

# **HEALTH ECONOMICS GROUP**

Faculty of Medicine and Health  
Norwich Medical School



## **Projecting Local Social Care Use And Costs For Older People Using Local Authority Records On Older Service Users**

**Ruth Hancock and Amanda Burke**

Norwich Medical School  
Health Economics Group  
University of East Anglia  
United Kingdom

## Contents

Background.....	2
Data and methods .....	3
Data.....	3
Isolating the cost that falls to the Local Authority.....	3
Projection method .....	4
Results .....	5
Validation of 2019 figures.....	5
Patterns of service receipt in 2019.....	5
Projections .....	8
Improving the projection methodology.....	11
Taking account of additional personal characteristics .....	12
Incorporating the wider LA population .....	12
Adding a time dimension .....	13
Discussion.....	13
References.....	16
Appendix.....	17
Hierarchy used to identify costs falling on parties other than the LA .....	17
Validation against NHS digital statistics .....	17

## Background

As in many countries, population ageing is set to continue in the UK with the proportion of the population over state pension age projected to grow by 30% over the next 25 years. The proportion aged 85 and over, where care needs are greatest, is likely to double over the same period (Office for National Statistics (ONS), 2019). National-level projections of the implications of this growth for social care demand and its associated costs are available (see for example Hu et al., 2020). However, in the UK responsibility for delivering social care services to older people and meeting the cost from limited budgets rests with Local Authorities (LAs). A recent market study into residential and nursing care homes for older people in the UK identified a need for ‘enhanced planning at local level, so LAs can make accurate and meaningful forecasts of future needs’ (Competition and Markets Authority, 2017 p. 17).

To be entitled to LA-funded social care, older people in the UK have to be eligible on grounds of care and financial need. Assessments of these needs can vary across LAs although they must follow national guidelines. There are quite substantial differences in the national guidance on the assessment of financial need across the constituent countries of the UK. Here we are concerned primarily with the system in England which has 152 LAs with adult social care responsibilities.

Making projections of future demand for LA social care involves taking account of the likely evolution of care need and of the income and wealth of those likely to need care. National projections of social care demand and associated costs typically use data from nationally representative surveys on individuals’ needs and financial circumstances, combined with national projections of the numbers of people in demographic groups defined in terms of age, gender and other relevant characteristics for which projections are available (for example Hu et al., 2020). The sample sizes of national surveys are generally too small to permit analysis at the LA level. Where estimates of demand and costs are needed for LA areas, one approach is to use such national data but adjust (re-weight) them for known differences in the composition of the local and national populations (see for example Fernandez and Snell, 2018a and 2018b). An acknowledged restriction of this approach is that the re-weighting is constrained by the limited set of population characteristics that are known about at both the national and local level. Weights are typically constructed from published aggregated data. These rarely provide a full picture of the inter-relationships between key variables such as income/wealth and care needs (Fernandez and Snell, 2018b). Such inter-relationships are particularly important at the distribution extremes where people most likely to fall within the scope of LA funding may be located i.e. those with low income/wealth and high care needs.

LAs hold detailed information on the people to whom they provide services but have access to much less information on the rest of their population, from whom future demand for care may come and/or who could become eligible for LA-funded services if eligibility rules change. In this paper we report exploratory work to investigate the potential to make projections of future volumes and cost of such services using the detailed information that a typical English Local Authority holds on the services currently provided to its older population. We develop an approach to categorising the many different types of services provided through the LA to their older population which helps us to understand the associated costs and facilitates projections. We then apply a simple approach to projecting future numbers of older recipients of social care

services and the associated costs, before discussing the strengths and limitations of this approach and ways in which it could be improved in the future.

## **Data and methods**

### *Data*

Anonymised data on older social care users were supplied by a Local Authority in England. The data consist of a cross-section of records of services received by people aged 65+ on a day in January 2019. Each record relates to a specific service received by an individual. Each individual can be in receipt of more than one service. A unique personal identifier enables all records for an individual to be identified and associated with their personal characteristics as known to the LA, such as age and gender. Other variables in the data set cover type of service, funding source and costs. The last of these had been converted to weekly equivalents values prior to the data being supplied to us.

A potential use of the data is to understand the drivers of the need for care and how future trends in those drivers will affect the demand for services. Most determinants of care needs are personal attributes such as age, health/disability etc., so it is important to be able to analyse the data at the person level, while maintaining the ability to see also which services are the main drivers of cost and/or the main way in which support is provided to different individuals. This also has the potential to facilitate ‘what-if’ type analyses of potential changes to the way care needs are supported – e.g. more high level care at home and less use of care homes.

We therefore sought to identify for each individual the main type of service they received and the combined cost of all other services received. Services were first categorised into a manageable number of broad service types (see Figure 2)<sup>1</sup>. For each individual, costs for all services falling into each of these broad service types were aggregated and the most costly service type deemed to be the ‘main’ service type. Costs for the remaining types of service that the individual received were totalled into a single cost for all ‘non-main’ services. Adding these two costs together provides a total package of care cost for the individual.

### *Isolating the cost that falls to the Local Authority*

From the perspective of a local authority’s budgetary planning, it is the cost that falls to them that is of primary interest. However, the cost data provided to us also included costs borne by other parties: users themselves if they were self-funders whose care was arranged through the LA; third-party ‘top-ups’ e.g. to fund a care home place at a fee higher than the LA pays; or the NHS, e.g. where it provides a flat-rate contribution (known as Funded Nursing Care (FNC)) to the cost of nursing care in a care home or as can happen for people with long-term complex health needs, where it meets all the cost of someone’s care<sup>2</sup>. The data available to us did not permit us to identify means-tested user contributions for LA-funded clients, a limitation to which we return later.

To distinguish costs to the LA, from costs falling to the NHS, fully self-funding users and user top-ups we used three variables in the data set. The variable ‘Funding’ was the same for every service that an individual received so we treated it as a person-level

---

<sup>1</sup> Prior to this, a number of duplicate records were deleted.

<sup>2</sup> <https://www.nhs.uk/conditions/social-care-and-support-guide/money-work-and-benefits/nhs-continuing-healthcare/>. Some such cases were in the data supplied to us presumably because the LA was involved in arranging their care even though the NHS was paying for it.

variable. Entries indicating costs not borne by the LA were ‘Self funded’, ‘Full cost’, ‘NHS Funded’. Each service had a ‘Service description’ which we searched for the terms ‘Top Up’, ‘Self Funding’ and ‘NHS funded’. The NHS FNC was identified by searching the weekly cost of each service for an amount equal to its weekly value (£158.16 in 2019). Because there can be overlap between categories used to identify costs which do not fall on the LA (e.g. Funding could be ‘Self Funded’ and the description could contain the words ‘Top Up’), we assigned these costs hierarchically as described in the Appendix, with FNC being identified first and top-ups last.

