

Annex: Methodology for calculating adult social care funding gap estimates

What this annex covers

This annex describes in detail the methodology for calculating the estimated funding gap for adult social care services under four scenarios:

- Scenario 1: Meet future demand
- Scenario 2: Meet future demand and improve access to care
- Scenario 3: Meeting future demand and pay more for care
- Scenario 4: Meeting future demand, improve access and pay more for care

We also describe the methodology for projecting a baseline scenario.

Key terms used in this annex

- **Baseline scenario:** This is our projection of adult social care (ASC) spending if no additional funding is made available in future. This involves projecting forward past increases in local government core spending power to 2030/31.
- **Meet demand:** A scenario estimating future ASC funding needed to keep pace with an ageing population and increases in costs of providing ASC.
- **Unit cost:** This is the cost of a single 'unit' of ASC (for example a week of care in a care home or an hour of care in someone's home).
- **Unit cost gap:** This is the gap, represented in % terms, between the amount that local authorities are able to pay for ASC services and our estimate of a minimum cost of care provision.
- **Care package:** This is the term used to describe the ASC usage of one user during a year (eg a year in a care home).
- **Funding gap:** This is the difference, in any given year, between funding available in our baseline scenario and funding required under our different scenarios (for example

the difference between the amounts of funding in the 'meet demand' scenario and 'baseline scenario'.

- **Local government core spending power:** This is the amount of funding local government have available to spend on services.
- **Better Care Fund:** This is a programme of pooled NHS and local authority funding for adult social care and integrated services.
- **Adult Social Care Precept:** This is a flexibility given to local authorities to raise additional council tax to fund ASC services.

Background

The REAL Centre's funding model for adult social care estimates additional funding needed for social care, under a range of different scenarios, by 2030/31. These estimates of funding needed, or the funding gap, are over and above the REAL Centre's projections of £22bn spending in 2030/31 in the baseline scenario, ie if no additional funding is made available.

In practice, additional funding estimated under different scenarios could be used to meet policy objectives which include improved access and quality of care. While this analysis focuses on funding, additional policy initiatives and reforms would be needed to achieve these objectives. We set out our assessment of the policies needed to improve adult social care elsewhere.¹

All estimates are provided in 2021/22 prices, and we use 2019/20 as our 'start' year for each scenario.

The baseline scenario takes into account our understanding of current government policy on social care funding which includes:

- commitments made in November 2020 Spending Review, of additional social care funding
- overall funding for local authorities and implications for their 'core spending power'.

We have not factored in:

- additional one-off funding provided to deal with cost pressures associated with COVID-19 to date

¹ https://www.health.org.uk/sites/default/files/2020-10/health_foundation_supplementary_evidence_-_funding_scenarios.pdf² <https://files.digital.nhs.uk/BF/7AEF16/ASCFR%20and%20SALT%20Reference%20Tables%202019-20.xlsx>³ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>⁴ Table 5, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2019-20/appendix-b>

- estimates of the costs associated with the longer-term impact of COVID-19, as these are currently too uncertain to quantify.

The funding estimates in the four scenarios are therefore likely to be a minimum requirement and any additional medium and long-term implications of COVID-19 may require additional funding.

The amount of money spent on social care is largely determined by local authorities, with some funding provided by the NHS. If local authorities have more funding available to spend on social care, it could be used in a number of different ways and this will vary locally.

For example, some areas may have unmet need for care and may choose to increase the numbers of people receiving support. Some areas may have problems recruiting and retaining staff, so local authorities may choose to pay higher rates for care to providers so they can pay their staff more. In practice this will vary across the country. The modelling scenarios presented here are therefore a simplification to illustrate what additional funding could achieve in relation to specific goals.

A spreadsheet model accompanies these funding gap estimates, where users can change some of the parameters and generate different estimates (see [related downloads](#)).

