings from employment because of unpaid care commitments.

There are also non-service costs that could be relevant, including costs of productivity losses due to disruptions in employment patterns for service users or carers (e.g., from short- or long-term absenteeism), reduced performance while at work (called ‘presenteeism’), early retirement or reduced opportunities for career development. These productivity costs might be incurred by employers (and the wider economy) but might also affect an individual’s earnings and household income.

**Making an economic case in adult social care**

By economic case, we mean whether an intervention is cost-effective and affordable. This includes understanding whether and how successfully an intervention works, as well as understanding the costs linked to that intervention. Decision-makers need to weigh up the additional costs of a new service or other intervention against the additional outcomes achieved. Following that, they need to address the challenge of fitting the new service within the resources available.

There are a variety of recommendations that can flow from an economic evaluation. If a study finds that one intervention has better outcomes and lower costs than the intervention with which it is being compared, then the recommendation to the decision-maker should be straightforward: on these economic (efficiency) grounds, the new intervention looks more attractive than its comparator. Of course, there may be other criteria that decision-makers want to consider, such as fairness in the distribution of available resources or the balance between meeting needs and satisfying preferences.

If, on the other hand, a new intervention has better outcomes but higher costs than its comparator, then the recommendation to the decision-maker is more complex and essentially boils down to whether the additional outcomes are considered to be ‘worth’ the additional cost of achieving them. Each of the types of economic evaluation gives recommendations in different ways. With a cost-benefit analysis, which measures the outcomes in monetary terms, it would be straightforward to compare the value of the outcomes with the costs incurred. However, getting (monetary) ‘benefit’ measures in adult social care contexts is almost impossible. With outcomes measured in terms of changes in individual needs or wellbeing, the economic case for intervention depends on the value judgement reached by the decision-maker as to whether the higher costs are justified by the improved outcomes. Both cost-effectiveness and cost-utility analyses help decision-makers by providing information on costs per unit of additional effect (better outcome). It is therefore quite possible that an intervention is seen to be cost-effective compared with its comparator even if it is more expensive in that it generates higher overall costs; this is because it is accompanied by greater wellbeing or other benefits.

**NICE guidelines**

In the last few years there has been a noticeable increase in the generation of economic evaluation evidence because of the work of the National Institute for Health and Care Excellence (NICE). NICE provides guidance, advice and information services for health, public health and social care professionals. Their social care guidelines support evidence-based recommendations on the effectiveness and cost-effectiveness of interventions and services. Those guidelines are produced in collaboration with a range of social care experts. We describe NICE processes in social care in another paper (Bauer et al., 2020 forthcoming).
What is the ESSENCE toolkit?
Four separate components of the ESSENCE toolkit are available online and are described below.

Individual case summaries
For those social care interventions where we considered the evidence to be sufficiently robust (see below), we produced individual case summaries. Each followed a structure that was easy to read, explained key matters of interest, included a very short summary as well as a longer (but still non-technical) account of a number of areas: the context and setting for the 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).

To date, 17 case summaries have been produced (Table 1). Twenty-one adult care services (out of the 33 ‘types’ in the NAO framework) are covered by these case summaries (Figure 1). Four summaries relate to care and support planning, four to social work support, three to home care, three to carer services and three to adults with disabilities. The complete list is provided in Table 2.

Searchable database of evidence
The database of evidence allows searches to be made for information about completed studies (as well as ongoing projects) to discover more, for example, about their focus, the setting, the type of intervention presented, the population and the main findings. Key words can be entered to select a group of studies of interest. Information can be filtered for comparison using an Excel spreadsheet.