In the analysis of costs presented below, where we refer to the ‘package cost’ or to ‘gross’ LA costs/expenditure, these are before deduction of means-tested user contributions, but exclude costs falling on the NHS, on fully self-funding users and user top-ups. Note however that for the purposes of distinguishing main and non-main services, we consider the total cost, including costs met by the NHS, self-funders or through user top-ups.

Our data contained approximately 8,420 unique individual users aged 65+ of whom a large majority (76%) received only one service. A small number of cases (1% of the total) had zero total package cost; eighty per cent of these had a main service ‘other’ which includes services such as ‘Medicine Support’, ‘Transport – non chargeable’, ‘Independent advocacy’<sup>3</sup>. In the analysis which follows, cases with zero total package cost are excluded where relevant e.g. from averages of total package cost<sup>4</sup>.

#### *Projection method*

The method we have implemented for projecting the future numbers of LA social care service users aged 65+ assumes that these numbers will change in direct proportion to the ONS 2016-based sub-national population projections<sup>5</sup> for the LA, disaggregated by gender and 5 year age group. Each person currently receiving LA services is assumed to be representative of future service users in their age and gender group but the number of them is weighted to account for projected changes in the numbers of people in that age and gender group in the LA. Each current user’s future weight ( $w$ ) is defined as follows:

$$w_{i,j,t} = 1 + \delta_{i,j,t} \quad (1)$$

where:

$i$  indexes gender, 1 (male) or 2 (female)

$j = 1 \dots 6$  indicates one of six age groups from 65-69 to 90+

$t$  indexes time point, ranging from 2020 to 2040

$\delta_{i,j,t}$  is the proportionate change over the base year (2019) in the projected number of people of gender  $i$  and age group  $j$  by time  $t$ , in the LA.

Note that the weight does not take account of main service type; we effectively assume that the LA’s service provision model is unchanged such that the proportion in each age/gender group receiving each main service will remain constant. Our method assumes that the proportion of those in each age/gender group that are eligible for LA services

<sup>3</sup> It is possible that zero costs should be interpreted as zero chargeable costs since clearly there are costs to the LA associated with these services but perhaps not ones which are chargeable to users.

<sup>4</sup> There are also some cases with very small costs. For example, a few cases had a non-zero package cost which was less than £5 pw. Almost all of these had a main service ‘other’. These might be one-off services whose costs become very small when converted to a weekly equivalent. They have not been excluded from the analysis.

<sup>5</sup><https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandz1>

remains constant over the period of the projections. Eligibility for LA services should be interpreted here as covering both care needs and financial need as embodied in the means test which determines whether someone is provided with services via their LA<sup>6</sup>. If there were to be a change in the relationship between care needs and financial needs within age and gender groups, for example if care needs became more concentrated in those with low wealth, this would be expected to change the proportion of each age and gender group receiving services via the LA.

## Results

### *Validation of 2019 figures*

We cross-checked aggregate numbers of social care users and costs from our analysis of the LA data against statistics collated by the national provider of data services for health and social care in England (NHS Digital). We used the aggregated activity and finance data for the LA contained in the Adult Social Care Activity and Finance Report for 2018/19<sup>7</sup>, and its associated tables (Short and Long Term (SALT) and Adult Social Care Finance Returns (ASC-FR) reference tables). The figures in these tables are based on annual returns that LAs in England are required to make to NHS Digital. It was not possible to make exact comparisons between our analysis and these sources because of definitional differences but in general the comparisons gave us confidence in our understanding and use of the data provided to us. Details are contained in the Appendix.

### *Patterns of service receipt in 2019*

The patterns of expenditure, service receipt and average gross package cost in our LA are presented in Figures 1 to 5.

Overall, about 4% of the LA's 65+ population received social care from the LA. The percentage rose from 1.2% amongst those aged 65-69 to 20% amongst those aged 90+. Older women were more likely to receive services than older men and the gap increased with age (Figure 1). The largest and most costly group of users was formed of women aged 85+ followed by women aged 75-84 (Figure 2).

---

<sup>6</sup>Although some people who have to pay the full cost of their services have them arranged via their Local Authority, the majority of such people have to arrange care for themselves.

<sup>7</sup> <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19>

Figure 1: Social Care users aged 65+ as percentages of total LA population by age and gender, January 2019