Summary of funding gap estimates

The following tables are located at the end of this document:

- **Table 1** provides a summary of our estimates of the funding gap relative to the baseline scenario up to 2030/31.
- **Table 2** provides estimates of the yearly increases in adult social care funding in the four scenarios.

Number of people accessing long-term care

Under scenarios 2 and 4 we estimate the additional funding needed for local authorities to provide improved access to care. This additional funding increases the number of people that could receive care. We use NHS Digital data on the number of people who accessed long term care support in 2019/20 to estimate this for our start year, and the Care Policy and

Evaluation Centre (CPEC) projections on the number of service users to estimate this.^{2 3} To illustrate, we add in an additional 10% increase in the number of service users, split over the first two years of the time-series, in scenarios 2 and 4.

In scenario 3 additional funding is used to increase the amounts that local authorities have available to pay for care. This could enable improvements in quality of care and higher wages to be paid to staff. In this scenario the number of people receiving care stays the same as in the 'meet future demand' scenario (scenario 1) and the estimates are based solely on the CPEC projections of number of service users.

Table 1 shows the projected number of people accessing long-term care in 2030/31 under the four different scenarios 1 to 4.

² <https://files.digital.nhs.uk/BF/7AEF16/ASCFR%20and%20SALT%20Reference%20Tables%202019-20.xlsx>³ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>⁴ Table 5, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2019-20/appendix-b>

³ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>⁴ Table 5, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2019-20/appendix-b>

Baseline scenario

Scenario description

This is our projection of adult social care spending if no additional funding is made available in future. The starting point for the baseline scenario is the amount currently spent on social care services. This is based on Annex B of the NHS Digital publication *Adult Social Care Activity and Finance Return 2019/20*.⁴ A summary of this table is shown below.

Net current expenditure on adult social care services in cash terms: by source of funding (£bn, in cash terms)

	2015/16	2016/17	2017/18	2018/19	2019/20
Social care service departments	14.33	14.78	15.07	15.81	16.55
Planned Better Care Fund expenditure	1.81	1.97	2.06	2.10	2.28
Total net expenditure	16.14	16.75	17.14	17.92	18.83

In order to estimate the gap in social care funding in 2030/31, it is necessary to project a 'baseline' scenario. This scenario involves estimating social care spending in each year to 2030/31, if current spending patterns continue into the future with no additional funding made available. It involves making assumptions about the different policies that affect the funding sources, shown in the table above.

We estimate that under this baseline scenario, social care funding rises from £19.5bn in 2019/20 to reach £22bn in 2030/31 (in 2021/22 prices).

Modelling approach for baseline scenario

- We use data on local government spending in 2019/20 to estimate change in spending between 2019/20 and 2023/24.
- We then calculate the annual growth rate in spending for the period 2021/22 to 2023/24 and assume the same growth rate for the years 2024/25 to 2030/31.
- We provide estimates in 2021/22 prices.

⁴ Table 5, <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2019-20/appendix-b>

For the years 2022/23 and 2023/24:

- We assume that local government spend on social care rises year-on-year in line with estimates of local government net spend in the period 2015/16 to 2021/22.^{5 6}
- We use data on the contribution of the Improved Better Care Fund, Adult Social Care Support Grant, Winter Pressures Grant, Social Care Support Grant and Social Care Grant for years 2015/16 to 2020/21.⁷
- We assume that the additional funding made available through precepts announced in the 2018 and 2019 Spending Reviews will rise with inflation in the three years following 2020/21.
- We assume the precept announced at the government's November 2020 Spending Review raises £0.79bn additional funding for ASC in 2021/22 and that this will rise with inflation in the following two years.