The total number of entries in the searchable database of evidence is currently 231, covering completed projects/publications (225; 97.4%) and work in progress (6; 2.6%). It includes evidence presented in the case summaries, plus additional sources of economic evidence extracted from the various databases. Table 2 reports the number of entries according to type of data source. Evidence was extracted from the following sources:

- online searchable database of evidence produced by the Social Care Institute for Excellence (n = 69),
- Public Health England tool on return-on-investment and cost-effectiveness of public health programmes (published Excel database; n = 61),
- PSSRU-led (now CPEC-led) research (list of projects and publications from PSSRU website; n = 61),
- Housing Learning and Improvement Network (online searchable database of evidence; n = 37),
- NICE guidelines (online searchable database of evidence; n = 18),
- a scoping review commissioned by NICE on the social care economic evaluation methods (list of publications; n = 11),
- York University-led research (list of projects and publications from the York website; n = 11),
- NIHR School for Social Care Research-funded projects (list of awarded projects; n = 7),
- miscellaneous other sources (n = 12).

Evidence can also be selected according to particular groups of social care interventions. The majority of the entries relate to adult social care interventions delivered by local authorities, followed by health services, housing and leisure sectors. Evidence for welfare and benefits is very limited. Details are given in Table 2. The most frequently evaluated interventions include adaptations to the home, assessing needs, care and support planning, carers services, day services, home care, information and advice, integration (inter-professional working), intermediate care and mental health services.

Six of the 231 outputs were reported as being works in progress at the time of our review; they have been classified according to type of intervention in Table 2.

Glossary of terms and concepts
The glossary includes key terms and concepts used in case summaries that may need further explanation, particularly for non-economists. They appear as a summary list available to download as a PDF; in addition, each case summary presents interactive links with relevant information from the glossary of terms and concepts (which appears when the reader selects specific words). The glossary provides more information on the key concept selected and directs the reader to relevant publications if needed. It also allows access to a number of directories of definitions used to extract information on key terms and concepts on the economics of social care (e.g., Glanz & Knapp, 2017; Encyclopedia of Public Health, 2008; York Health Economics Consortium, 2016; Public Health England, 2017). Other useful directories of definitions of commonly used terms in health and social care are also made available (British Medical Journal, 2019; Harris & White, 2013; National Institute for Health and Care Excellence, 2019; Think Local Act Personal, 2019).

Project resources and training
We sought to provide further support and training for decision-makers, analysts and anyone else to help them understand economic evaluation methods, evidence, application and uses. Each individual case summary includes a section on the implementation of the intervention, in some cases with examples of successful experiences across England.

In addition, we planned to organise workshops on understanding economic evaluations in adult social care, the first of which took place in July 2019, with more to follow (now likely to be online). In preparation for the workshops we tested the Toolkit with a social worker/manager and a research practitioner with experience of participating in local implementation and improvement work. Information relating to training events delivered by the team and additional relevant resources (such as papers and presentations) will be uploaded regularly to the website for free public access.
Table 1: Classification of the case summaries.