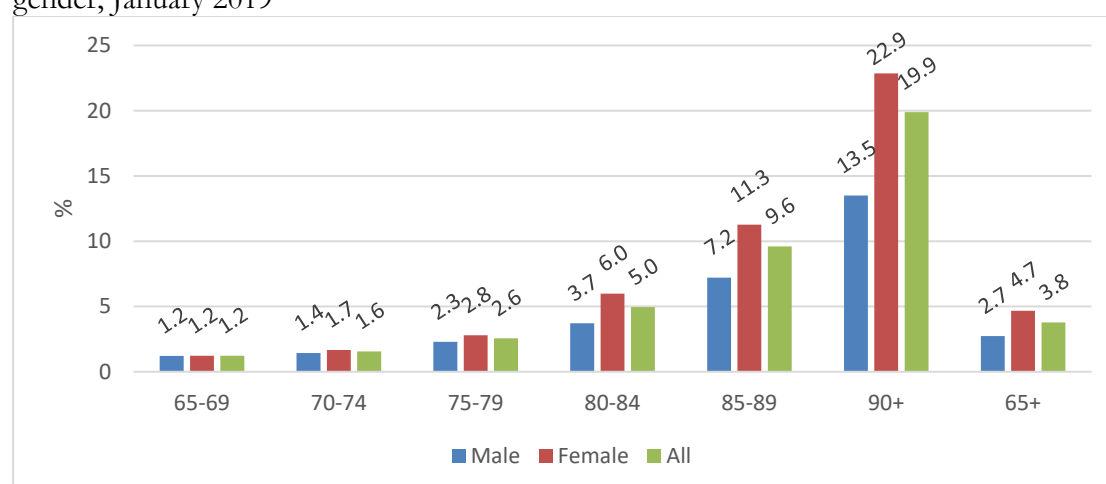
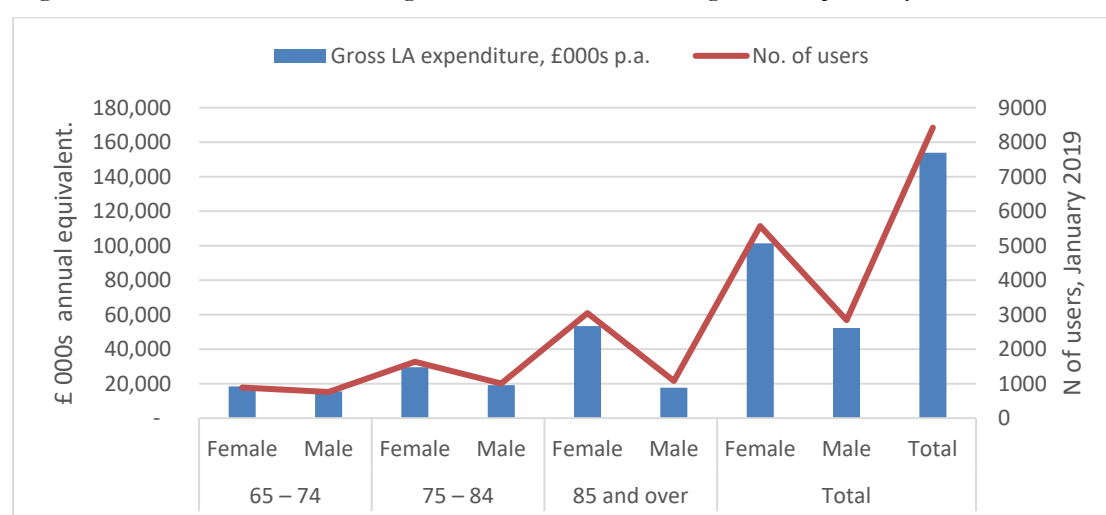


Figure 2: Number of users and gross cost to LA, users aged 65+, January 2019



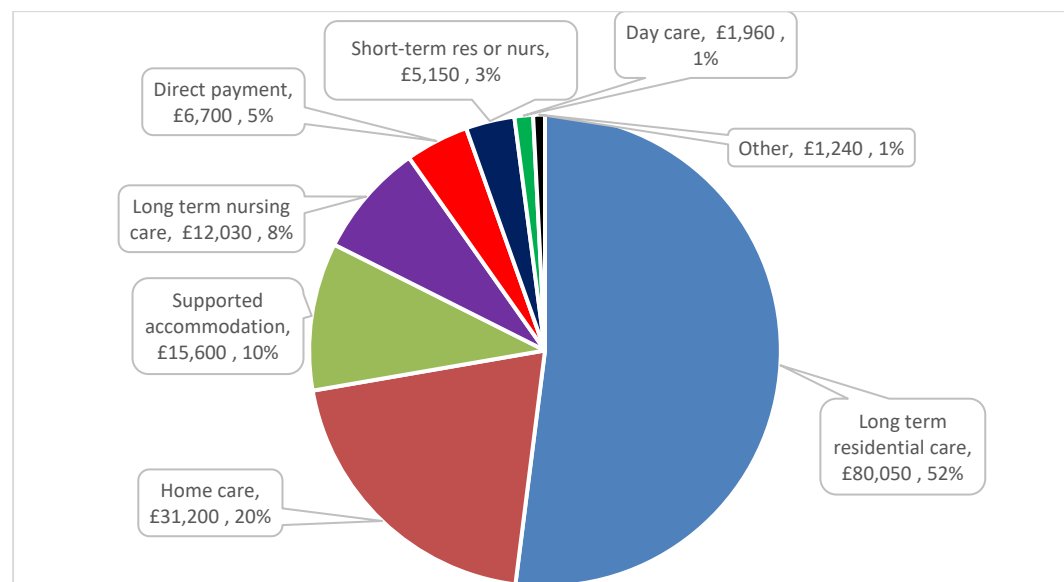
Note: Expenditure is the gross package cost to the LA totalled across all users in the relevant age and gender group.

Expenditure on users whose main service was long-term residential care accounted for over 50% of total gross LA expenditure on social care for older people, followed by expenditure on those whose main service was home care. The latter made up 20% of total expenditure (Figure 3). While the largest group of users was also those whose main service was long-term residential care (Figure 4), at 37%, they accounted for a considerably lower proportion of users than their share of gross expenditure. This is partly because at £510 per week, they had the highest average package cost (Figure 5). In contrast users whose main service type was home care made up 34% of users but only 20% of expenditure with an average weekly package cost of just £220; the vast majority of users whose main service was home care or a Direct Payment, received low-level care (Figure 4), which we defined as a total package cost below the lower quartile<sup>8</sup> of the distribution of the total package cost (including costs not falling on the LA) where the main service was long-term residential care. Where the main service was long-term nursing care, the average package cost was £500 per week (excluding any NHS

<sup>8</sup> £556 per week.

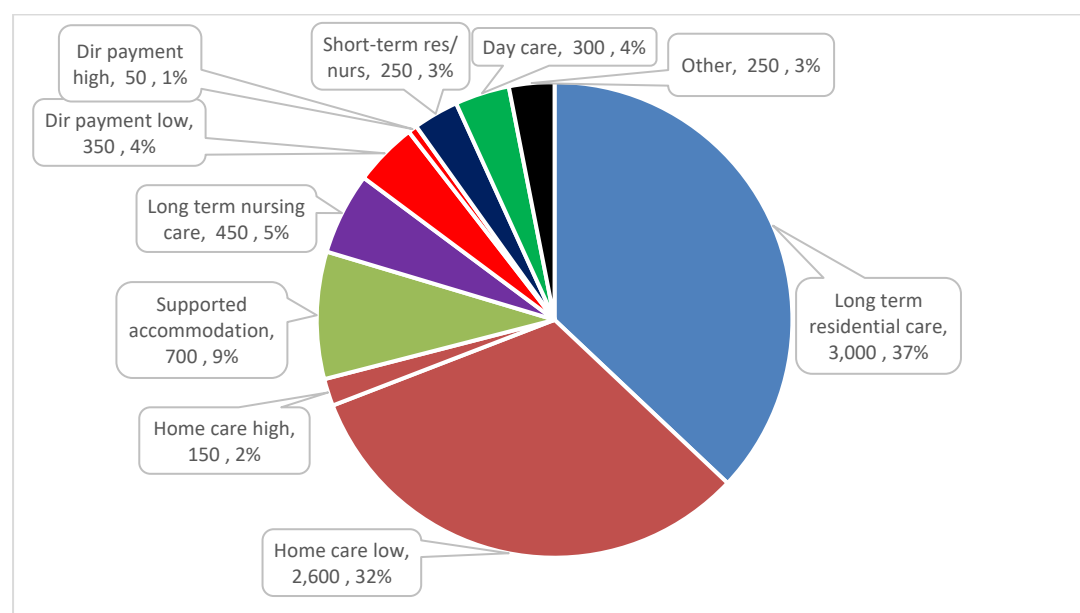
contribution) but such users accounted for only 5% of all users and thus just 8% of total expenditure. Where the main service was a direct payment, the average cost was £320 but only 5% of users had direct payments as their main service.