⁵ In Core Spending Power, supporting information: <https://www.gov.uk/government/publications/core-spending-power-final-local-government-finance-settlement-2020-to-2021>

⁶ Table 6.16

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938052/SR20_Web_Accessible.pdf

⁷ In Core Spending Power, supporting information: <https://www.gov.uk/government/publications/core-spending-power-final-local-government-finance-settlement-2020-to-2021>

Scenario 1: Meet future demand

Scenario description and key results

Under this scenario, additional funding provided keeps up with underlying demand from an ageing population. This would maintain eligibility for publicly funded social care at current levels of asset and needs thresholds.⁸

The projection for this scenario starts in the same year as the baseline scenario 2019/20, with the same level of spending on social care (2019/20 and £19.5bn). This annual spend is projected to grow to £28.1bn in 2030/31 (in 2021/22 prices). We therefore estimate the funding gap for social care in this scenario is approximately £6.1 by 2030/31. This is the gap between £22bn in 2030/31 in our baseline scenario and £28.1bn in 2030/31 in our 'meet future demand' scenario.

We use NHS Digital data on the number of people who accessed long-term care support in 2019/20 to estimate the increase in the number of service users in this scenario.⁹ The data suggest that around 839,000 people accessed long term support in 2019/20. We use CPEC projections of increases in the number of social care service users to forecast year-on-year growth up to 2030/31.¹⁰ Under this scenario, the number of service users increases to a little over 1m by 2030/31, an additional 190,000 compared to 2019/20.

Modelling approach

1. We use CPEC projections of the increases in social care expenditure to estimate growth in from 2019/20 to 2030/31. The assumptions which underpin these projections are set out in their publication.¹¹
2. We use NHS Digital data on the number of people who accessed long term care in 2019/20 to estimate the increase in the number of service users in this scenario.¹² We do this using CPEC projections of the increases in number of people accessing care.

⁸ <https://www.nuffieldtrust.org.uk/news-item/offer-and-eligibility-who-can-access-state-funded-adult-care-and-what-are-people-entitled-to#:~:text=For%20anyone%20of%20any%20age,fall%20entirely%20on%20the%20individual.&text=A%20nyone%20with%20assets%20between%20%C2%A3,depending%20on%20level%20of%20need>

⁹ Table 34

<https://files.digital.nhs.uk/BF/7AEF16/ASCFR%20and%20SALT%20Reference%20Tables%202019-20.xlsx>

¹⁰ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>

¹¹ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>

¹² Table 34

<https://files.digital.nhs.uk/BF/7AEF16/ASCFR%20and%20SALT%20Reference%20Tables%202019-20.xlsx>

Scenario 2: Meet future demand and improve access to care

Scenario description and key results

Under this scenario, funding rises to meet the expected growth in demand from an ageing population and the local authority budget increases by 10% to expand access to long term care and meet any unmet need in the population.

Levels of unmet social care need are challenging to quantify so we have illustrated an increase in budgets and care of 10% to demonstrate the additional funding required in this scenario. We believe that a 10% rise in access to care is a conservative estimate of what is actually required.¹³

Meeting the expected growth in demand up to 2030/31 would require around £6.1bn (scenario 1). In scenario 2, we estimate that if we were to increase care provision by 10% in addition to meeting the expected growth in demand up to 2030/31, £8.9bn (in 2021/22 prices) additional funding would be required.

In this scenario, we estimate that the number of people accessing long term care could rise by 432,000, from around 839,000 in 2019/20 to 1.25m in 2030/31.

Modelling approach

1. We use the 'meet future demand' scenario (scenario 1) as our benchmark. We increase the estimated funding in the 'meet future demand' scenario by 10% and split this rise over the first two years of the model, in 2020/21 and 2021/22.
2. We use CPEC projections of the increases in social care expenditure to estimate growth annually up to 2030/31.¹⁴
3. We use NHS Digital data on the number of people who accessed long term care in 2019/20 to estimate the increase in the number of service users in this scenario.¹⁵ We do this using CPEC projections of the increases in number of people accessing care. We add an extra 10% rise in number of people accessing care, and this is split over the years 2020/21 and 2021/22.