| Classification                                      | Case summaries                                                                                                                                 |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| **ADULT SOCIAL CARE**                               |                                                                                                                                               |
| Advocacy                                            | • Small-scale social care interventions [Investing in advocacy for parents with learning disabilities]                                        |
| Adult with learning disabilities                    | • Employment support for autistic adults                                                                                                                                                                  |
|                                                     | • Short breaks for adults with learning disabilities and behaviour that challenges: economic evidence (Summary of the National Institute for Health and Care Excellence Guideline) |
|                                                     | • Small-scale social care interventions [Positive behavioural support for people with learning disabilities and behaviours that challenge]           |
| Assessing needs                                     | • Person centred support in care homes                                                                                                                                                                   |
|                                                     | • Transition from hospital (summary of the National Institute for Health and Care Excellence guideline)                                        |
| Care and support planning                           | • Advance care planning                                                                                                                                                                                    |
|                                                     | • Person centred support in care homes                                                                                                                                                                    |
|                                                     | • Homeless discharge service                                                                                                                                                                               |
|                                                     | • Transition from hospital (summary of the National Institute for Health and Care Excellence guideline)                                        |
| Carers services                                     | • Support for unpaid carers                                                                                                                                                                               |
|                                                     | • Carers’ support programme                                                                                                                                                                                |
|                                                     | • Respite care (summary of the National Institute for Health and Care Excellence guideline)                                                                                                                |
| Day services                                        | • Signposting and navigation                                                                                                                                                                               |
|                                                     | • Cognitive stimulation therapy                                                                                                                                                                            |
|                                                     | • Interventions for dementia, all except medicines (summary of NICE guideline)                                                                                                                            |
| Home care                                           | • Help-at-home                                                                                                                                                                                           |
|                                                     | • Home care reablement                                                                                                                                                                                    |
|                                                     | • Small scale interventions [British Red Cross ('Support at Home' hospital discharge scheme)]                                                                                                               |
| Information and advice                              | • Debt advice                                                                                                                                                                                            |
|                                                     | • Signposting and navigation                                                                                                                                                                               |
| Residential care home with/without nursing          | • Person centred support in care homes                                                                                                                                                                   |
| Safeguarding                                        | • Homeless discharge service                                                                                                                                                                               |
| Social work support                                 | • Homeless discharge service                                                                                                                                                                               |
|                                                     | • See ‘home care’ above                                                                                                                                                                                    |
|                                                     | • Small scale social care interventions                                                                                                                                                                  |
|                                                     | • Signposting and navigation                                                                                                                                                                               |
| **ADULT SOCIAL CARE & HEALTH SERVICES**             |                                                                                                                                               |
| Employment support                                  | • Employment support for autistic adults                                                                                                                                                                 |
| Integration: inter-professional working             | • Homeless discharge service                                                                                                                                                                               |
|                                                     | • Person centred support in care homes                                                                                                                                                                    |
| Intermediate care                                   | • Home care reablement                                                                                                                                                                                    |
|                                                     | • Homeless discharge service                                                                                                                                                                               |
| Mental health services                              | • Small-scale social care interventions [Psychology in Hostels; Peer-led self-management for people with severe mental health issues]                                                                 |
| Occupational therapy                                | • Interventions for dementia, all except medicines (summary of the National Institute for Health and Care Excellence guideline)                                                                 |
| Reablement                                           | • Home care reablement                                                                                                                                                                                    |
| **ADULT SOCIAL CARE & HOUSING**                     |                                                                                                                                               |
| Alarms and key holding                              | • Telecare                                                                                                                                                                                               |
| Extra-care housing                                  | • Extra-care housing                                                                                                                                                                                      |
| **ADULT SOCIAL CARE & LEISURE AND WELLBEING**       |                                                                                                                                               |
| Physical activity                                   | • Interventions for dementia, all except medicines (summary of NICE guideline)                                                                                                                            |

Please note that the same case summaries appear multiple times (i.e., 17 case summaries could cover 21 adult care services) because one case summary can report on more than one intervention (e.g., interventions for dementia, all except medicines, NICE guideline) or the same intervention can be described by different terms from the framework (e.g., homeless discharge service described as ‘care and support planning’, ‘integration’, ‘intermediate care’, ‘safeguarding’).
| Table 2: Searchable database of evidence: Overall data matrix. |
|-------------------------------------------------------------|
| **Total no. entries (projects/publications) per database**   |
| NICE guidelines | PHE | SCIE | Housing LIN | EMBASE | PSSRU | York | Others | **Total** |
| 18 | 7 | 61 | 11 | 69 | 37 | 16 | 61 | 11 | 12 |