Figure 3: Gross LA gross expenditure on social care for people aged 65+, by main service type: annual equivalent £'000s<sup>9</sup> and % of total, January 2019



Note: Expenditure is the gross package cost to the LA totalled across all users.

Figure 4: Number and % of social care users<sup>10</sup> aged 65+ by main service type distinguishing high and low level home care/direct payments, January 2019



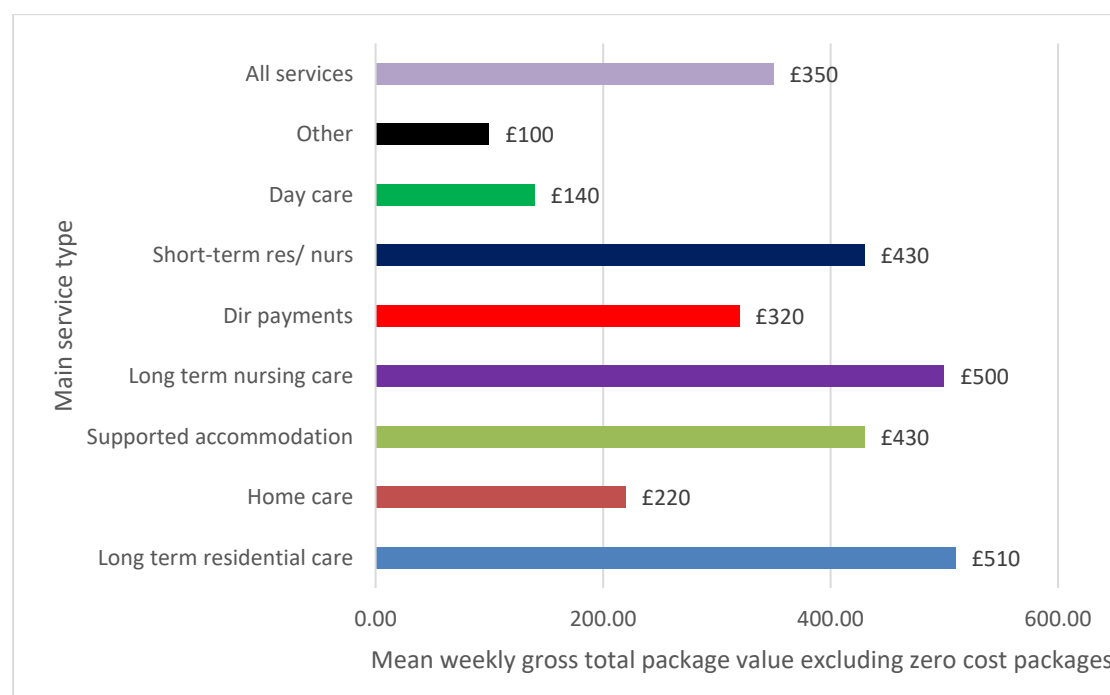
Note low level home care is defined as having a total cost below the lower quartile of the distribution of total package cost for users whose main service type is long-term residential care.

<sup>9</sup> Rounded to the nearest £10 thousand.

<sup>10</sup> Rounded to the nearest 50



Figure 5: Mean weekly non-zero total package cost<sup>11</sup> by main service type: LA social care users aged 65+, January 2019



Note: Package cost is the gross cost to the LA

### Projections

The projected number of future users of adult social care in the LA is plotted in Figure 6. Associated costs have been projected on two alternative assumptions. First we assume that the unit costs of care (e.g. fees for residential care or the cost of an hour's home care) stay constant in real terms (i.e. compared with general price inflation) over the projection period. As an alternative – and more realistic option – we assume that unit costs will rise in line with real<sup>12</sup> growth in average earnings with an uplift for years to 2020 to take account of rises in the national living wage<sup>13</sup> which particularly affect the social care sector. These two alternatives are applied to 2019 average package costs which are then multiplied by the projected number of users in each main service type to yield projections of aggregate costs, by main service type, for future years. Projections of costs are plotted in Figure 7 assuming constant real unit costs and in Figure 8 assuming unit costs rise in line with real earnings.

The number of users of LA social care over the age of 65 is projected to grow by 70% between 2019 and 2040. The growth is driven to a substantial extent by increases in the number of female users aged 85+ but significant increases in the numbers of male users aged 85+ are also projected. The number of male and female users aged 85+ is projected to more than double between 2019 and 2040. The number aged 75-84 is projected to increase by 50% in that period. In 2019 the total number of older female users was

<sup>11</sup> Rounded to the nearest £10

<sup>12</sup> That is, growth above general price inflation.

<sup>13</sup> We follow Adams J., Curry, C. *et al.* (2018). Note that the Office for Budget Responsibility has since updated their forecasts, including taking account of the Covid-19 pandemic, but these updates have not been incorporated into our projections.

almost twice the number of male users. In proportionate terms this difference is projected to fall so that by 2040 the number of female users would be only 55% more than the number of male users. However, in absolute terms the gap between the numbers of older female and male users is projected to increase from around 2,700 to 3,500 users (Figure 6).

The gross costs to the LA are projected to grow at a similar rate to the number of users (Figure 7) if there is no real increase in unit costs. However, under the more realistic assumption that unit costs rise in real terms in line with real increases in average earnings, the cost to the LA is projected to grow by much more (Figure 8). A 70% increase in the number of users between 2019 and 2040 is associated with a rise of nearly 150% in the cost to LA of providing services to them. By 2040 the cost of services is projected to be 43% higher than if unit costs remain constant.