¹³ <https://www.ageuk.org.uk/latest-press/articles/2019/november/the-number-of-older-people-with-some-unmet-need-for-care-now-stands-at-1.5-million/>

¹⁴ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>

¹⁵ Table 34

<https://files.digital.nhs.uk/BF/7AEF16/ASCFR%20and%20SALT%20Reference%20Tables%202019-20.xlsx>¹⁶ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>

Scenario 3: Meet future demand and pay more for care

Scenario description and key results

Under this scenario, funding would rise to meet the expected growth in demand from an ageing population and to cover an increase in costs to local authorities for care. Additional costs could cover higher hourly rates for providing domiciliary care, or higher weekly rates for providing residential and nursing care (referred to in this Annex as 'unit costs'). In scenario 3, the funding required would be around £33.1bn per year in 2030/31 (in 2021/21 prices).

We use NHS Digital data on the number of people who accessed long term care support in 2019/20 to estimate the increase in the number of service users in this scenario. The data suggest that around 839,000 people accessed long term support in 2019/20. We use CPEC projections of increases in the number of social care service users to forecast year-on-year growth up to 2030/31.¹⁶ Under this scenario, the number of service users increases to a little over 1m by 2030/31, an additional 190,000 compared to 2019/20.

Modelling approach

We use cost estimates provided by the UK Home Care Association (UKHCA) and Laing and Buisson to undertake this analysis.^{17 18 19} The numbers of people accessing care are the same in this scenario as in scenario 1 – meet future demand.

Calculating the unit cost gap

We begin by calculating the unit cost gap for different types of care, as detailed below. These unit cost gaps are used to estimate the total amount of funding local authorities would need in total to meet some minimum unit cost of care for all clients accessing care.

Domiciliary care

For the domiciliary care (home care) sector we use UKHCA estimates of the unit cost gap. This is a measure of the gap between the hourly weighted average price paid by local authorities in England for domiciliary care, and the hourly rate that would cover domiciliary care provider operating costs at the statutory National Living Wage (NLW) (the UKHCA 'Minimum Price for Homecare').^{20 21}

The UKHCA's estimate of the average hourly weighted average fees paid is £16.96 in 2020/21, projected to £17.36 in 2021/22. We compare this to the UKHCA Minimum Price for

¹⁶ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>

¹⁷ <https://ukhcablog.com/blog/ukhcas-minimum-price-for-homecare-for-april-2021-to-march-2022/>

¹⁸

<https://www.ukhca.co.uk/downloads.aspx?ID=589#:~:text=UKHCA%20calculates%20that%20the%20UK's,can%20meet%20their%20statutory%20obligations.>

¹⁹ <https://ukhcablog.com/blog/homecare-in-the-time-of-coronavirus/>

²⁰ <https://ukhcablog.com/blog/homecare-in-the-time-of-coronavirus/>

²¹ <https://ukhcablog.com/blog/ukhcas-minimum-price-for-homecare-for-april-2021-to-march-2022/>

Homecare, £21.43. This leads to an estimated unit cost gap in domiciliary care of 24% in 2021/22.

Residential and nursing care

For residential and nursing care, we use Laing and Buisson's research into care homes for older people²². Laing and Buisson present data the difference between their estimate of a benchmark to provide a minimum standard of care (£647) and average fees paid by local authorities (£555). This leads to an estimated unit cost gap of 16% in 2018/19.

1. The unit cost gaps are used to calculate a total funding gap.
2. We use our estimate of aggregate social care expenditure in 2019/20 from scenario 1 – meet future demand (£19.5bn in 2021/22 prices) as a benchmark.
3. We increase the £19.5bn figure using a weighted average of the unit cost gaps for domiciliary, residential and nursing care (24% and 16% explained above). These are weighted using and the amount of overall expenditure each sector accounts for.²³
4. We use CPEC projections to estimate growth in social care expenditure up to 2030/31.²⁴
5. We use NHS Digital data on the number of people who accessed long term care support in 2019/20 to estimate the increase in the number of service users in this scenario.²⁵ We do this using CPEC projections of the increases in number of people accessing care (in the same way we do for Scenario A)²⁶