**Total entries across databases:** 303
**Total entries considered (without repetitions):** 231

### Adult social care

| Subgroup of entries reporting on specific 'Adult social care' interventions: |
|--------------------------------------------------------------------------|
| 1. Adult with learning disabilities services | 5 | 2 | 5 | 0 | 6 | 3 | 0 | 7 | 1 | 1 | **21** |
| 2. Advocacy | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 0 | 1 | **7** |
| 3. Assessing needs | 9 | 2 | 7 | 3 | 6 | 4 | 3 | 12 | 3 | 1 | **34** |
| 4. Care and support planning | 9 | 2 | 19 | 2 | 36 | 7 | 1 | 22 | 1 | 4 | **69** |
| 5. Carers services | 8 | 4 | 6 | 0 | 7 | 7 | 0 | 9 | 1 | 2 | **35** |
| 6. Day services | 4 | 0 | 7 | 3 | 12 | 10 | 4 | 16 | 1 | 6 | **50** |
| 7. Deferred payment agreement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| 8. Direct payment | 0 | 0 | 2 | 0 | 3 | 3 | 1 | 2 | 0 | 1 | **11** |
| 9. Drug and alcohol services | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | **2** |
| 10. Home care | 1 | 1 | 16 | 6 | 26 | 15 | 9 | 13 | 5 | 4 | **78** |
| 11. Information and advice | 5 | 1 | 13 | 2 | 13 | 3 | 5 | 11 | 2 | 3 | **45** |
| 12. Meals | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | **2** |
| 13. Residential care home | 6 | 0 | 2 | 0 | 1 | 4 | 0 | 1 | 1 | 0 | **13** |
| 14. Residential care home with nursing | 0 | 0 | 3 | 0 | 1 | 4 | 0 | 1 | 0 | 0 | **7** |
| 15. Safeguarding | 1 | 1 | 5 | 0 | 6 | 1 | 3 | 3 | 0 | 2 | **20** |
| 16. Social work support | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 3 | 0 | 1 | **7** |

### Health services & adult social care

| Subgroup of entries reporting on specific 'Health services & adult social care' interventions: |
|--------------------------------------------------------------------------------------------|
| 17. Continuing healthcare (personal health budget) | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | **4** |
| 18. Integration: Inter-professional working | 0 | 0 | 10 | 1 | 17 | 1 | 5 | 4 | 2 | 1 | **34** |
| 19. Intermediate care | 3 | 0 | 8 | 0 | 10 | 2 | 2 | 4 | 1 | 1 | **27** |
| 20. Mental health services | 5 | 1 | 7 | 0 | 10 | 3 | 6 | 14 | 4 | 3 | **40** |
| 21. Occupational therapy | 1 | 0 | 3 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | **6** |
| 22. Reablement | 1 | 0 | 6 | 0 | 9 | 2 | 1 | 2 | 1 | 0 | **19** |

(Contd.)
| NICE guidelines | SSCR | PHE | NICE review | SCIE | Housing LIN | EMBASE | PSSRU | York | Others | Total |
|----------------|------|-----|-------------|------|-------------|--------|-------|------|--------|-------|
| Welfare and benefit & adult social care | | | | | | | | | | |
| 23 Citizens advice | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 Disability benefits | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 Employment support | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 2 | 0 | 0 |
| 26 Housing benefits | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Housing & adult social care | | | | | | | | | | |
| 27 Adaptations to the home | 0 | 0 | 9 | 2 | 7 | 12 | 2 | 7 | 3 | 3 |
| 28 Alarms and key holding | 0 | 1 | 4 | 2 | 8 | 5 | 1 | 3 | 1 | 2 |
| 29 Extra-care housing | 0 | 0 | 3 | 1 | 3 | 9 | 1 | 2 | 1 | 3 |
| 30 Supported housing | 3 | 1 | 6 | 2 | 3 | 6 | 2 | 5 | 1 | 1 |
| Leisure and wellbeing & adult social care | | | | | | | | | | |
| 31 Sports/Physical activity | 1 | 0 | 6 | 2 | 5 | 2 | 2 | 1 | 1 | 1 |
| 32 Support planning | 2 | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 1 | 1 |
| 33 Transport services | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| TOTAL (as sum of counts for all interventions) [see note below] | 68 | 16 | 152 | 29 | 198 | 111 | 55 | 150 | 33 | 42 |

Note: National Institute for Health and Care Excellence guidelines (NICE guidelines), School for Social Care Research-funded projects (SSCR), Public Health England toolkit (PHE), National Institute for Health and Care Excellence scoping review (NICE review), Social Care Institute for Excellence database (SCIE), the Housing Learning and Improvement Network database (Housing LIN), EMBASE data (EMBASE), Personal Social Services Research-led research (PSSRU; now Care Policy and Evaluation Centre at LSE), York-led research (York).