Figure 6: Projected number of 65+ users of social care, 2019-2040 by gender and age group

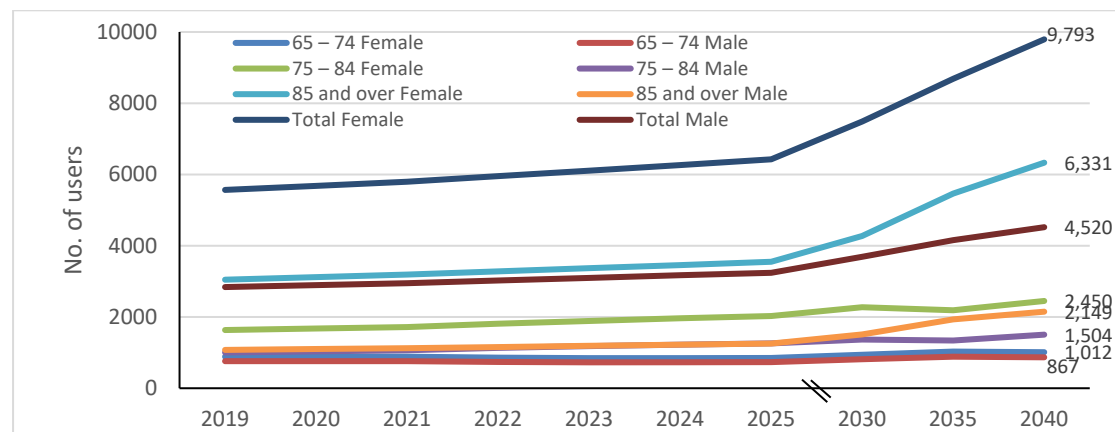


Figure 7: Projected annual gross costs to the LA of social care for users aged 65+ by gender and age group, 2019-2040, assuming **no real increase in social care unit costs**

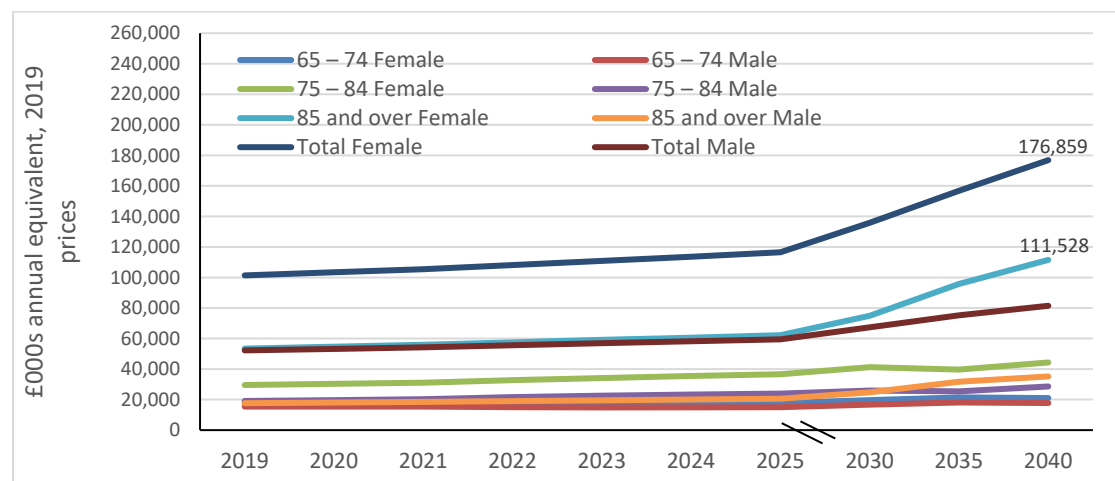
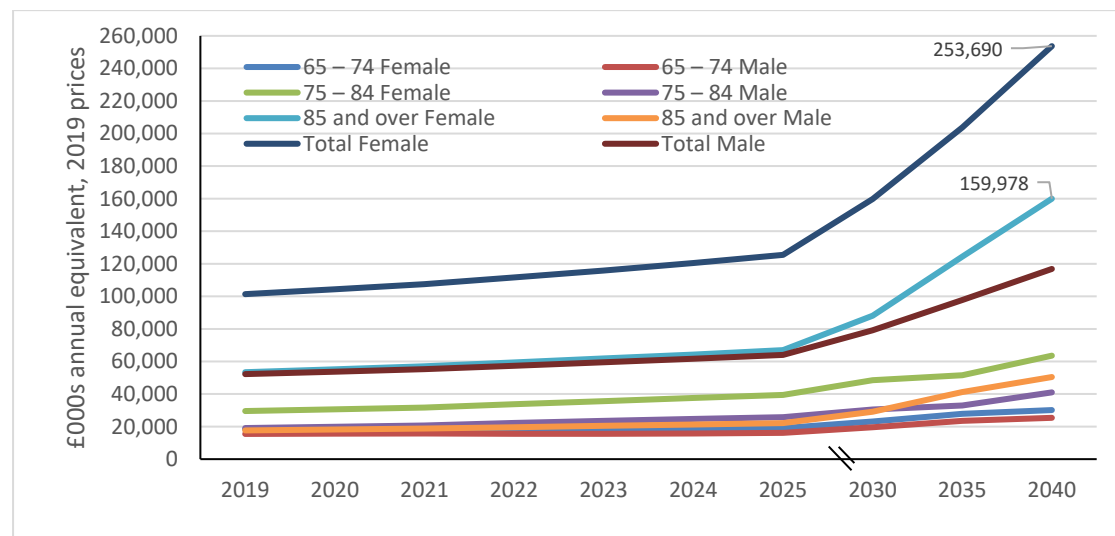


Figure 8: Projected annual gross costs to the LA of social care for users aged 65+ by gender and age group, 2019 to 2040, assuming **social care unit costs rise in real terms in line with average real earnings growth**



Figures 9 to 11 present projections according to main service type. The number of users whose main service type is long-term residential and nursing home care is projected to increase from around 3,500 in 2019 to 6,100 by 2040 – an increase of 77%. The corresponding increase for low level home care or Direct Payments is 66% and for high level home care/Direct Payments is 62%. It needs to be remembered, however, that the projections assume that the age and gender pattern of service receipt remains constant and in practice this may not be the case.