²² <https://www.laingbuisson.com/shop/care-homes-for-older-people-uk-market-report/>

²³Based on gross current expenditure in 2019/20 available from NHS Digital data
<https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2019-20#resources>

²⁴ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>

²⁵ Table 34

<https://files.digital.nhs.uk/BF/7AEF16/ASCFR%20and%20SALT%20Reference%20Tables%202019-20.xlsx>

²⁶ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>

Scenario 4: Meet future demand, improve access to care and pay more for care

Scenario description and key results

Scenario 4 combines the analysis in scenarios 2 and 3. Under this scenario, funding would rise to meet the expected growth in demand from an ageing population and:

- increase access to care by increase the budget for care packages by 10% (as in scenario 2)
- cover higher unit costs of care provision in domiciliary care (home care) and residential and nursing care (as set out in scenario 3).

This leads to a funding gap estimate of £14.4bn in 2030/31 (in 2021/22 prices).

As in scenario 2, we estimate that the number of people using long term care would rise by nearly 412,000, from around 839,000 in 2019/20 to 1.25m in 2030/31.

Modelling approach

1. We use our estimate of aggregate social care expenditure in 2019/20 from scenario 1 – meet future demand – as a benchmark (£19.5bn in 2021/22 prices).
2. We increase the £19.5bn figure by 10% (as in scenario 2) and by a factor based on a weighted average of the unit cost gaps for domiciliary, residential and nursing care (as in scenario 3).²⁷
3. We then use CPEC projections of increases in social care expenditure to estimate growth up to 2030/31.²⁸
4. As in scenario 3, we use NHS Digital data to estimate the increase in the number of service users that could access care in this scenario. Approximately 839,000 people accessed long term support in 2019/20. We do this using CPEC projections of the increases in number of people accessing care. We add an extra 10% rise in number of people accessing care, and this is split over the years 2020/21 and 2021/22 (as in scenario 2).

²⁷ <https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report/2019-20#resources>

²⁸ <https://www.lse.ac.uk/cpec/assets/documents/cpec-working-paper-7.pdf>

Table 1: Funding gap and number of user estimates under different scenarios

Scenario	Social care funding gap: total additional funding required per year by 2030/31 Uses 2021/22 prices, and 2019/20 as a base year	The estimated number of people accessing long term care by 2030/31 Based on 839,000 users in 2019/20
1. Meet future demand	£6.1bn	1.03m
2. Meet future demand and improve access to care	£8.9bn	1.25m
3. Meet future demand and pay more for care	£11.1bn	1.03m
4. Meet future demand, improve access to care and pay more for care	£14.4bn	1.25m

Table 2: Estimated annual funding required for adult social care in the four scenarios, 2019/20 – 20230/31 (£bn, 2021/22 prices)

Year	Baseline projections of increases in adult social care spending power	Scenario 1: Meet future demand	Scenario 2: Meet future demand and improve access to care	Scenario 3: Meet future demand and pay more for care	Scenario 4: Meet future demand, improve access to care and pay more for care
2019/20	19.5	19.5	19.5	19.5	19.5
2020/21	20	20.3	21.3	22.1	23.2
2021/22	20.1	21.0	23.1	24.7	27.2
2022/23	20.3	21.7	23.9	25.6	28.2
2023/24	20.5	22.4	24.7	26.4	29.1
2024/25	20.7	23.2	25.5	27.3	30.0
2025/26	20.9	23.9	26.3	28.2	31.0
2026/27	21.1	24.7	27.2	29.1	32.0
2027/28	21.4	25.5	28.0	30.0	33.0
2028/29	21.6	26.3	29.0	31.0	34.1
2029/30	21.8	27.2	29.9	32.1	35.3
2030/31	22.0	28.1	30.9	33.1	36.5