The cells are coded as follow: 0, they indicate that there are no entries for a particular social care intervention.

The number of counts reported in the total, last row, are greater than the number of entries reported in the total, first row. The reasons being that (i) the same entry may have appeared multiple times across the different searches and (ii) the same entry may report either different interventions or complex intervention(s) that include(s) multiple and complementary components.
How did the ESSENCE project work?

Support from experts
The project involved regular dialogue between the researchers and a range of experts, including local decision-makers, commissioners, service providers, care practitioners and third sector organisations. Our advisory group included stakeholders of this kind, as well as a number of researchers with substantial experience in social care interventions, a carer researcher and a researcher with lived experience of mental health services.

Organising framework
We sought to cover as many adult social care interventions as possible, but obviously this was dependent on there having been previous research. We used the organising framework of social care interventions employed by NAO (2018) to categorise evidence by type of interventions.

Search for evidence
Economic evidence was sourced from relevant databases selected through an iterative process with the support of our experts (the project advisory group, researchers who led previous economic studies and experts on specific topics). The sources that were searched are listed above. Searches were conducted looking at publication either in peer-reviewed journals or the grey literature (predominantly via Google searches) reporting on

- social care interventions and services and
- economic evidence (any type of economic evaluation).

The timeline covered the period January 2010 to March 2019.

Type of evidence selected and its robustness
In searching for and summarising economic evaluations, we were interested in studies that sought to measure the impacts on individuals, families and other stakeholders along any relevant dimensions, including domains considered important by the people using services. QALY-type measures can be useful for strategic decision-making, as noted earlier, but would normally be used alongside other measures.

We looked for studies that measured cost with any degree of breadth, whether very narrow or covering the whole societal impact. The narrowest measure would be the resources needed to organise and operate the intervention (service or programme), including variable elements, such as costs of staff salaries, food and electricity, as well as (more or less) fixed or overhead elements, such as costs associated with buildings, durable equipment and other capital inputs.

We were interested in any evidence from any types of economic evaluation, although it is very rare to find cost-utility or cost-benefit analysis in the adult social care field. We did not impose a strict quality threshold for inclusion of studies, but we added comments where we felt that the findings were of less immediate relevance to the social care system in England. We described basic study design (such as randomised trials and observational studies): different designs have strength in different contexts. We also described any limitations of how those designs were implemented (such as lack of concealment/blinding in a randomised trial or short follow-up periods). We noted any differences between studies on those rare occasions where more than one evaluation had been carried out on the same intervention.

Conclusion
The ESSENCE toolkit seeks to make economic evidence on adult social care interventions more readily available to decision-makers in a number of ways. The ‘compendium’ of economic evidence (with a searchable database of evidence) is intended to be a comprehensive collection of what is currently available and what is forthcoming. The searchable database of evidence is also available as a spreadsheet to allow ‘localisation’ of evidence by type of intervention, source of evidence and publication details.

The ESSENCE toolkit also offers a collection of case summaries, each of them summarising key information on context, type of intervention, effectiveness, cost-effectiveness, experiences of people who have used the service (where these have been collected by researchers), quality of the evidence and implementation.

The ESSENCE toolkit can help raise awareness of the latest evidence, not currently mentioned in published NICE guidance for example, and channel people to relevant sources.

We believe the ESSENCE toolkit will additionally be useful to identify future options for research. Results from the study offer the opportunity to identify areas not currently well supported with economic evidence (for example see advocacy, direct payment, meals, drug and alcohol services, social work support). In addition, the ESSENCE project provides information on areas where there is currently work in progress.

The first phase of the ESSENCE project was completed in April 2019. A second phase started in June 2020 and will keep the toolkit updated for a further three years (https://essenceproject.uk/). During this new period of work, the team will build on the current format of the toolkit so as to help decision-makers make better use of resources.

Competing Interests
The authors have no competing interests to declare.

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