Like the projected growth in service users by main service type, the fastest growth in expenditure is for those whose main service type is long-term residential and nursing care. If unit costs rise in real terms in line with average earnings, each category of service is projected to cost about 43% more by 2040 than if unit costs remain constant in real terms.

Figure 9: Projected number of users aged 65+ by main service type, 2019-2040

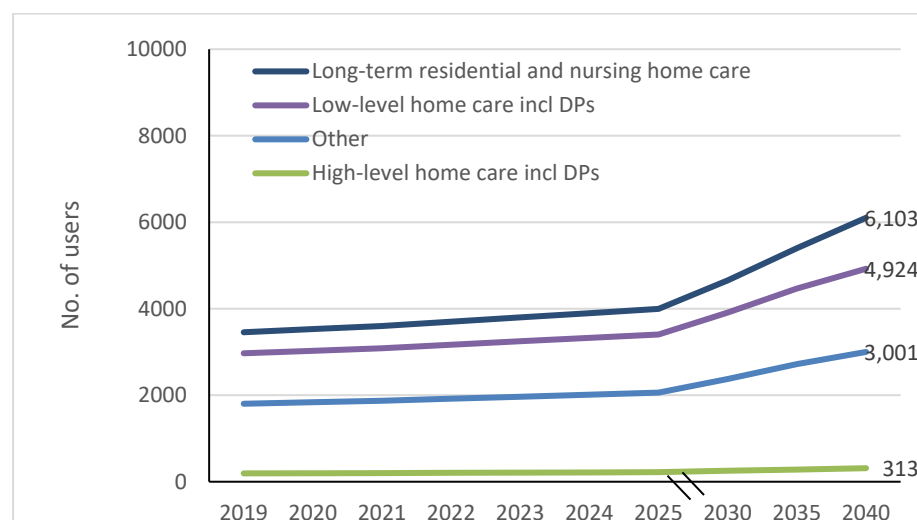


Figure 10: Projected annual gross costs to the LA of social care services for users aged 65+ by main service type, 2019-2040, assuming **no real increase in social care unit costs**

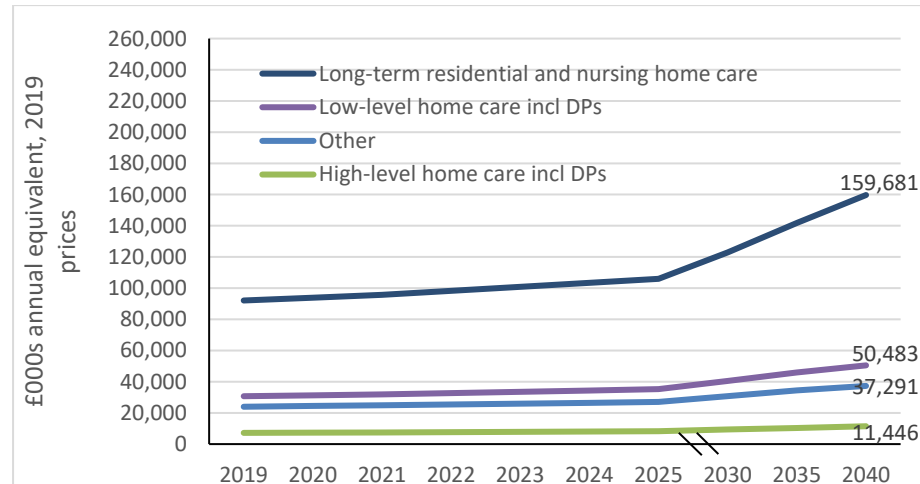
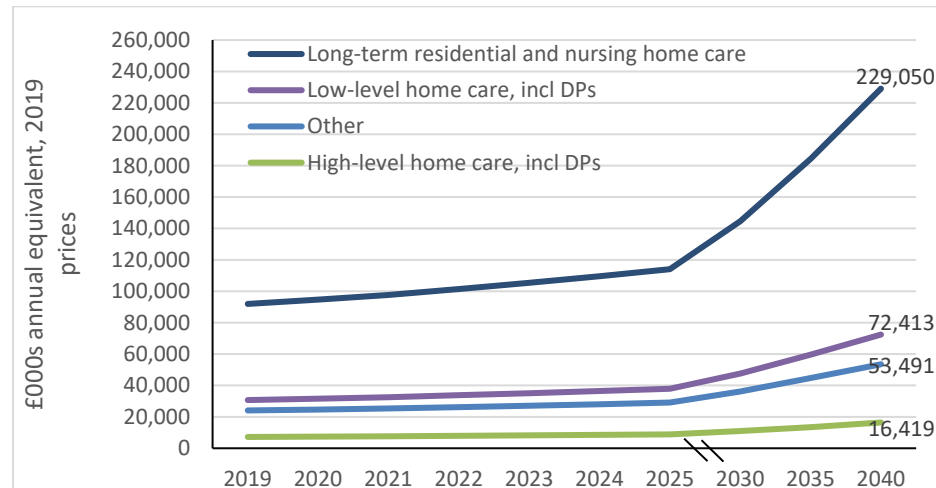


Figure 11: Projected annual gross costs to the LA of adult social care services for users aged 65+ by main service type, 2019-2040, assuming **social care unit costs rise in real terms in line with average real earnings growth**



### Improving the projection methodology

The mechanics of the projections facilitate developments of the simple approach used so far. Recall equation (1) above which defines each current service user's weight ( $w$ ) as :

$$w_{i,j,t} = 1 + \delta_{i,j,t}$$

where:

$i$  indexes gender

$j = 1 \dots 6$  indicates one of six age groups

$t$  indexes time point

$\delta_{i,j,t}$  is the proportionate change over the base year in the projected number of people of gender  $i$  and age group  $j$  by time  $t$ , in the LA.

Enhancements to the projection method which could use this framework include allowing for additional personal characteristics beyond age and gender and incorporating the wider population not currently receiving services from the LA but who could

become eligible for services if eligibility criteria were to change in the future. We also discuss the possibility of moving from a purely cross-sectional approach to one which adds a time dimension to take account of duration of receipt of services. This would require a different projections framework but could enhance the usefulness of the resulting projections.

#### *Taking account of additional personal characteristics*

Additional personal characteristics can be incorporated into the projections by adding further dimensions beyond age and gender to the weights. Characteristics could include e.g. marital status/living arrangements, disability/frailty, socio-economic status in constructing the weights. This would allow for a change in the relationship between gender/age group and need for LA services if for example age-related disability rates increase or decrease in the future. There is some evidence that severe disability rates at the oldest ages are increasing (Kingston et al. 2017). Incorporating additional personal characteristics would require information on such characteristics for current recipients of LA services and population projections for the LA population disaggregated by those characteristics as well as by age and gender. Some information on living arrangements and health was included in the data we were given for our LA but it was missing for many cases.

#### *Incorporating the wider LA population*

The above would be an improvement on the simple method based on age and gender projections alone. However, it would not allow for the possibility that within each age and gender group there may be older people in the area who are not receiving LA services who have unmet needs or who are paying for services privately and might qualify for LA services if there were changes to the care or financial needs eligibility criteria in the future.

One way to allow for such possibilities would be to add to the database of LA service recipients, representative individuals from the rest of the LA. This could work as follows using the example of women aged 90+:

- In our data there are roughly 2,000 women aged 90+ receiving services from the LA.
- The total LA population of women aged 90+ is approximately 7,500 i.e. there are some 5,500 women aged 90+ not receiving services from the LA.
- A representative woman aged 90+ not receiving LA services could be added to the model with a weight of 5,500 in the base year and that weight changed according to population projections for future years in the same way as for service recipients.
- Similarly, representative individuals from other age and gender groups could be added with corresponding weights.

An improvement on that would be to use external information about the characteristics of the local population to divide the 5,500 women not receiving services into a number of sub-groups (e.g. by health/disability or socioeconomic status) likely to influence whether they are on the margins of needing/being eligible for LA services. A 'representative' individual from each sub group would be added to the data.

These sub groups could be assigned probabilities of being cases of unmet need or newly eligible for services if eligibility criteria changed and a proportion based on these

probabilities could be assumed to become service users with the same pattern of services as current users with the same personal characteristics. The probabilities could be based on a range of external information about the local area. Alternatively the weights could be manipulated to explore ‘what-if’ scenarios such as suppose x% of the local population not receiving services in a particular age/gender group were cases of unmet need, what would be the effect on LA services and costs in some future year, of reducing that unmet need by y%, assuming that the types and levels of services they would receive was the same as for that gender/age group currently receiving services?

A hybrid approach could combine re-weighted nationally representative data (as in Fernandez and Snell, 2018a, 2018b) with LA-specific data on existing users. Cases of older non recipients of LA care from a national survey (such as the English Longitudinal Study of Ageing<sup>14</sup>) with weights attached to them (based on age and gender at a minimum) to reflect the composition of the local population could be added to the cases of existing users from the LA. This would provide a very rich set of variables, which could be used to estimate/project unmet need and/or eligibility for LA care under different eligibility criteria. However its validity would be dependent on the weights adequately capturing differences between the national population and the local population.

#### *Adding a time dimension*

The data provided to us consisted of a snapshot at a point in time. Although each service for each user had an associated start and end date, initial inspection of these variables revealed some anomalies so we did not attempt to use them further. Adding a time dimension to the analysis could aid understanding of the user journey into and between different services and the duration of receipt of each type of service. It has the potential to improve projections by modelling changes in users’ needs. Data on social care users covering any, or all of, the following would be needed to pursue this further:

- Start and end dates for services received at a point in time;
- Snapshots of the data at different points in time would enable users to be linked across the snapshots to analyse what influences duration of service receipt and transitions between types of services;
- Data spanning a window of time on all services received during that window with start and end dates, including those which start after the beginning of the time window and those that finish before the end of the time window. The duration of the time window would ideally be long enough to capture a high proportion of completed spells of service receipt that were in train during the window (to minimise the effect of left and right ‘censoring’).

With such data, it would be possible to move from the cross-sectional approach used so far to a dynamic microsimulation approach (see for example, Kingston et al. 2018; Forder and Fernandez, 2012).

## **Discussion**

In this paper we have set out and applied a simple method for making projections of the numbers of older people receiving LA social care in the future and the associated costs to the LA. An advantage of this method is that it is straightforward to implement requiring only cross-sectional data on current users and projections of the local population disaggregated by age group and gender. However, this simplicity comes at a cost: the assumption that the need for care and the ability to pay for it – as embodied in the

---

<sup>14</sup> <https://www.elsa-project.ac.uk/>

current means test – both remain constant over time within age and gender group. This assumption is unlikely to hold in practice. There could be changes in the need for social care within age and gender group. These could result from changes in the age and gender prevalence of different degrees of disability or from changes in the availability of informal care as a consequence of changes in living arrangements, or in the number and geographic proximity of older people's children. The ability of future generations of older people to meet the costs of any care they need may well be different from that of current generations so that the proportions within age and gender who are eligible for LA care may change. Additionally, any reforms to the needs criteria for eligibility for LA social care such as the recently announced plan<sup>15</sup> for a lifetime cap on individual liability for care costs are not easy to take into account within our framework.

As we discussed above, the framework has the potential to capture other factors likely to influence the need for LA-funded social care amongst older people. The prospects for such enhancement depend very much on the availability of appropriate data on existing recipients of LA social care and on the wider population who could become users in the future. In relation to the former, there is currently a pilot study to explore the possibility of requiring LAs to make individual-level returns so that LA data on older people using social care would be collated and made available for research<sup>16</sup>. If this pilot study paves the way for the collection of data on LA social care users similar to that supplied to us for all LAs in England in a common form, the result would be a very rich data source.

A significant limitation of our data was that we were not able to identify user contributions to the cost of their LA care. Our projections of LA expenditure were therefore of gross costs of services to the LA. Yet means-tested user charges are not trivial. For 2018-19, the Adult Social Care Finance Return statistics available from NHS digital indicate that user contributions towards long-term support provided by all LAs in England to people aged 65+ amount to some 30% of gross expenditure<sup>17</sup>. The proportion is likely to be higher for residential care (where the value of a person's home if they own it, is generally taken into account in the means test) than where care is provided to people in their own home (where the value of a person's home is disregarded). Thus the relative cost to the LA of residential care compared with care provided to people in their own homes, is likely to be less when user charges are taken into account. Moreover, the effect of taking into account user charges may well vary across age and gender groups (because of differences in their incomes and wealth) so that future changes in the age and gender composition of the local population may affect the difference between gross and net costs to the LA. Knowledge of the income from user charges for each user in the dataset would permit projections of the net cost to the LA and provide a more accurate picture of the cost to the LA of different packages of care<sup>18</sup>.

---

<sup>15</sup> 'Build Back Better: Our Plan for Health and Social Care'

<https://www.gov.uk/government/publications/build-back-better-our-plan-for-health-and-social-care>

<sup>16</sup> (<https://digital.nhs.uk/about-nhs-digital/corporate-information-and-documents/directions-and-data-provision-notice/secretary-of-state-directions/collection-of-client-level-adult-social-care-data-no-2>)

<sup>17</sup> Adult Social Care Activity and Finance Report England 2018-19: Reference Data Tables; Adult Social Care Activity and Finance Report England 2018-19: Reference Data Tables – Net Current Expenditure. <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2018-19>

<sup>18</sup> Because user charges are assessed for the care package as a whole, user contributions cannot be split across the different services they may receive. For this reason, the main service type, it would remain appropriate to identify the main service type based on the gross cost of each service a user receives.

Given that service users can receive multiple services, our approach of identifying the mostly costly service they receive provides a useful way to categorise users. However, data spanning more than a single time point would have allowed us to identify, and adjust the analysis for, situations where the observed most costly service is atypical of a user's pattern of service receipt. An example of this would be where someone is receiving short-term residential care as respite care when normally they would receive home care.

Our simple approach does, nonetheless, provide a starting point which illustrates the likely effects of changes in the age and gender composition of the older population on their own. This is valuable given that such changes are set to be very significant over the coming decades.



## References

- Adams J., Curry, C. *et al.* (2018) “Interactions between state pension and long-term care reforms: a summary of further findings” London: The Pensions Policy Institute. Available at: <https://www.pensionspolicyinstitute.org.uk/research/casper/>.
- Competition and Markets Authority (2017) Care Homes Market Study Final Report <https://www.gov.uk/government/publications/care-homes-market-study-summary-of-final-report>
- Fernandez, J-L and Snell T (2018a) Exploring the use of micro data for estimating a Relative Needs Formula for older people’s additional assessments following the introduction of a universal cap on social care expenditure. PSSRU Discussion Paper DP2875/5 [https://www.pssru.ac.uk/pub/DP2875\\_5.pdf](https://www.pssru.ac.uk/pub/DP2875_5.pdf)
- Fernandez, J-L and Snell T (2018b) Estimating local relative expenditure needs of changes in social care means-testing arrangements: a microsimulation approach PSSRU Discussion Paper DP2909/4 [https://www.pssru.ac.uk/pub/DP2909\\_4.pdf](https://www.pssru.ac.uk/pub/DP2909_4.pdf)
- Forder and Fernandez (2012) Analysing the costs and benefits of social care funding arrangements in England: technical report (3rd edition) <https://www.pssru.ac.uk/publications/pub-1660/>
- Hu B, Hancock R and Wittenberg R (2020) Projections of Adult Social Care Demand and Expenditure 2018 to 2038 <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>
- Kingston A, Comas-Herrera A and Jagger C. (2018) Forecasting the care needs of the older population in England over the next 20 years: estimates from the Population Ageing and Care Simulation (PACSim) modelling study. *The Lancet Public Health* 2018, **3**(9), e447-e455.
- Kingston A, Wohland P, Wittenberg R, Robinson L, Brayne C, Matthews FE and Jagger C. (2017) Is late-life dependency increasing or not? A comparison of the Cognitive Function and Ageing Studies (CFAS). *The Lancet* 2017, **390**(10103), 1676-1684.
- Office for National Statistics (2019) National Population Projections 2018-based. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2018based>

## Appendix

### *Hierarchy used to identify costs falling on parties other than the LA*

1. Incidences of the FNC were identified first and treated as a separate category with the cost assumed to fall on the NHS.
2. Self-funded/full cost users were identified next and all costs other than any FNC were deemed to fall on the user.
3. Next, where a service description included the words 'Self Funding' but the variable Funding was not 'Self Funded' or 'Full Cost' and the service cost was not identified as the FNC, the cost of that service was deemed to fall on the user.
4. Next, where Funding = 'NHS Funded' and the package cost had not been identified as FNC or assigned to the user, the package cost was deemed to fall on the NHS.
5. Next where a service description included the words 'NHS Funded' but the cost had not been identified as FNC or already assigned to the user or the NHS, the cost of that service was assigned to the NHS.
6. Finally where a service cost had not, by the method above, been identified as FNC, assigned to the user or the NHS but the description of the service included the words 'Top Up', the cost was deemed to fall on the user or a third party but not the LA.

### *Validation against NHS digital statistics*

The SALT and ASC-FR statistics distinguish between short- and long-term adult social care support provided by LAs. Those for the latter are the most comparable with our data. The number of adult social care users in our data (for a date in January 2019) was about 25% higher than the number of long-term adult social care users aged 65+ supported by our LA as recorded in SALT and ASC-FR for the 31<sup>st</sup> March 2019. Some user categories distinguishable in our data are excluded from the SALT definition of long-term support<sup>19</sup>, namely: self-funders; those receiving short-term residential or nursing home care; those who are NHS funded and those for whom the only service is the FNC. By excluding such users from our data, we are left with around 7,200 users or 7% more than recorded in the SALT/ASC-FR data. The difference between this and the SALT figure might be explained by: a) the slight difference in date to which the figures relate; b) the inclusion in our figures of people receiving only short term non-residential care whom we could not separate out in our data; and c) definitional and other differences between what is reported in SALT and the data provided to us by the LA including how we have classified service types.

For comparison with the ASC-FR data, we used guidance issued to LAs for completing the SALT and ASC-FR to construct an annual equivalent (i.e. multiplying the weekly cost by 52) figure for the total costs of services recorded in our data matched as closely as possible to that used in the ASC-FR. As with comparisons of number of users, we excluded the costs of services arranged for self-funders, the FNC, other NHS funded services, top-ups and short-term residential or nursing home care but including expenditure associated with full-cost clients<sup>20</sup>. The result was very close to (about 0.5% higher than) the 2018/19 SALT-ASC-FR figure for our LA for expenditure on long-term support for people aged 65+, despite the fact the latter excludes short-term non residential support which we were not able to remove from our figure.

---

<sup>19</sup> See <https://nhs-prod.global.ssl.fastly.net/binaries/content/assets/website-assets/data-and-information/data-collections/social-care-collections-2019/salt-2018-19-guidance-v0.3-draft.pdf>

<sup>20</sup> In the ASC-FR returns, expenditure associated with full cost clients is included in gross expenditure and the charges paid by such clients is included in income.